

**THE LIFE AND ECONOMICS
OF DAVID RICARDO**

THE LIFE AND ECONOMICS OF DAVID RICARDO

By
John P. Henderson†

With Supplemental Chapters By
John B. Davis

Edited By
Warren J. Samuels and Gilbert B. Davis



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Printed on acid-free paper

**For Margaret
and for our children
Blair Patricia Henderson Tonelli
and Scott Rifkin Henderson**



David Ricardo
April 18, 1772 - September 11, 1823



John Patrick Henderson
April 23, 1919 - February 16, 1995

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INTRODUCTION

Warren J. Samuels
Michigan State University

John P. Henderson worked on this personal and intellectual biography of David Ricardo throughout much of his scholarly career. His 1956 doctoral dissertation at the University of Maryland, written under Dudley Dillard, was entitled *A Reinterpretation of Ricardo's Theory of Value*. For many years thereafter, Henderson researched the heritage, life, times, and ideas of David Ricardo. He did so, in part, in areas and fields normally far removed from the work of the historian of economic thought, though not from the biographer. He worked on Jewish and financial history. He visited the places that figured in the life of Ricardo. All this ceased, alas, by about 1983. Thereafter, despite the pleadings of friends and colleagues for him to resume writing activity, Henderson was often too ill--including the recurrence of tuberculosis initially suffered as a child--to work seriously on the project. Accordingly, the first eight chapters of this book comprise Henderson's manuscript as he had left it as of 1983. Chapter nine is constructed from two pieces which he said were intended to be the basis of that chapter (or were adapted for other use from a draft, now missing, of that chapter). Chapter thirteen consists of an essay written by Henderson which here serves as a conclusion. The remaining chapters have been written by John B. Davis, based in part on discussions with Henderson as to what he would have covered¹

Henderson was born April 23, 1919 in Sudbury, Ontario, Canada. The family moved to California when he was one year old. He was struck with osteotuberculosis at age three and spent most of his childhood in bed. He entered first grade at age 12 in Vallejo, California and graduated from the University of California, Berkeley in 1944 with a B.A. in history, having accomplished public school and university in thirteen years. He received the Ph.D. from the University of Maryland in 1956. He previously taught at Michigan State College, the University of Buffalo and Stanford University. He subsequently taught at the

Universities of Pittsburgh and Illinois before joining the Michigan State University faculty in 1958. He specialized in the history of economic thought, labor economics, and economic development. His teaching and research assignments included work in Nigeria, Zambia, and Uganda. He served in numerous positions in faculty governance and administration at Michigan State. He was vice president of the History of Economics Society and edited several professional journals and was on the editorial board of others. He published four books and some three dozen articles in economics, law, and other journals. He was active as a consultant to numerous state and federal agencies and with many attorneys in personal injury, wrongful death and industrial relations disputes, often testifying in court as an expert witness. He died February 16, 1995, after a prolonged illness.

Henderson had his own preferred approach to the study of Ricardo's value theory, profoundly influenced by that of Piero Sraffa. His Sraffian intellectual predilection strongly affects but does not overwhelmingly dictate the interpretation of Ricardo's life and work given in these pages. Sraffa's work clearly helped Henderson determine, to his own satisfaction at least, what was important in Ricardo's work--not just his value theory but his entire corpus of economics. Perhaps it is most accurate to say that Henderson was influenced both by Sraffa's view of Ricardo and by the information provided by Sraffa's monumental collection of Ricardo's *Works*.

Several points must be made in this and other regards: First, although he builds and comments on the interpretive literature, this is Henderson's statement and not a running commentary or gloss on the secondary literature. He does position himself, however, with regard to some of that literature on various topics, especially, if not solely, the earlier literature.

Second, inasmuch as Henderson ceased serious work on the project sometime around 1983, the text does not reflect the significant literature published since 1983, perhaps even earlier, perhaps since 1979, especially that written and induced by Samuel Hollander, Terry Peach and Donald Winch, among others, including, for example, collateral works such as Paloma Diaz-Mas, ed., *Sephardim: The Jews from Spain* (Chicago: University of Chicago Press, 1992). Henderson was familiar with Samuel Hollander's *The Economics of David Ricardo* (Toronto: University of Toronto Press, 1979), on which we had several discussions over the years, but he did not amend his work to either reflect or deal with Hollander's arguments; his take on Ricardo's economics was already firmly established. I believe he did not deal with Hollander (among others) for several reasons: he had already formed his view of what he wanted to say, Hollander simply had a different account of Ricardian economics to relate, and he did not want to convert his book to a series of glosses or commentaries on the literature with different stories. Perhaps if he had worked at full strength until he produced a completed manuscript I might have convinced him to prepare an appendix dealing with Hollander and the others. On

the other hand, I could then and still can appreciate his desire to tell his own story, period. Scholarship does, however, require paying attention to the work of others. Henderson does this to a substantial degree, at least to the work of others until 1979 or 1983, but not completely, and the reader must be aware of this.

Third, inasmuch as relatively little of the post-1983 literature deals with the life and times of Ricardo, very little if anything of fundamental importance in Henderson's account and interpretation of the life would likely have been changed because of those publications. As for the theory, I doubt if any post-1979 literature would have led Henderson to change his view of Ricardo on value theory or on any other technical topic. We discussed some of that literature and I sensed no serious modification.

It is therefore particularly important to appreciate that although Henderson was familiar with substantially all of the important Ricardo literature to 1979 (and with some written thereafter), and although he could have written an extensive and interesting critique of that literature, this biography of Ricardo is not a critique--although, again, he does distinguish his interpretation on various points from the positions established in the principal writings on Ricardo to that time. This book is a distillation of what he learned and thought important about Ricardo, his heritage, his times, and his theories, building upon the scholarship as it existed by c.1983. This is *Henderson's* account of Ricardo's life and economics. Surely another scholar could have written a more or less different account, but in various respects, perhaps especially in matters of Ricardo's personal biography, this is the first comprehensive treatment and the one from which any and all future Ricardo biographies will have to begin.

The picture of Ricardo which Henderson presents is more comprehensive, deeper, richer, and more finely nuanced than any that existed before Henderson laid down his pen (I mean that literally: he wrote his text and notes by hand on yellow legal pads). Henderson shows that many of the uses to which the mainstream of economic thought has put Ricardo's ideas have, regrettably, not only obscured the humanity of the man but exercised myopia in interpreting and characterizing his system of thought. Much of the latter is due to the practice of Whig history of economic thought, in which Ricardo is both understood and assessed on the basis of hegemonic neoclassicism (and Ricardo would face no better a fate if a Marxist standpoint were substituted, although the Marxist would be more sensitive to different topics and nuances). The Whig history of Ricardo has not been entirely successful, in large part because neo-Ricardianism has been active in establishing *its* interpretation of Ricardo and the classical tradition. Henderson is to be seen as a contributor to the neo-Ricardian movement.

As for David Ricardo himself, much less is known of the details of his life and career than, for example, John Maynard Keynes, for whom his biographers, notably Don Moggridge and Robert Skidelsky, have an abundance of materials, due in part to the relative recency of Keynes's life and in part to the enormous surviving paper trail of that major modern writer. (We know even less about the details of the life of Adam Smith than about Ricardo.) Still, even with an ample paper trail, researchers

have had to dig. Henderson, for his part, has blended three modes of biographical procedure, neither perfect and conclusive but each of value. He has combined (1) careful use of established knowledge of putative fact, however often enough equivocal in interpretation; (2) disciplined exercise of perceptive intuition and reasoning as to what likely did happen and why; and (3) broad reference to cultural and historical background. The result is a personal biography which is in some respects a combination of fact and interpretation and in other respects, especially those having to do with ideas and theories, that is, intellectual biography, a combination of fact and interpretation.

Some of Henderson's intuition and reasoning pertains to the psychology of David Ricardo the human being. Here Henderson relies on the insights of Erik Erikson. The result is restrained, certainly not exuberant, psycho-biography. The psychological analysis is an aid in understanding and interpretation, not an off-putting device with which to generate major arguments or conclusions. Even referring to Henderson's study as psycho-biography is a bit of an exaggeration, but that element is present. Indeed, a good biography requires some psychological analysis, and Erikson's framework is for the most part rather commonsensical. (Some readers may find objectionable the occasional Freudian analysis and the long parallel discussion of Martin Luther, but Henderson has both his reasons and his discretion as an author.) At any rate, every author needs a design strategy, or, to change the metaphor, pegs on which to hang his story, and the theory of crises of the human life cycle is used by Henderson for such a purpose. As someone who appreciates the difficulty, even the impossibility, of comprehending (the basis of) his own motivations, I can appreciate the utility and the limits of trying to figure out others' conscious and subconscious motivations, which is the interpretive course which Henderson deemed useful to him. Henderson is, appropriately, generally careful and restrained in his interpretive attribution of the psychological character of sources of Ricardo's behavior.

Along these same lines, among the attributes of the aforementioned biographies of Keynes are their respective authors' willingness to address both motive and cultural and social circumstance. Indeed, both are extraordinarily rich and highly nuanced in the depth and importance of the issues raised in the course of presenting Keynes's life. Here, too, the design strategies include psychology as a basis of comprehension and interpretation, perhaps less explicitly manifest than in Henderson's treatment of Ricardo but present nonetheless.

As part of his discussion of the cultural and ideological climate in which Ricardo lived, Henderson relates how classical economic liberalism was one facet of a great wave of individualism extending to religious, political, and other spheres. For example, he stresses the common dilemma of the Quakers and Jews on religious freedom. As Davis points out in his chapter on Ricardo in parliament, following Henderson's lead, religious toleration was important to the man. Further, the rise of the commercial nexus in the City was very much a matter of individual powers and rights (as John R. Commons was later to make clear in his *Legal Foundations of Capitalism*). Subsequent conflict over class and related legal-economic structures--

centering on the further question: individualism for whom and in what?--may well have obscured this movement.

But the distinctive character of Henderson's biography resides not only in its wide use of Sraffa's Ricardo materials, its resonance with Sraffa's approach to Ricardian value theory, its theory of biography, and its effort to relate Ricardo to contemporary movements of thought and policy. It also resides in its approach to Ricardo the person. Henderson's biography is premised upon and gives effect to a particular approach to the man. Henderson sees Ricardo as the product of his personal intellectual history and that as a function of the history of the Sephardic Jews. Ricardo was not just an unusually brilliant individual. He did not just exist at a particularly exciting time--exciting from the standpoints of English economic and political history and of the development of economic theory. He was an unusual person with a particular intellectual heritage and, Henderson both argues and pursues in detail, that heritage meant something to what he did, and the way he did it, as a stock jobber, a parliamentarian, and an economist.

Just what did the history of the Jews mean? The Jews were successful in commercial and financial terms, because of their being prohibited from other economic activities and because of their developed skills. When national economic development came to depend upon what the Jews had mastered, alliances central to national political conflicts emerged around and against their role in the economy. Henderson very effectively goes from writing a history of the Jews to a history of the emergence of the national economy given the history of the Jews. Ricardo was positioned on account of both historical developments. This is important to understand and to appreciate his special role historically and uniqueness intellectually. Ricardo is to be understood in terms of his Sephardic culture generally but especially in terms of the history of the Sephardim in the developing national economy.

Accordingly, the reader will not come to David Ricardo directly or in depth for quite some pages. First, one will encounter both the general Sephardic heritage and the particular experience of the Ricardo family, the latter a heritage of Sephardic background, family history, and London finance. Only then does Henderson relate further details of Ricardo's own family and his early financial career. Only then do we come to the life and relationships of Ricardo the economic theorist. It is Henderson's understanding that one cannot know who Ricardo was until one knows his Jewish religious and family background and especially the history of the Sephardim in the developing national economy.

One cannot appreciate too strongly the importance of Henderson's historical approach to biography. One cannot understand Ricardo, Henderson maintains, unless one sees him to be the product of a history, even though this is an important and not always well appreciated view of biography generally. This does not signify Henderson's Marxist convictions, for example, a naive historical materialism. Henderson truly and honestly believed individuals to be products of history. Other biographers say this, but it is often more of a cliché for them. Individual attributes do count--no other contemporary of Ricardo became a Ricardo--and while our

contemporary culture is very individualist, it may be a verdict of future generations that good biography was rarely done in our period. Henderson needs to be appreciated on this score.

I first met John Henderson in 1968 when I first visited and later moved to Michigan State University. He had been working on Ricardo's biography for some time and was to work further on the project for the next fifteen years. We discussed his work often. He always insisted that to know Ricardo one must know his personal and intellectual, that is, Sephardic Jewish, origins as well as his family's and his personal experience in City finance. Ricardo was indeed, for Henderson, a product of his heritage. The conventional wisdom, I think, has emphasized his role as a stock jobber. For Henderson, that is not irrelevant but the experience was practiced and interpreted on the basis of Ricardo's Sephardic Jewish origins.

I have noted that Henderson had a particular affection for Sraffa's approach but did not overwhelmingly adopt that approach in writing Ricardo's intellectual biography; the biography is not a brief for Sraffa (though it is a paean to his creation of Ricardo's *Works*). The reader should be aware that Henderson was, with Jeff Biddle and myself, a member of the dissertation committee of Ercument Aksoy. Aksoy's dissertation, subsequently published,² examined the problem of the multiple interpretation of Ricardo in the light of the problem of the hermeneutic circle. Although Aksoy, too, was impressed with Sraffa's approach, he had to maintain a certain agnostic approach in view of the problem of the hermeneutic circle. I mention the Aksoy committee and dissertation because, although Henderson shared Aksoy's proclivity for Sraffa's interpretation of Ricardo, he fully and unreservedly supported the agnostic approach taken by--yes, to some extent imposed upon--Aksoy.

Let me comment on the preceding paragraph, at the instigation of John Davis, as it may contain more Samuels than Henderson. Intellectually, Henderson appreciated Aksoy's hermeneutic-circle argument. But both Henderson and Aksoy felt that Sraffa was correct. Henderson came out of a traditional left-Marxist background and was no agnostic in the sense used here. Henderson, for all his agreement with the limits imposed by recognizing the hermeneutic circle, insisted upon in the case of Aksoy by Samuels and Jeff Biddle, surely thought he had got it right as a neo-Ricardian Sraffian. The reader must be clear on this point.

Henderson does derive great insight from both Sraffa and from Erikson, as well as others. None of these scholars, however, lead Henderson; our author is his own man; he uses the formulations and insights of others, but is not driven by them.

Henderson's personal interaction with Sraffa and Maurice Dobb ought to be noted. Henderson met with them at Cambridge while researching Ricardo. He related to John Davis (and to me many years earlier) an occasion at which they lunched and had substantive discussions. He asked Sraffa in a sort of teasing way whether *Production of Commodities* assumed constant returns to scale (an often debated point), and Dobb laughed and said that he'd never get an answer out of him on that! Sraffa sat stone-faced. The point is that more than acknowledgment of their help is called for. That was the heady period of the capital controversy, and

there was almost a conspiratorial air to things. Both Sraffa and Dobb were committed Marxists and undoubtedly this is the way Henderson related to them. Accordingly this biography of Ricardo must be placed in the tradition from which it is drawn.

Henderson's affection for Sraffa is exceeded, I think, only by that for David Ricardo himself. Does Henderson commit the cardinal sin of the biographer, and lionize his subject? My opinion does not count; each reader will have to pursue his or her own judgment. What is certain, is that each reader will have a deeper and more profound understanding and respect for Ricardo. This man, whom so many know for his theories of rent, labor theory of value, international trade, and increasing returns, and for his conflicts with Thomas Robert Malthus over the theories of gluts and value, was a living, working individual, and, as Henderson shows, a remarkable human being.

Many are the topics which the reader must interpret and assess for him- or herself, for example, religion. How important was religion both *for* Ricardo and *to* Ricardo? What impact, consciously or unconsciously, did it have on his life's work--business, political economy, and politics? Would he have been a different person had he been raised differently? Similarly regarding ideology: How important was the mind-set of his own stockjobbing career and of a commercial and manufacturing society in the formulation of his ideas? Was it the source of his preconceptions and presuppositions, and, if so, what of it (what does it mean for the nature and limitations of his, and other, economic theories)? Furthermore, what is omitted from his total system of ideas by the conventional textbook treatment of Ricardo? Is Ricardo an example of the proposition that a great writer is always more complex and more subtle than he or she is typically made out to be?

Likely the most controversial argument by Henderson involves his interpretation of Ricardo's theory of value, presented in Chapter VIII with echoes in Chapter IX. The reader must be prepared to consider a rather simple and straightforward question which has vastly varied and subtly nuanced answers: What is a theory of value a theory of? Henderson argues both that a theory of value need not be a theory of price and that a theory of value which is not a theory of price can itself be, or attempt to do, several different things. He argues, in effect, that only if these considerations are effectively understood, can one appreciate the differences between Ricardo and Malthus and between Ricardo and many later writers.

Lest one think that I am unduly extolling the virtues of Ricardo, let me note (as many have done before me) a defect of his analysis--a defect on the one hand so human and on the other so prevalent in economics. I refer to his position on bullion insofar as it differs from the *Bullion Report* (which topic Henderson discusses in Chapter VI). Here we have a good example of what Schumpeter called the "Ricardian Vice." Ricardo affirms that the price level is a function of the quantity of money and rejects the role of all other factors, such as demand and shocks in general. On the basis of his adherence to a narrow view of the quantity theory, he not only reaches presumptuous recommendations for policy but also presumptuous

conclusions as to economic reality. If the actual economy on some matter or in some respect, X, is a function of several possible variables, say, A, B, C, D . . . N, then it is especially myopic (and perhaps also ideologically and politically driven) to affirm that X is a function--and by implication at least, always a function--of, say, B, because (perhaps) one has a nicely formulated theory of B (in the case of the quantity theory, it is altogether both nicely and diversely formulated). So that in one instance B might actually be the governing variable but in another, A or C, etc. This being the case totally detracts from neither the attractiveness of Ricardo nor the putative greater complexity and subtlety of Ricardo claimed above--any more than recognizing that William Stanley Jevons (among others) practiced a broader economics than his narrow definition of the field would lead one to expect, or recognizing that Carl Menger had a more affirmative view of history and organicism than his stylized position in the *Methodenstreit* and on economic theory in general would lead one to believe. Of course one also should note that Malthus, too, was somewhat a man of one cause; as Henderson points out in Chapter VII, whereas Ricardo attributed inflation to an excessive note issue, Malthus found the cause to reside in excessive population.³

Further apropos of the "Ricardian vice," in Chapter VII Henderson treats its practice as a factor distinguishing Ricardo from Malthus. I would differ: Both dealt with aggregates and both applied theory to policy questions; the difference was that Ricardo sought major institutional change, whereas Malthus sought to maintain the old regime. But Henderson is extremely perceptive when he characterizes Malthus's position as "biased toward resolving all contingencies prior to the implementation of policy," for herein lies a critical difference, that between deliberative policies in the legal/political arena opening up, indeed motivated by opportunities for, change, and policies of reinforcing and perpetuating the institutional status quo by avoiding consideration of deliberative change. One is tempted to call the latter nondeliberative change but that characterization is deficient on several counts, for example, because (1) the status quo is itself in part a function of past acts of deliberative legal change (albeit often with unintended and unforeseen consequences); (2) efforts to avoid "deliberative" change themselves often involve deliberation, including disingenuity; and (3) change within the status quo is both deliberative and nondeliberative, with elements of the former within the domain of the latter, for example, decisions made within the existing structure of nominally "private" power. In other words, policy is ubiquitous, and Malthus's efforts to avoid "policy" reduce to avoiding legal change of law--which is always the fundamental issue.

The question is a matter of taste but I found that one of the most intriguing aspects of Henderson's biography concerns the conflict of world views among Ricardo and his fellow political economists. For some, the world is described and evaluated on the basis of the preconceptions of an agrarian and landed property society; for others, the preconceptions of a middle-class, capital-accumulating society. Modern economic theory has the preconceptions of the latter group, in part because of the past social construction of the economy on the basis of the

preconceptions of this very group. The problem is not necessarily to challenge these preconceptions and the society erected on their foundations, but to comprehend it and its limits in terms of those preconceptions. As George Shackle might have put it, modern economic theory, like the modern mind, poses only those questions which the terms of that theory allows itself to be asked.⁴ In Ricardo's day, during the infancy of political economy, there were more questions being asked and on quite different terms.

The point I want to make is a more general one. It also applies, for example, to the conflict between Malthus and Ricardo over the theory of value and, by extension, to the entire history of value theory. The point is this: Different writers focus on different specifications of problems. Different writers focusing on the same problem focus on different facets and different variables. Even though they use common words ("value," "cost," and so on), the meanings which they attribute to them vary considerably. For any particular work, each writer tends to define it in such a way as to give effect to, or build in, his or her own problem-definition and/or his or her own theory. Henderson very aptly contrasts Ricardo's and Malthus's theories of value ultimately in such a way. In this context, some theories are non-competitive though they may nonetheless be commensurable. Two theories of value may define the problem of value differently and produce different theories; the different definitions of the problem of value are competitive but the theories qua theories are not competitive, though they are commensurable (comparable). Each theory explains a different problem, a different definition of the problem of value. Insofar as they explain a different problem, they are noncompetitive as theories, though, again, the problem-definitions (with their respective claims for social space and attention) are competitive. (Marshall's scissors' analysis brilliantly finessed much of this for neoclassical price theory.) Finally, one can envision a matrix formed by the different problem definitions--the different definitions of the problem of value--and by the different facets and variables taken up by each theory as well as by the different theories themselves.

In the present instance, of course, more is involved than the analytical, empirical and other relationships between different theories of value (and other rival theories). Also present is the question of what Ricardo "really" meant, subsidiary to which is the further question of interpreting the evolution of his ideas. Henderson, for his part, insists that the publication by Sraffa of Ricardo's *Works* was a major contribution to such historiography. For Henderson, the *Works* are a major source into Ricardo the human being and Ricardo the economic theorist.

In the Spring of 1994 I realized, after much wishful thinking and procrastination, that Henderson was not going to be able to complete the work, despite my and others' occasional efforts to prod him to do so. It appeared to me that either the manuscript was going to pass into oblivion or someone would have to superintend its preparation for publication. The latter was obviously the preferred operative alternative--it would be an intellectual tragedy for Henderson's enormous efforts to have been in vain--and the sooner the better. As a close friend and colleague, and especially one who shared work in the field of the history of

economic thought,⁵ it became clear to me that I had to undertake the project; not doing so would be regrettable for Henderson, for our colleagues in the field, and for myself. Fortunately, I could count on the assistance, however limited, of both Henderson himself and his wife Margaret. Henderson's assistance to both John Davis and me continued until mid-December 1994, when he took seriously ill, eventually becoming comatose, until passing away on 16 February 1995.

Early on I decided that, due both to the pressure of my own research and relative lack of expertise, someone else had to be recruited to complete the manuscript. John Davis had written his dissertation on Ricardo's machinery chapter under Henderson and me, and had since become a productive scholar of both quality and note. Moreover, Davis and I shared many of Henderson's views about Ricardo. With Henderson's permission I proposed this to Davis and he agreed. John Davis wrote chapters X, XI, and XII. Also with Henderson's permission, I recruited another former student, Gil Davis, no relation to John, to help with the technical editing.

The reader must appreciate that except for relatively minor editorial alterations in the nature of light editing (sometimes using suggestions marked in margins by various earlier readers, and in a few cases introducing alterations of my own, in no case involving a matter of substance), I have not insinuated myself into this work. I say that not to dissociate myself from something disagreeable, which is hardly the case; if I did not respect the work I would not have devoted so much time and energy to it, collegiality and friendship notwithstanding. (That is not to say that I agree with every word.) My point is, rather, to underscore to the reader that this is Henderson's and not my work. To him should be directed all credit--as well as all criticism--except insofar as criticism may pertain to my editing or to Davis's chapters, which are intended to say what Henderson would have said if he had been able to write them.

Throughout the many years in which Henderson worked on David Ricardo, he was helped in various ways by many, many people, by no means all of whose names can I retrieve from his records and memory. But, so far as I can tell, they include the following: William Breit, Dudley Dillard, Maurice Dobb, William Grampp, Alexander Guttmann, Arnold Heertje, James P. Henderson, Margaret Henderson, Ben Hitchcock, Herbert Kisch, Don Lammers, Jacob R. Marcus, Ronald Meek, Piero Sraffa, William Thweatt and Mary Jo Tormey. Several of them--as well as Bruce Caldwell, William Campbell, Huimin Chung, Ross Emmett, Riccardo Faucci, Kirk Johnson, D. P. O'Brien and Steven Weiland--have helped me. All of them, and perhaps still others, deserve his fondest and more sincere gratitude.

I add my own name to that list so as to record my fond discoveries of materials in his files which I had come upon, in my own reading and research, and passed along to him, as well as edited copies of earlier versions of his chapters. While editing the manuscript my memory occasionally returned to reading both Ricardo's *Works* in the early 1960's and Henderson's manuscript, chapter by chapter in various versions, fifteen years or so ago, and with much pleasure, both then and now. I was also led to reread certain writings and to read others for the first time,

both a source of great pleasure and contributing to the situation that the work was its own reward.

I also want to thank Zachary Rolnik for his enthusiastic support for the project for well over a decade. His help, and more recently that of Christopher Collins and others, is very much appreciated.

I should also note that Henderson read widely in areas both immediately and tangentially related to Ricardo's life and work. This is evident in the piles of note cards given to me by him and Margaret Henderson (and which are surely incomplete). Not all his research was cited directly in the work, so they do not all show up in the list of references.

This is as good a point as any to remark both that Henderson was dedicated to writing Ricardo's biography--it was the major thread of his intellectual life--and that he very much enjoyed himself doing the research and writing. That is why his abrupt cessation of activities on the project in 1983 was so sad to his friends.

I want to thank Herbert Johnson and JAI Press Inc. for permission to include materials originally published in *Research in the History of Economic Thought and Methodology*, volume 2, 1984, pp. 65-124. These are the essays on "Ricardo and the Provident Institutions," "The Political Economy Club: Robert Torrens and the Decline of Ricardo's Influence," and "Malthus and the Edinburgh Review." I also want to thank R. K. Meiners for permission to include materials originally published in *Centennial Review*. These are the essays on "Adam Smith, Ricardo and Economic Theory," volume 21, Spring 1977, pp. 118-139, and "David Ricardo and Religious Liberty," volume 25, Summer 1981, pp. 294-313.

No one, however, can ignore the enormous debt which Henderson (and many other scholars) owe to Piero Sraffa and Arnold Heertje for their enormous accomplishments in ferreting out so many details of Ricardo's family and life. Henderson, for all his original on-site research, could not so readily and effectively, if at all, have written this work without the aid of their published research, not to mention private discussions. Of course, Henderson both borrowed from and found re-enforcement for some of his own ideas in the work of others; one example is the interpretation of the role of Ricardo's theory of value affirmed by S. G. Checkland.

I also want to thank Gilbert B. Davis, John B. Davis, Margaret Henderson, and John P. Henderson himself for invaluable help in preparing this manuscript for publication. Gil Davis and I shared the editing work, with some input from John Davis. Some errors and problems likely remain, perhaps due to the division of labor between two editors (problems "falling between the cracks," as the expression goes); I take full responsibility for all of them, both those which I may have failed to correct and those which I may have inadvertently introduced. Margaret Henderson also prepared the camera-ready copy.

Also due thanks are my wife, Sylvia, for a variety of assistance, sometimes tedious, and for her unflagging support; and our daughter Susan, especially for recruiting Melanie McCurdy for library research in New York City. Melanie identified and/or located several of Henderson's references which I thought might be beyond rescue.

John Davis wishes to acknowledge the help of Giles Dostaler, Christian Gehrke, Heinz Kurz, Murray Milgate, Warren Samuels and Philippe Steiner for comments on his chapters.

Alas, Henderson was not perfectly meticulous in his record keeping and I have been unable to identify several of his sources. Many more were identified and located but I had to become reconciled that not all would be found. These have been identified in the text with a question mark within square brackets: [?]. Much reliance for the identification of authors has been placed on Frank W. Fetter's "The Authorship of Economic Articles in the *Edinburgh Review*, 1802-1847," *Journal of Political Economy*, vol. 61 (June 1953), pp. 232-259.

The reader will have to make his or her own adjustments for the enthusiasm with which I help make Henderson's Ricardo available. We were good friends and colleagues, so some myopia is to be expected. Whatever, the reader is in for a good read.

Joseph Schumpeter, in his review of Keynes's *Essays in Biography*, wrote that "Biography is the art of focusing an epoch and an environment in the story of an individual."⁶ Schumpeter also writes that "The great difficulty of a biography like this consists in making one connected whole of its two elements, disposition of a life and exposition of scientific achievements, which are so refractory to being welded together. This difficulty has in this instance [Keynes's essay on Alfred Marshall] been solved in such masterly fashion as to make any commendation inadequate."⁷ Henderson's biography of Ricardo, the reader will find, is similarly masterful.

With great sadness I report the death, on 9 August 1996, of Gilbert Brian Davis at the age of 46. Gil, who was born 4 October 1949, received his undergraduate degree from Kalamazoo College and the doctorate from Michigan State University, where he had been our student. He was a visiting professor of economics at the University of Michigan Business School. He is survived by his wife, Brenda Turner, an attorney. Gil was a splendid teacher, a fine intellect, and a genuinely decent person. His work as co-editor of this biography was first rate. We shall miss him.

Notes

¹ On a page headed "Notes for Preface or Introduction," Henderson indicated he would discuss (1) that it is not true that supposedly little is known of Ricardo, a lot is known of the Sephardim; (2) how Keynes "did in" Ricardo, "just as bad as Jevons," and that Fetter (senior) was wrong on Ricardo's value theory; (3) the importance of Dobb, "to whom R was important"—that in Robert Brady's course (at Berkeley), one needed to understand Dobb's first chapter, "hence to R;" and (4) "Thesis—not time for Labor Theory."

² Ercument Aksoy, *The Problem of the Multiple Interpretation of Ricardo*, Greenwich, CT: JAI Press, 1988.

³ This is also a matter of symbolic logic. If S or R can cause T, and if T is known to exist, then one does not know a priori whether S or R is the cause in this particular case. The determination of cause is in part a matter of factual evidence, but data, or fact, is itself theory dependent (theory laden), and it is here

that the role of a striking or ideologically loaded theory—such as the quantity theory—can lead to presumptuous identification of one cause over the other(s).

- ⁴ The text derives from the following: “The forty years from 1870 saw the creation of a Great Theory or Grand System of Economics, in one sense complete and self-sufficient, able, on its own terms, to answer all questions which those terms allowed, ...Only a few questions, that lay outside the terms on which the Great Theory allowed itself to be consulted, remained as scraps to satisfy the prowlers round the edge of the camp.” G. L. S. Shackle, *The Years of High Theory*, New York: Cambridge University Press, 1967, pp. 4, 5.
- ⁵ As I reflect on our professional relationship, I am struck that, with the exceptions of Introductions to the *Klassiker der National-Okonomie* reprint series editions of Malthus’s *Essay on Population* and *Principles of Political Economy*, we wrote nothing jointly. This is perhaps explained by his preoccupation with Ricardo and mine with Smith (and other subjects).
- ⁶ Joseph A. Schumpeter, Review of John Maynard Keynes, *Essays in Biography*, *Economic Journal*, vol. 43 (1933), p. 652.
- ⁷ *Ibid*, p. 654.

Chapter I

THE MULTIPLE ROLE OF THE BIOGRAPHER

The biographer is, as it were, a hybrid: he is a historian-
psychologist-sociologist-man-of-letters.

Daniel J. Levinson (1978, p. 43)

This book is an intellectual biography of an outstanding and unusual Englishman, David Ricardo. He was born on Broad Street, in the center of the ancient City of London, on 18 April 1772. Reared in a highly orthodox Sephardic family, young Ricardo's initial interaction with the broader English society came when he entered his father's stockbrokerage business at age fourteen.

Owing to his success as a stockbroker and his superior intellectual capacities, Ricardo became active in English economic and social affairs during the crucial first decades of the nineteenth century. He withdrew from the Jewish enclave in which he had been reared, becoming in a brief time an active and highly successful participant in the wider arenas of English society. The story of his life bridges both the world of the Sephardic enclave, and that of the English society which encompassed it. Once he began to participate in the surrounding culture, he suspended the habits and practices of his Sephardic upbringing, even though there were many remnants. It is not unreasonable to argue, as subsequent discussions will detail, that a major reason David Ricardo was capable of making his great contributions to economic theory and was able to foster and support the fundamental humanitarian ideas which he held, stemmed primarily from the fact that he was raised in the Jewish enclave, rather than the mainstream of English society. Since he was an "outsider," he was able to penetrate the veil of custom and tradition which covered the English economic and social system.

For example, David Ricardo was the first Jewish-born member of the House of Commons. He was the first Jew to become an accepted member of English society, even though his connections with that society were largely of an intellectual and

political kind. For a time, he was even sheriff of Gloucestershire, an honorary title more typically conferred by the Crown upon country gentlemen and squires whose ancestors held similar titles. Undoubtedly, he was the first sheriff of any of the shires who had been born on Broad Street and had made his reputation and fortune in the infamous environment of Exchange Alley.

Ricardo died on his country estate in Gloucestershire on 11 September 1823. He was buried in hallowed ground a short distance away in Hardenhuish. He was accompanied to his grave by seven brothers, three sons, three sons-in-law, three brothers-in-law, and Joseph Hume, a fellow Member of Parliament—seven in excess of a minyan.¹ Significantly, there were no women at Ricardo's burial, also a traditional orthodox Jewish practice.

Just how much significance should be attached to these traditional aspects of his burial is open to some question, for Ricardo had broken his association with the Jewish religion long before, when he married a Christian woman in his twenty-first year. But despite his separation from the family religion, he was the favorite son, and the favorite brother of all his many siblings. Several of his brothers and sisters left the faith, but several others remained orthodox Sephardic Jews, and it could well have been in deference to their wishes that Ricardo was accompanied to his grave in a traditional fashion.

The current resident of David Ricardo's country estate, Gatcomb Park, is Princess Anne; the site of his London house, on Grosvenor Square, is occupied by the Embassy of the United States of America. Ricardo would be highly amused, for a man less pretentious and unassuming would have been difficult to find in the first quarter of the nineteenth century. As for his wife and children, they would have looked upon these recent happenings with great awe, and would have considered them an honor.

Ricardo's accumulated wealth provided him with the financial opportunity and the leisure to pursue his intellectual activities; the same wealth provided his family with the means to engage in conspicuous consumption and emulate the grand manner of living of the English landed aristocracy. The fact that as an economist-politician he proposed and pursued policies which were an anathema to the same landed aristocracy makes his story that much more meaningful and exciting.

Almost any serious scholarly work concerned with the sociopolitical events of early nineteenth century England will make some reference to the activities and influence of David Ricardo. In most instances these citations center on Ricardo's theoretical thrusts with his friend, critic, and fellow economist, Robert Malthus. As a consequence, those who are familiar with the history, economics, or politics of England during the post-Napoleonic era have read of Ricardo, and may even know something of his economic theories. If one is an economist, that familiarity is more extensive, even though the significance and meaning of his contribution to the

¹ Minyan is the English expression for the Hebrew word ten. As Hebrew is written without vowels, there could be several English spellings. Minyan is significant in that no public reading of prayers from the Tora or the Talmud can be recited except in the presence of ten males who have been bar mitzvahed. A minyan is necessary for a circumcision, bar mitzvah, prayer for the dead, a burial, or any service in a synagogue.

development of economics is subject to conflicting interpretations. In writing this biography I have a dual purpose, and it is believed appropriate in this initial chapter to set the stage so that these purposes may be better understood, and perhaps appreciated.

In Sections 1 and 2 of this chapter, my chief concern is with the general reader, as different from economists, since I believe Ricardo's story is too interesting to be limited to the members of the profession. Ricardo was not merely an economist. And the typical view that he was a dull and dreary man, who wrote even drier economic theory, a pessimist and cynic, needs to be put to rest. When his life and ideas are set against the backdrop of an English society in transition from an agricultural to an industrial state, Ricardo the individual takes on dimensions and characteristics which are quite contrary to the prevailing picture. His story is set out in detail in the remaining chapters, and the brief synopsis here is merely to whet the appetite for the full fare. This, then, is my primary purpose: to tell the life story of David Ricardo.

If the first two sections are intended for the generalist's palate, Sections 3, 4 and 5 are served up primarily for economists, even though I hope to make the issues understandable to non-economists as well. These essential issues involve the fact that Ricardian economics has always been controversial, as has most economics. Ricardo himself lived with this controversy and thrived on it, but after he died the debate took on added dimensions, and there has been growing disparity in interpretations of Ricardianism. There is much confusion in the economics literature as to just what Ricardo meant, and what his economics said, despite the fact that almost everyone agrees he was one of the great economists. He is the "economist's economist."

With the publication in the 1950s of the first of Piero Sraffa's eleven-volume edition of Ricardo's *Works*, containing his speeches, drafts of manuscripts, correspondence, and books and pamphlets, one would have expected that the profession would at long last have been able to develop a better perception of Ricardian economics. But that has not happened, at least in my view, and this is my second purpose in writing this volume: to present my perception of his economics and what it meant.

The major difficulty with interpreting Ricardo arises, to some extent, from conflicting paradigms. The way in which he viewed the functioning of the economy was quite different from the paradigm dominating the profession today. It is my intention to show the development of Ricardo's own paradigm, not to evaluate his contribution in terms of how he failed to write within the neoclassical framework. As the discussion in Sections 3-5 suggests, that difference has been one of the major reasons for the intensity of the controversy over what he meant and explains why it has lasted for such a long time.

The final section of this chapter delineates what I understand to be intellectual biography, as opposed to biography that simply traces the events of an individual's life. The development of ideas emerges in the course of the social and personal life of an individual, and to understand and to convey how the pieces fit together in the

matrix of a lifetime requires that the biographer plays many roles. The title of this initial chapter, therefore, is chosen to convey at the outset the complexity, the diversity, and the intensity with which I have labored over the life of David Ricardo.

Ricardo's Three Careers

Measured against normal life expectancies of his time, let alone ours, David Ricardo lived an abbreviated life. Two score and eleven years is a brief period in which to attain success in one career, much less three. Ricardo first distinguished himself as a highly successful businessman, then became one of the greatest economists of all time, and finally had a brief but outstanding career as a parliamentarian.

David entered his father's business at age fourteen and eventually acquired a substantial reputation as a broker. When at twenty-one he parted with his father over religious differences, he was able to enter business on his own with a line of credit extended by independent sources. He was so successful that he retired twenty years later with a fortune in excess of £500,000. He succeeded not only from a personal financial standpoint; he was a leading member of the London Stock Exchange, where he played a major role in establishing higher standards of conduct for brokers, a problem which had plagued the Exchange from its beginning. As was his father, David Ricardo was one of the most trusted and respected members of the Exchange. As a loan contractor for the British Government during the Napoleonic Wars, he was bullish on Britain, and that contributed greatly to his financial success. He marshaled the major share of the funds necessary to wage the wars; Wellington provided the military generalship, the students from the playing fields of Eton, the land forces.

Ricardo's second career began at age thirty-six, while he was still a stockbroker. As he became more and more interested in the broader economic and social characteristics of English society, he began to write. His first efforts were in the form of three anonymous letters to the editor of the *Morning Chronicle*. As might be expected, he concentrated upon the causes of wartime inflation, which he attributed to the excessive and uncontrolled issue of bank notes by the Bank of England. Others attempted to argue that the inflation resulted from trade imbalances or structural changes in the economy caused by the war. These initial letters developed the theoretical framework for Ricardo's later contributions to the quantity theory of money, and his views on money and banking regulation.

As the war drew to an end in 1815, Ricardo turned his attention to agricultural issues, more precisely the economic consequences of agricultural protection. It was in this area, of course, that he became most famous as an economist. It is ironic that Ricardo is almost universally associated with the concept of rent, and the conditions which make it a category of income. This emphasis greatly misrepresents his main contributions to economic theory. It cannot be denied that Ricardo was interested in the analysis of rent, but his purpose was to draw attention to the fact that rent was an effect, not a cause. As Joan Robinson later was to write,

"(T)he whole of the earnings of *land* in the economist's sense is *rent* in the economist's sense" (Robinson 1933, p. 102; italics in original).

This conceptualization of land income was neither original nor unique with Ricardo, as he pointed out on numerous occasions. What was unique was his policy recommendation. His theoretical work and later political career were directed toward achieving an economic system in which rent would be gradually reduced as a category of income. The fact that rent occurred at all was only a consequence of a system that led to a misallocation of resources. The source of that distortion of resources was an intruding legislature, controlled by landed interests.

Ricardo's formulation of his analysis of rent and its consequences occupied only a few months of his time, but he spent years arguing in support of his conclusion that agricultural protection should be ended. After leaving the stock exchange in 1815, he devoted his thought and writings to the role that capital played in the process of commodity production in a market system. He sought to analyze the influence of the different quantities of capital and labor in the numerous sectors of the economy and to formulate a system that would reveal the consequences of these diversities as they affected the two productive categories of income, wages and profits. Rent, the income from land, played no causal role in the distribution of capital and labor among the numerous industries in the system, for rent was always an effect, not a cause. In the major portions of Ricardo's economic writings after 1815, rent played a minor and diminishing role.

Ricardo was the first theorist to analyze the intricacies of capital accumulation, and the consequences of the diversity of capital formation among industries. He attempted to explain the effects of this diversity upon the value and price of commodities and, therefore, wages and profits. Ricardo's great theoretical contribution, accordingly, was his analysis of the labor-capital process of industrial production, and not the labor-land process of agricultural production.

Until recently, scholars in the history of economic theory mistakenly have stressed Ricardo's critique of the labor-land process of production, rather than his unique contribution to the consequences of differing degrees of labor and capital in the various segments of the economy. Ricardo's predecessors were, indeed, the Physiocrats, such as Quesnay and Turgot, but his successors were the analysts of capital formation, the likes of Marx, Böhm-Bawerk, and Wicksteed. Ricardo's great contribution was in the direction of his successors, not that of his intellectual ancestors.

Ricardo The Man And His Times

To achieve the great transition from a society dominated by a labor-land production system to one in which the emphasis is upon a labor-capital process, several distinct change agents are required, as well as the institutionalization of new forms of economic and social activity. One such change agent is that of technology, another the installation of a system of money and credit, while a third is the institutionalization of an emphasis upon the need for capital accumulation, rather

than a stress upon conspicuous consumption at the hands of the land owning class. A land-labor production system is geared to the maintenance of minimum agricultural subsistence for the great majority of society, while there is surplus consumption for the minority aristocracy. Luxury and wasteful consumption for the nobility and clergy are desired ends, while an excess of consumption on the part of the masses is typically viewed as being sinful and self-destructive. The lot of the peasant and serf is misery; the lot of the aristocracy of church and state is wealth, and it is always strange how much wealth for the aristocracy a poor society can generate. Prior to Martin Luther, few Western theologians had given much consideration to whether the aristocracy of church and state might also find the path to sin through excessive consumption.

In a labor-capital production system there is subsistence consumption for the masses and surplus accumulation by the *nouveau riche*. To be sure, the process of accumulation leads to conspicuous consumption, but this is not the primary emphasis in the early stages of the transition. The process of capital accumulation yields a greater net product, and this increased output presumably allows for an increase in real wages for the majority, or an increase in the subsistence level. How rapidly that level rises is, of course, one of the great controversies of economic and social history, as is the issue of whether a system of collective ownership of capital would not yield a more rapid rate of accumulation, because there would be a greater net increase in the total product each year. So far as England was concerned, the accumulation model applies, especially during the transition which bridged the late eighteenth and early nineteenth centuries. A rise in the level of subsistence occurred after 1775, as Adam Smith claimed in his *Wealth of Nations*, even though many of his contemporaries denied that the great majority of the people were improving their economic and social status as the result of the growth of capital accumulation. As one eminent authority has observed:

The later eighteenth century, according to the modern school of social historians, is regarded as the beginning of a dark age, in which there was a progressive degradation of the standards of life, under the blight of a growing industrialism, while the earlier part of the century is considered a golden age, one of those periods when English working-class prosperity was at its height. The social history of London obstinately and emphatically refuses to adjust to this formula. There is a cleavage, certainly, about the middle of the century, *but it is improvement, not deterioration, which can be traced about 1750 and becomes marked between 1780 and 1820.*

(George 1966, p. 15; italics added)

Ricardo's years coincided with this marked transition. England, of course, was the first economy to experience this change, and as Marx was to stress many years later, the land of Ricardo's birth became the classic model for the study of such a transformation. In 1772, when Ricardo was born, England was still predominantly

a labor-land production system, but by 1823, the year of his death, the floodgates of industrial capitalism had been flung open. More important, of course, Ricardo was active in bringing about the change, although he was a more effective agent in some areas than in others.

In the area of new technology, for example, Ricardo took no part in developing new systems of husbandry, steel-making, or even mine-dredging. But in the growth of money and credit markets, he was an active and highly successful participant. In order for money capital to accumulate, so that physical capital can eventually perform its role of revolutionizing the old system of production, the centralization of such markets is essential. The accumulation of money capital preceded the accumulation of physical capital, the former occurring as an outgrowth of the expansion of both the public and private debt. The growth of debt was a prerequisite for the creation of the bricks and mortar which built the factories of the industrial system, not to mention the British fleet, which allowed England to dominate the seas and build a colonial empire.

As a third-generation stockbroker, David Ricardo was born, reared, and nurtured in the money and credit markets of Western Europe. In the growth of these crucial institutions, it was the Jews, especially the Sephardim of Amsterdam and London, who played a dominant role, and it was to this environment and background that Ricardo owed much of his success.

While technology and the growth of new financial institutions were of major consequence to England's transformation, important also were the new ideologies, the necessary new conceptualizations of social, economic, and political affairs. It was upon the formulations of these ideas that Ricardo centered his second and third careers.

Although this book must of necessity be mainly concerned with Ricardo the economic theorist, it is at the same time an intellectual biography, not merely an exposition and analysis of Ricardian economics. Of course, much attention will be given to the development of his economic ideas, but an intellectual biography also is an integrative narrative of the personal, social, and theoretical aspects of a particular individual's life. Accordingly, it is essential to appreciate and understand not only Ricardo's economics and his views on sociopolitical matters, but also what manner of man he was and how he reacted to his environment, that broad social milieu which encompasses not only friends, allies, family, and comrades in arms, but also antagonists.

Much can be learned of an individual's personality and character from a study of his relations with friends, foes, and allies. Ricardo had many of each. In one sense, his greatest comrade-in-arms was James Mill, especially because of their common outlook on political matters. But Mill was not Ricardo's intellectual equal in economic theory; his only peer was his chief antagonist, Robert Malthus the economist. Yet Ricardo and Malthus also were the greatest of friends. For twelve years they debated, argued, and even wrote pamphlets and books attacking one another's views, but to the end there was always that warm respect which only mature and honest men have for those who disagree with them. In August 1823,

after Ricardo had once more set down in correspondence what he believed was his final summary of a particular theoretical topic which he and Malthus had been debating for some months, he added a paragraph which proved to be not only prophetic but also a loving tribute to an old friend and foe.

And now my dear Malthus I have done. Like other disputants after much discussion we each retain our own opinions. These discussions however never influence our friendship; I should not like you more than I do if you agreed in opinion with me.

*(Works, Vol. IX, p. 382. David Ricardo to Robert Malthus,
31 August 1823)*

Eleven days later Ricardo was dead.

David Ricardo was a man with a distinct habit of thought and action, a highly developed system of values, and a lifestyle of work and leisure. One of his greatest pleasures was discussing with his friends the theoretical aspects of the economic, social, and political questions of the times, at a good dinner with the best wine. It was in this fashion that he was instrumental in founding a "school of thought," in the broad sense in which that term must be understood. From these dinners at Ricardo's home eventually emerged the Political Economy Club, which still meets regularly in London, though there are probably no true Ricardians in attendance. Ricardo is worthy of an intellectual biography because he was more than a great economic theorist. He was a man of considerable compassion, a quality that has not always been recognized. This quality, as well as his egalitarianism and humility, emerges in his speeches in the House of Commons, while pursuing his third career.

Initially, Ricardo entered Parliament at the urging of James Mill, who saw it as an opportunity to advance their economic and political views. These were, specifically, support of monetary reform, removal of agricultural protection from the competition of continental imports, and extension of suffrage to a greater percentage of the populace. Given the character of the unreformed Parliament, Ricardo became a member of the House of Commons in a generally accepted fashion of the time, by buying a seat and representing a rotten borough of central Ireland.

Although he was neither Whig nor Tory, his political activities were important to him, and his attendance in Commons was constant, an unusual practice except for the leaders. To a large extent, his major speeches, as well as his committee assignments, were centered on monetary and agricultural topics. But after Waterloo it became all too evident that while England's successes at war had led to great economic advantages in trade and commerce, tremendous domestic issues transcended such foreign economic preoccupations.

Paramount among England's ills in the first quarter of the nineteenth century was the unrepresentativeness of Parliament. Accordingly, Ricardo was one of a small but growing number of radicals who struggled to remove the heavy hand of the ancient regime, which still controlled both houses, especially the Commons.

There was a connection, of course, between the advancement of Ricardo's program for economic reform and his advocacy of political reform. So long as representatives from the rotten boroughs controlled a majority of the Commons—the "place men" as they were called—agricultural protection would remain intact. Nor did the place men show any interest in monetary reforms or in instituting controls over the Bank of England. The extension of suffrage, therefore, was the key to freeing Parliament from the control of the agricultural interests. If representation were given to the new industrial cities of the north and midlands, and greater representation to older centers such as London and Westminster, only then could agricultural and monetary reform have any chance of success.

In a letter to an old friend from his days in the stock exchange, Ricardo wrote

A Government is free in proportion to the facility with which the people can overthrow it. . . . The fear of insurrection, and of the people combining to make a general effort are the great checks on all governments—these we might have through the means of a reformed House of Commons—now we have them by the privilege which the people have of meeting—I cannot consent to weaken the latter check without having some security for the obtaining of the former. . . .

(*Works*, Vol. VIII, p. 133. David Ricardo to Hutches Trower, 12 November 1819.)

At about the same time, Ricardo also drafted a paper on reform:

The really efficient power of Government is, then, in the hands of the wealthy aristocracy . . . What is the consequence of this?—A compromise between the aristocracy and the monarchy; and all the power and influence which Government gives are divided between them. . . . The check on this Government, which operates on behalf of the people, is the good sense and information of the people themselves, operating through the means of a free press, which controls not only the Sovereign and his Ministers, but the Aristocracy, and the House of Commons, which is under its influence. . . . Experience proves that the liberty of the press is insufficient to correct or prevent . . . abuses, and that nothing can be effectual to that purpose but placing the check in a more regular manner in the people, by making the House of Commons really and truly representative of the people. . . . If, then, we could get a House of Commons chosen by the people, . . . we should have a controlling body whose sole business and duty it would be to obtain good government.

(*Works*, "Observations on Parliamentary Reform," Vol. V, pp. 496-498.)²

² Ricardo's views on Parliamentary Reform were well known, and while this particular piece was published posthumously (*Scotsman*, 24 April 1824), it was written in the summer of 1818. *Ibid.*, p. 491.

Ricardo was not alone in his views on the need for Parliamentary reform, his friend Jeremy Bentham being one example. The idea that a people should have the right to change their form of government fundamentally was very much accepted in the early 1800s. The United States of America and France had experienced new forms, as had the English themselves to a lesser extent in the sixteenth century. By the 1820s the long reign of the post-Restoration Parliament had just about run its course, and with new economic and social forces changing the character of English society, the imperative for new political forms was quite obvious to men like David Ricardo. Eventually, the Reform Act of 1832 went some distance in bringing about the needed changes.

The origins of Ricardo's political views, and his strong egalitarian and humanitarian instincts, have typically been associated with his friends, James Mill and Jeremy Bentham, both ardent philosophical radicals in the tradition of the eighteenth and nineteenth centuries. But as subsequent analysis will reveal, Ricardo's ideas predated his association with his radical friends and should more correctly be traced to his Sephardic origins. Certainly, he was reinforced in his social outlook through his friendship with James Mill, and to a lesser extent Bentham, but the democratic spirit Ricardo championed originated not in Mill's Scotland, but in the Sephardic enclave of London.

Besides the question of political reform, England in the post-Napoleonic era still struggled over the issue of religious dissent. Compared to other contemporary societies, England was very liberal in these matters. Out of the English Reformation a degree of religious toleration had emerged which granted a wide latitude to any individual in the choice of which form of Protestant Christianity he or she might choose. The spectrum ranged from the High Church of England to the various sects of dissenting Congregationalists. But any belief outside this range was not allowed, or at least could not be expressed.

The largest excluded religious group was the Roman Catholics. During the several centuries since the Reformation, the exclusion of Roman Catholics from effective participation in English society had become firmly established. The issue was inextricably tied to the political status of Ireland, the home of the overwhelming majority of Roman Catholics in the British Isles. Connected also was the issue of succession to the throne, although that problem had been temporarily settled with the installation of the Hanoverians. In the meantime, the Irish-Catholic problem was a blight upon the record of religious freedom in England.

There was also the dubious status of the Jews. England was one of the most chauvinistic and prejudiced countries in Western Europe. Of the difficulties that stemmed from that source, David Ricardo knew first hand. In 1823 he wrote to the leader of a movement to emancipate the Jews in England:

It appears to me a disgrace to the age we live in, that a part of the inhabitants of this country are still suffering under disabilities imposed upon them in a less enlightened time. The Jews have most reason to complain, for they are frequently

reproached for dishonesty, which is the natural effect of the political degradation in which they are kept. I cannot help thinking that the time is approaching when these ill-founded prejudices against men, on account of their religious opinions, will disappear, and I should be happy if I in any way should be a humble instrument in accelerating their fall.

I carry my principles of toleration very far;—I do not know how, or why any line should be drawn, and am prepared to maintain that we have no more justifiable ground for shutting the mouth of the Atheist than that of any man. I am sure it will be shut, for no man will persevere in avowing opinions which bring on him the hatred and ill will of a great majority of his fellow men.

(*Works*, Vol. IX, p. 278; Ricardo to Isaac Goldsmid, 4 April 1823)

As Ricardo indicated, there were also those who professed no belief in any deity or supreme being: the free-thinkers and atheists. Their views were a logical extension of one line of thought emerging from the Reformation: If the Roman Catholic church did not have the right to dictate how man must deal with his God, then the ultimate authority of any institutionalized religion could legitimately be called into question.

If one permitted the authority of any established church, be it Roman or Anglican, to be questioned, then eventually any and all religions would be questioned. In Ricardo's opinion, did not the category of complete religious freedom contain the subset of those who did not believe in any "future state"? Moreover, if one held such beliefs, did he not have the right to proselytize and convert others to his way of thinking, just as the Methodists and the Anglicans proselytized? In 1822, the government of George III disagreed; several individuals were sent to jail for a year and fined £500 for distributing certain atheist pamphlets that contained *An Appendix to the Theological Works of Thomas Paine* (Carlile 1821). After serving their terms, these people had no means of paying the £500 fine. In March 1823, speaking on behalf of a petition for the release of prisoners, Ricardo was reported as saying:

He must now inform the House that after a long and attentive consideration of the question, he had made up his mind that prosecution ought never to be instituted for religious opinions. All religious opinions, however absurd and extravagant, might be conscientiously believed by some individuals. Why, then, was one man to set up his ideas on the subject as the criterion from which no other was to be allowed to differ with impunity? Why was one man to be considered infallible, and all his fellow men as frail and erring creatures? Such a doctrine ought not to be tolerated: it savoured too much of the Inquisition to be received as genuine in a free country like England.

(*Works*, Vol. V, p. 280; speech delivered 26 March 1823)³

³ When Ricardo was a member of parliament, speeches were reported by newspapermen, with the result that the past and present tense were sometimes interspersed. This procedure led to errors and poor grammar.

In what proved to be his last speech to his fellow parliamentarians, Ricardo again spoke on the need for religious freedom and against taking a judicial oath which professed a belief in God.

No man had a right to say to another, "My opinion upon religion is right, and yours is not only wrong when you differ from me, but I am entitled to punish you for that difference." Such an arrogant assumption of will was intolerable, and was an outrage upon the benignant influence of religion. They might talk of ribaldry and levity, but there was nothing more intolerable than the proposition which he had just stated, and which was nothing less than the power contended for by the advocates of these prosecutions for mere opinions upon points of faith. Then, what an absurd and immoral mode did the law provide for estimating the credit of a man's faith before his testimony was legally admissible! When the question was put to a witness, "Do you believe in a future state?" If he were a conscientious man, entertaining seriously such an opinion, his answer must be in the negative, and the law said he should not be heard; but if he were an immoral man, and disregarded truth, and said, "I do believe in a future state," although in his conscience he disbelieved in it, then his evidence was admissible, and his hypocrisy and falsehood secured him credibility. Now, there would be some sense in the law, if it declined tempting the hypocrisy of the individual, or his fear of the world's hostility or prejudice, and let in other evidence to establish, from previous knowledge of the individual, whether or not he ought not to be admitted as a witness; but as it stood, it was absurd and ridiculous; and when he (Mr. R) was charged upon this ground with a desire to do away with the sanctity of an oath, his reply was, "I do not desire to diminish the sacredness of the obligation; but I do desire to get rid of the hypocrisy by which that oath may be evaded."

(*Works*, Vol. V, p. 326; speech delivered 1 July 1823)

Ricardo and the Economists

Ricardo's economic theory was not much more popular than his views on politics or religion. To be sure, he had any number of supporters of his view that there should be free trade in grain and perhaps some type of monetary reform. For those who advocated a greater degree of industrialization for England, it was highly desirable to import the cheaper grains of Eastern Europe, since the lower prices of food would prevent pressure from building for higher money wages. This latter argument was the touchstone of Ricardo's analysis in his 1815 pamphlet, *An Essay*

on the Influence of a Low Price of Corn on the Profits of Stock, Showing the Inexpediency of Restrictions on Importation (*Works*, Vol. IV, pp. 9-41), and others were thinking along the same line, particularly Edward West (West 1815) and Robert Torrens (Torrens 1815). In fact the full titles of the three pamphlets published in February 1815 by Ricardo, West, and Torrens were remarkably similar. West went off to India and had no further appreciable effect upon the development of economic theory; Torrens continued to be active and, along with Ricardo and Malthus, was one of the leading economic theorists of the period.

The three leading economists of the post-Napoleonic era—Ricardo, Malthus, and Torrens—agreed on very few points of theory. Ricardo and Torrens concurred about removing protection from agriculture, but their views on value and monetary theory were quite different. Malthus, while differing with Torrens on the issue of protection, was equally critical of Ricardo's value theory. Of the three contenders for dominance in economic theory between 1815 and 1823, Ricardo was foremost. In debate, in both the written and spoken word, he was the most successful, but because he took the most extreme positions, he had the fewest supporters.

When J.M. Keynes wrote that "Ricardo conquered England as completely as the Holy Inquisition conquered Spain" (Keynes 1936, p. 32), he had in mind that most economists agreed with Ricardo that the possibility of general gluts could be ignored. Keynes could not have meant that Ricardo's general economic theory was dominant, because that was not the case, and Keynes was correct only in that very narrow sense. Malthus's assessment, given in a letter to Sismondi, was probably more accurate:

The *Edinburgh Review* has so entirely adopted Mr. Ricardo's system of Political Economy that it is probable neither you nor I shall be mentioned in it. I know indeed that a review of your work was written and sent, but it appears to have been rejected through the influence of the gentleman [McCulloch] who is the principal writer in the department of Political Economy, and who is known to have adopted fully and entirely all Mr. Ricardo's views. The article however which you have so ably controverted in the sheet you were so good as to send me was written by another convert of the name of Torrens. In general however, I would say that though Mr. Ricardo's doctrines have certainly captivated some very able men, they are not spread very much among the great body of political Economists and I am inclined to think that many of them will not stand the tests of examination and experience.

(*Works*, Vol. VIII, pp. 376-377; Robert Malthus to J. C. L. Sismondi, 12 March 1821)

If Malthus was correct, and the decline of Ricardo's influence tends to bear him out,⁴ why has Ricardo been held in such high esteem? The detailed answer is to be found in this book, in the study of his ideas.

Much of the failure of Ricardian theory to survive is blamed upon John Ramsey McCulloch, the only disciple who stood by him until the last. McCulloch was in charge of the political economy section of the *Edinburgh Review*, and it always helps to have a journal editor in one's camp, even if it is published in faraway Scotland. But after Ricardo's death, McCulloch was unable to garner the support which Ricardo had enjoyed among members of the Political Economy Club, and he was unequal to the theoretical task required to maintain the supremacy of Ricardo's views. Moreover, as early as 1821, rifts were developing between Ricardo and McCulloch on the effects of machinery, and while McCulloch continued to champion Ricardian principles, he was no match for men like Torrens and Malthus.

The arena in which Ricardian principles were debated most vigorously was the Political Economy Club, not the pages of the *Edinburgh Review*. In the Club which he had been very instrumental in starting, Ricardo had few supporters among those who counted. Malthus, of course, was the professor in residence, and while he claimed to Sismondi that Torrens was a Ricardo convert, that was not true. Again, a distinction must be drawn between agreement on conclusions of policy and agreement on first principles of economic theory. Torrens was a great advocate of free trade and a strong supporter of the rent theory of the free traders. But Torrens rejected not only Ricardo's value theory, but also his derivation of the theory of profits and wages. It is not surprising, therefore, that by 1831 Torrens was claiming "that all the great principles of Ricardo's work had been successively abandoned" (Political Economy Club, 1921, p. 223). In 1828, Torrens even proposed that the Club accept a new set of definitions in order to have a common nomenclature. His definition for value was "the general power of purchasing" (Political Economy Club, 1921, p. 30). Whether this definition was accepted, it is not known, but it suggests the swing to a demand-dominated theory, rather than one grounded in production, as Ricardo would have insisted.

Nassau Senior became a member of the Political Economy Club in 1823, and he could hardly have been expected to be a Ricardian. In 1836, John Stuart Mill also became a member. Although Mill kept the name of Ricardo alive, it was primarily because of the personal relationship of his youth, not because he agreed with Ricardo's theory. His father had not been to a Political Economy Club meeting since 1822, so the Millian influence was absent during the time that Torrens and Malthus were reshaping its orientation.

Once Ricardo was dead, his doctrine lost much of its power and character. He was a great persuader and expositor, not only in a small group, but also in the House of Commons, where he was highly respected. He stood head and shoulders above all his fellow political economists, save perhaps Malthus. The power of Ricardo's personality, his great warmth, and above all the razor sharpness of his

⁴ See Meek 1967, pp. 51-74 ("The Decline of Ricardian Economics in England"); Schumpeter 1954, pp. 469-480 and *passim*; Roll 1971, pp. 318-342; and Dobb 1973, pp. 96-110.

mind were tremendous strengths in dealing with his detractors. His ability to argue successfully and to drive home his conclusions contributed to his prestige and reputation. John Lewis Mallet remarked in 1831 that

it is a great drawback on Ricardo's work that it is almost a sealed book to all but men capable of pursuing abstract reasoning by a strict and mathematical analysis; and this, after all, with anything but certainty of arriving at the truth.

(Political Economy Club 1921, p. 224)

But it would be an error to attribute the eclipse of Ricardian economics to the success or failure of any one individual, even the originator. It cannot be denied that Malthus, Torrens, and McCulloch each played a role, just as Ricardo's premature death was of great significance. But even had he lived, Ricardo would not have been able to carry the day with his fellow Political Economy Club members. Ideologically, he was moving in one direction, the majority in another. His thoughts on many subjects were at odds with most of his contemporaries except James Mill.

Among the topics discussed by the Political Economy Club, in the late 1820s and 1830s, two recurred often as reported in the Minutes:

1. Are there any circumstances in which Machinery, in competition with Manual Labour, can be injurious to the Labouring class?
2. What have been the effects of the Factory Regulation Act; and should any, and what, alterations be made in it?

The answers of most club members would be easy to predict, as would Ricardo's. But more significant is the fact that by the late 1820s the land question had dropped from discussion; arguments had begun to focus on the significance of wages in particular industries, such as mining and manufactures. The shift was to the consideration of individual sectors and away from Ricardo's emphasis upon aggregate wages and profits.

The architects of a new theory of value and profits were numerous, with Samuel Bailey, Senior, and Montifort Longfield following the groundwork of J.B. Say, Malthus, and Torrens. Maurice Dobb fit all of these pieces together (Dobb 1973, Chapter 4), and the mosaic he constructed is an excellent view of the changing social and economic conditions of England in the mid-nineteenth century. The transformation was so dramatic, from the lionization to the rejection of Ricardo, that by 1870 W. Stanley Jevons could claim that the "able but wrong-headed man, David Ricardo, shunted the car of economic science on to a wrong line" (Jevons 1931, p. 51).

Despite the critics, the spirit of Ricardo continued to dominate much economic thinking, if for no other reason than that he was the "economist's economist." All

of his theory was incorrect, according to his detractors, but Ricardo still lived. Why? There are several explanations.

One reason was that Ricardo's monetary and trade theories remained intact, representing perhaps some of the best theoretical formulations which have been made on the subject. Ricardo's theory of money, which became the standard doctrine for almost all economists, was that

the quantity of money, viewed both as a standard of value and a medium of exchange, was irrelevant to the determination of any of these essential relationships [of exchange]. Since money represented merely a convenient technique of exchange, either for calculation or as an exchange-intermediary, it could make no difference to the essential productive relationships, and hence could not (in the last analysis) affect the system of exchange-ratios. An increase or decrease in the quantity of money, since it would ultimately tend to affect all prices equally, would leave the relation between them unaffected.

(Dobb 1940, p. 39)

The concept of the neutrality of money can be traced to Adam Smith, of course, since it represented the major ingredient of his antimercantilist doctrine. But in Ricardo's monetary formulations, the idea acquired a new significance, becoming almost a truism of economic reasoning, until Keynes threw it over in the *General Theory*. Coupled with Ricardo's monetary view was his theory of the international exchange of commodities; the veil of money was pushed aside to reveal the actual conditions of exchange and labor specialization, grounded in the respective productive capacities of the trading nations. Trade between two individuals living in different countries was comparable to trade between two people in Sussex, in the sense that it was dependent upon the productivity of labor in the different vents of trade. Money was merely a veil in both cases, albeit confounded by two currencies in the foreign example.

Ricardo's formulations of monetary and trade theory were so dominant that economists ignored the fact that the basis of his international exchange was but a special case of the Ricardian theory of embodied labor. Even the most vociferous anti-Ricardians—those who rejected as nonsense his hypothesis that the ratios of exchange value were a function of the amount of embodied labor—nonetheless were able to accept the law of comparative advantage as illustrated by the number of bushels of grain or tons of steel that workers in two countries could produce in a day's time. In this type of formulation, the usual textbook presentation of the law of comparative advantage is analogous to Adam Smith's exchange between the hunters of beaver and deer.

A second reason for the continuing influence of Ricardo was the fact that, intuitively, one could hardly ignore primary emphasis upon production. In stressing the pre-eminence of the exchange of commodities which somehow already existed,

the early members of the neoclassical tradition ignored Ricardo's stress upon production conditions. In his *Principles*, Ricardo was explicit on the matter:

in speaking then of commodities, of their exchangeable value, and of the laws which regulate their relative prices, we mean *always* such commodities *only* as can be *increased in quantity* by the exertion of human industry and on the production of which *competition operates without restraint*.

(*Works*, Vol. I, p. 12; italics added)

Compare this formulation of the production conditions with the exchange theory of Carl Menger:

Suppose . . . a hunter has a great abundance of furs . . . but only a very small store of foodstuffs. . . [and] a nearby farmer is assumed to be in precisely the opposite position.

(Menger 1950, p. 176)

Menger's exchange system was one of trading inventories, or a marketing exchange relation, and not one associated with the conditions which will allow the commodities to be produced under competition over a continuum. In Menger's world, "bygones are bygones" and the original costs associated with the production of the goods exchanged by the hunter and farmer are irrelevant to the exchange system. The analysis of two people meeting in Menger's forest to trade their respective surpluses ignores the issue of whether they will return to do so another day. Somehow, economists have always returned to the material conditions of the production process, since they can hardly be ignored. It was for this reason that Alfred Marshall developed his famous scissors analogy, with the result that he insisted upon restoring the Ricardian emphasis upon supply, even though he gave it a peculiar neoclassical twist by stressing its pre-eminence only in the long run.

The third reason Ricardo persisted was his formulation of the special case of agriculture. In neoclassical times, it became the general case of all economic activity of the firm, with its well-behaved production function, along with the requisite "stages." Over the relevant range of output variation to which a sector or industry would be subject, Ricardo assumed that the facility of production or the homogeneity of inputs was constant, *except in the case of agriculture*. Because of the niggardliness of nature, it was necessary to bring "land of a worse quality, or less favorably situated into cultivation" (*Works*, Vol. IV, p. 14). As a result, the real cost of cultivation rose, along with rent, as the agricultural sector became subject to diminishing returns. In setting out the conditions of production in the special case of agriculture, Ricardo formulated the economic theory of an industry subject to a rising supply price, with its resultant effects upon rents, wages, and profits. While his examples in the *Essay on Profits* were mainly concerned with production occurring at the extensive margin of cultivation, those found in the *Principles*

suggest the possibility and likelihood of cultivation at the intensive margin. Nonetheless, in both instances, the results are rising supply prices (Robinson 1941).

Ricardo's special case of agriculture, what might be called his "rent theory," was not singularly his. He openly admitted that the theoretical aspects were also worked out by Malthus, Torrens, and West. But Malthus's *Essay into the Nature and Progress of Rent* (1815) was exclusively theoretical, and in no way was it intended to be directly associated with the restrictions on the importation of corn. For Ricardo, of course, the theory of rent was an integral part of his theoretical schema; although a special case, it was essential to his theory of profits.

In one sense, Ricardo used Malthus's *Essay* on rent to refute the latter's support of agricultural protection. Accordingly, while the theory of the rising supply price of agricultural production was the work of Malthus, it was with Ricardo that rent theory became associated, due to the theory's key role in his system.

To sum up, a great body of economic theory owes its origins to the work of Ricardo. As Knight has shown, the whole corpus of the modern theory of the firm, based upon the three-stage production function, can be traced to Ricardo's formulation of diminishing returns (Knight 1935). What Knight did not stress, of course, even though he found him guilty of "seven aberrations," was Ricardo's limitation of diminishing returns to agriculture. Neoclassical economics also has ignored the Ricardian general case of constant returns over the relevant range of output for firms in manufacturing. Nevertheless, Ricardo's special case of agricultural production, his monetary and trade theories, and his emphasis upon the overall and fundamental production aspects of political economy, all could not very easily be expunged from the body of economic theory, despite what Jevons said about Ricardo's wrongheadedness.

But if Ricardo is still viewed as one of the greatest of theorists, what of his value theory? In Ricardo's *Principles*, that first chapter was viewed as being "muddled," for Ricardo wrote that "labour" is "the foundation of all value." As early as the 1830s, the chapter presented problems. Ronald L. Meek has noted that

the majority of economists were very much aware of the dangerous use to which a number of radical writers were putting Ricardian concepts . . .

(Meek 1967, p. 70)

As time passed, and a certain unemployed European political economist worked away in the British Museum, Ricardo's labor theory acquired a new significance and importance. Writing in the 1890s, after having taught the same interpretations at Cambridge for several decades, Herbert S. Foxwell claimed:

I am more and more impressed, as I study the literature of socialism, with the far-reaching, disastrous consequences of the unfortunate colour given to economic teaching by Ricardo . . . it was Ricardo's crude generalizations which gave modern socialism

its fancied scientific basis, and provoked, if they did not justify, its revolutionary form. There are times when we are disposed to underrate the value of that drill in method which is a principal part of academic training. At such times we should think of Ricardo. Ricardo, and still more those who popularized him, may stand as an example for all time of the extreme danger which may arise from the unscientific use of hypothesis in social speculations, from the failure to appreciate the limited application to actual affairs of a highly artificial and arbitrary analysis. His ingenious, though perhaps over-elaborated reasonings became positively mischievous and misleading when they were unhesitatingly applied to determine grave practical issues without the smallest sense of the thoroughly abstract and unreal character of the assumptions on which they were founded. Thus, as Jevons has observed, Ricardo gave the whole course of English economics a wrong twist. It became unhistorical and unrealistic; it lost its scientific independence and became the tool of a political party. At one time, indeed it went very near to losing its rightful authority in legislation and affairs; nor did it regain its old position until by the greater precision of the theorists on the one side, and the broader treatment of real questions by the historical school on the other side, this elementary blunder in method was rectified. Meanwhile, by a singular irony of fate, it happened that Ricardo, by this imperfect presentation of economic doctrine, did more than any intentionally socialist writer to sap the foundations of that form of society which he was trying to explain, and which he believed to be typical and natural, if not, indeed the ideal social state.

(Foxwell 1899, pp. XL-XLII)

To rescue Ricardo from such charges, it became necessary to separate him from the labor theory of value. Marshall was foremost in these efforts:

Ricardo's theory of cost of production in relation to value occupies so important a place in the history of economics that any misunderstanding as to its real character must necessarily be very mischievous; and unfortunately it is so expressed as almost to invite misunderstanding. . . . he knew that demand played an essential part in governing value, but . . . he regarded its action as less obscure than that of cost of production, and therefore passed it lightly over in the notes which he made for the use of his friends, and himself; for he never essayed to write a formal treatise.

(Marshall 1930, p. 503)

Ricardo was now a Marshallian seamstress, scissors in hand.

In an Appendix, "Ricardo's Theory of Value," Marshall alleged that Ricardo's "exposition is as confused as his thought is profound," and that his words must be given "interpretation" when they appear "ambiguous." He "seems to be feeling his way towards the distinction between marginal and total utility." Moreover, Marshall claimed that Ricardo

delighted in short phrases, and he thought that his readers would always supply for themselves the explanation of which he had given them a hint. . . . And he was more guilty than almost anyone else of the bad habit of endeavoring to express great economic doctrines in short sentences.

(Marshall 1930, p. 816)

As for Ricardo's *Principles*, it

makes no pretense to be systematic. . . . if in writing it he had in view any readers at all, they were chiefly those statesmen and businessmen with whom he associated. So he purposely omitted many things which were necessary for the logical completeness of his argument, but which they would regard as obvious.

(Marshall 1930, p. 813.)

Anyone who was as active a pamphleteer as Ricardo, and who pushed his *Principles* through three editions, would be surprised to learn that he was merely passing sketchy notes amongst a small circle of friends. There is little doubt that Ricardo was not proficient at writing or that he did not intend to write a treatise. But to contend that he did not intend to convey the theory expressed in his *Principles* is a distortion.

Jacob Hollander claimed that the textual changes in Ricardo's second edition of the *Principles* should be regarded as "highly significant" since they showed "an appreciable increase of reserve in the advocacy of 'embodied labour' as a universal measure of value" (Hollander 1904, pp. 479, 481). Hollander also argued that the numerous revisions in the third edition made the chapter entitled "On Value" very different in "content and tendency" from its earlier formulations, since greater emphasis was given in this version to the "modifications of the principles which determine relative value." Hollander attributed Ricardo's modifications to his recognition of the effects of variations in the durability of capital. (Hollander 1895, p. 72).

The same type of interpretation was given by Edwin Cannan, who spoke of Ricardo's "unwilling admission of the influence of interest on capital as a modification of the pure labour-cost theory of value" (Cannan 1929, pp. 185-196) [?]. Cannan further claimed that Ricardo's discussion of the role of capital in the determination of value was "weak from the beginning, and he weakened more and more as time went on and criticism multiplied."

As a consequence of the assessments by Marshall, Hollander, and Cannan, the traditional view of Ricardo's theory of value was that he modified or retreated from the position taken in the first edition of *Principles of Political Economy*. Although it usually was assumed that he began with a theory that the quantity of embodied labor determined the ratios of exchange value, Ricardo was alleged to have rejected this formulation in subsequent editions. The reason for his retreat, it was claimed, was his recognition that varying degrees of durable capital also influenced the exchange value of commodities.

It was this view that permeated textbooks in economic thought as late as the 1930s and even into the 1940s. Most agreed with Alexander Gray that Ricardo "appears to have been increasingly dissatisfied" with the labor theory of value (Gray 1931, p. 189)—so dissatisfied that he was compelled "finally to abandon this theory in its purity" (Haney 1949, p. 288).⁵

One political economist considered Ricardo's labor-embodied theory of value to be the essential foundation upon which the classical system of analysis rested. That man, of course, was Marx. Initially, when he published his first work in economics, known as the *Economic and Philosophical Manuscripts* or the *1844 Manuscripts*, Marx had rejected the labor theory of value of English classical economics, since he was then mainly influenced by the romantic writings of the French socialists. These, having taken their economics from Sismondi, were thoroughly anti-Ricardian. Later, in commenting on this period, Marx said that while his own academic training and professional experience with the fields of jurisprudence, history, and especially philosophy stood him in good stead for his editorial work with *Die Rheinische Zeitung*, he was "embarrassed . . . [when] I had to take part in discussions concerning so-called material [political economy] interest." Accordingly, at that stage of his career, Marx's circle of experience in both Germany and France was such that economic issues were discussed only in terms of the framework of the writings of Hegel and Proudhon; the English classical economists were ignored (Marx 1904, pp. 9-15).

Marx's conversion to English classical theory, and particularly the work of Ricardo, came in 1845, when he accompanied his comrade Friedrich Engels to Manchester. Marx spent the summer there reading Smith, Ricardo, Malthus, and especially the works of the Ricardian socialists. It was at this time that he found the third source of his political economy. He now had his triumvirate: Hegel's methodology, the perfectibility hypothesis of the successors to Condorcet (the French socialists), and Ricardo's economics.

In 1847, Marx published *The Poverty of Philosophy*, his critique of Proudhon's latest volume, *The Philosophy of Poverty*. In contrasting Proudhon to Ricardo, Marx observed:

Ricardo takes his starting point from present-day society to demonstrate to us how it constitutes value—M. Proudhon takes

⁵ Gide and Rist (1948, p. 156) remarked that Ricardo "acknowledged his failure to explain value." For this reason this famous book in the history of economic thought did not even discuss Ricardo's value theory.

constituted value as his starting point to construct a new social world with the aid of this value. . . . Ricardo's theory of values is the scientific interpretation of actual economic life; M. Proudhon's theory of values is the utopian interpretation of Ricardo's theory. Ricardo established the truth of his formula by deriving it from economic relations, and by explaining this way all phenomena, even those like ground rent, accumulation of capital and the relation of wages to profits, which at first sight seem to contradict it; it is precisely that which makes his doctrine a scientific system.

(Marx 1847, p. 61)

Two years later, in August 1849, Marx was forced to leave Paris and migrate to London. Ironically, during his first months there. Marx lived in rooms over a coffeehouse on Grosvenor Square (McClellan 1973, p. 226), the same square on which Ricardo had had his fashionable London residence some three decades earlier. The following June, Marx obtained his pass to the reading room of the British Museum (McClellan 1973, p. 242), where he devoted most of the rest of his life to the study of political economy, mostly Ricardian.

It would be extremely difficult to find an economist other than Ricardo, with perhaps the exception of Adam Smith, who has been claimed as the authority for so many diverse interpretations of economic theory. One explanation is that Ricardo changed his opinion as time passed, and his economic analysis was, therefore, regularly revised. He was always adjusting his theory, even up to the time of his death, and revisions were major.

What was the direction of these changes, and why did they occur? Again, the answer shall be found in this book.

Sraffa's Ricardo

The event which permitted a resolution of the conflicting interpretations and partial evaluations of Ricardo's economics was the publication of Piero Sraffa's eleven-volume edition of the *Works and Correspondence of David Ricardo* (1951-1973). All else is prologue.

The list of reviewers of Sraffa's *Works* was impressive: Austin Robinson, T.W. Hutchison, George J. Stigler, S.G. Checkland, David McCord Wright, Vincent W. Bladen, Dudley Dillard, Arthur W. Marget, J.A. LaNauze, and Oswald St. Clair. These were the reviewers in the economics journals, as opposed to the popular press, and they should be regarded as representative of the profession's evaluation of Sraffa's endeavors. Praise was strong; "rare scholarship. . . . meticulous care. . . . and erudition" (Stigler 1953, p. 586); "monumental" (Marget 1952, p. 159); and one of "the greatest of all feats of economic scholarship" (Checkland 1952a, p. 372) were some of the terms the critics used.

Despite these accolades for Sraffa's editorial skills, few reviewers discussed the implications of his general "Introduction," the main content of which was addressed to the issue of whether Ricardo discarded the labor theory of value in subsequent

editions of the *Principles*. In fact, only two reviewers even discussed the evidence showing how Ricardo took up the issue of value in an attempt to elaborate and refine his theory of profits. None suggested that Ricardo was interested in value theory as a means of determining the distribution of gross income between wages, profits, and rents. His concept of value was designed for a purpose quite distinct from the one which concerned neoclassical economists;⁶ consequently, most of the reviewers left the confusion right where they had found it. It must be stressed that not all were unaware of the significance of Sraffa's "Introduction," and while several dealt with the significant issue of Ricardo's theory of profits, still others were of the opinion that perhaps Ricardo was not a very good theorist after all. Hutchison expressed views which reiterated those originally set out by Foxwell, to the effect that it was not desirable for economists to study Ricardo, since such study merely added credence to the respectability of Marxist theory (Hutchison 1952, pp. 416, 419-421).

If an opinion is warranted, it is that the reviewers of Sraffa's *Ricardo* either did not agree with Ricardo's original theoretical structure, or else they did not understand it. This could also be said about the interpretation and understanding of the "Introduction" and its significance. Reading these reviews years later, there is little recognition of the contemporary significance of Ricardo's work, except perhaps that he was incorrect about Say's law, gluts, and all that. Not all reviewers were in agreement, as might be expected, but no one hinted that perhaps within a decade there would be a grand rehabilitation of Ricardian theory. This occurred when Sraffa published *Production of Commodities* (Sraffa 1960, pp. VII, 95), which was Ricardo once more, as one writer put it. Sraffa's volume represented an extensive analysis of the overall evaluation of commodities by use of a standard unit, an issue first raised by Sraffa in his "Introduction." Both of these contributions should be viewed as raising essentially the same issue, a critique of subjective value theory and a statement of the Ricardian approach, by making the exchange value of commodities ultimately dependent upon the determination of the distribution of relative shares between wages and profits. It was as a consequence of Sraffa's work that, in 1971, Paul Samuelson claimed that it has become the "age of Leontieff and Sraffa" (Samuelson 1971, p. 400; for an answer to Samuelson's claim, see A. L. Levine 1974, pp. 872-881).

There was general acknowledgment that Sraffa's *Ricardo* should lead to a new understanding and appreciation of the development of theory, but most reviewers

⁶ Joan Robinson described the working of Marshall's scissors: "The main theme of this book is the analysis of value. It is not easy to explain what the analysis is, without making it appear extremely mysterious and extremely foolish. The point may be put like this: You see two men, one of whom is giving a banana to the other, and is taking a penny from him. You ask, How is it that a banana costs a penny rather than any other sum? The most obvious line of attack on this question is to break it up into two fresh questions: How does it happen that the one man will take a penny for a banana? and: How does it happen that the other man will give a penny for a banana? In short the natural thing is to divide up the problem under two heads: Supply and Demand." (Robinson 1933, pp. 6-7)

themselves, shied away from such evaluations.⁷ In many instances, reviews were perfunctory (Sayers 1952; Ray 1952), and in my opinion Sraffa's *Works* never has been accorded the analysis it deserves.

Interestingly enough, the most perceptive reviewers, those who were willing to evaluate Ricardo against his own historical background rather than their own, were two economic historians, S. G. Checkland (Checkland 1952a, 1952b, 1953-1954, 1956) and Dudley Dillard (Dillard 1953, 1956). Checkland brought to his several reviews a vast knowledge of Ricardian England, enriched by his own research (Checkland 1949, 1953). His perception and awareness of the development of Ricardo's economic analysis was clear, as was his knowledge of earlier interpretations which had attempted to separate Ricardo from the labor theory of value. As to Marshall's claim that Ricardo was writing for only a small circle of friends, Checkland said:

We discover thereby that certain legends will comfort us no more. No longer can we point to the difficulties of reading Ricardo, and remark that he was a poor expositor who excused himself from greater lucidity on the ground that he was writing for pundits.

(Checkland 1952a, p. 373)

As to the labor theory of value, he claimed that Sraffa

. . . further deprives us of the legend, begun by Professors Hollander and Cannan, that Ricardo in successive editions was in retreat from the labour theory of value.

(Checkland 1952a, p. 373)

With respect to Marshall's claim that Ricardo was "feeling his way towards utility," Checkland recognized that very early on Ricardo was "attacking Say's subjective utility approach" (Checkland 1953, p. 322).

As subsequent discussion will reveal, it is one of the ironies of the history of economic thought that Ricardo has been identified as a Benthamite, and a follower of the felicific calculus. Bentham's own claim in this respect⁸ was not only self-serving but totally incorrect. Ricardo's ideas on social issues were shaped long

⁷ Austin Robinson referred to a need for "a review of the work as a whole at a later date, when it is possible to consider all the volumes together and to appreciate the light that the correspondence throws on the development of Ricardo's thought and his meaning at certain disputable points." (A. Robinson 1951, p. 848)

An editorial note attached to Arthur W. Marget's review (Marget 1951, p. 274), promised a Marget evaluation of all ten volumes, when they became available. Marget's comprehensive analysis never materialized.

Vincent W. Bladen observed that "the publication of this definitive and superb edition of Ricardo can stimulate the study of his work; it should lead to reinterpretation and new evaluation. The material is, however so massive, that this fruit will not come quickly to harvest." (Bladen 1952, p. 403)

⁸ "I was the spiritual father of Mill, and Mill was the spiritual father of Ricardo: so that Ricardo was my spiritual grandson . . ." Quoted in Halevy 1972, p. 266.

before he met Bentham or Mill, and his economics shows no evidence of having been influenced by Bentham's felicity, as Checkland correctly observed.

Being first and foremost a pamphleteer and polemicist, Ricardo did not commence with the intention of writing a treatise on value theory. But in the course of his running controversy with Malthus over the determinants of the distribution between aggregate profits, wages and rents, he was pushed into disaggregation. The decomposition of the aggregates led Ricardo to the complexities of a theory of value, one grounded in the various inputs to production, as against a simple demand and supply analysis. Contrary to Marx's claim that Ricardo started with the theory of value (Marx 1847, p. 61), more correctly it was with the theory of value and prices that Ricardo attempted to complete his theoretical schema. Moreover, Marx himself did not commence with a theory of value as the *1844 Manuscripts* attest; it is doubtful if any economic theorist "started" with a theory of value, even though that is the topic of the first chapter of most major works. The great advantage of Sraffa's *Ricardo* is that it allows one to explain the precise evolution of his thinking in matters theoretical, since the correspondence and memorabilia reveal the precise evolution of his economic theories. Such detail is missing on the lives of the great majority of economists, but as Keynes once remarked, from Sraffa "nothing is hid" (Keynes 1933, p. 138).

Although Checkland posed Ricardo's basic problem, he did not stress the need or the significance of a standard measure of value. In this respect he missed the theoretical issue of evaluation. As Sraffa suggested in the "Introduction", and later worked it out in *Production of Commodities*, the choice of a standard unit of value is the key to linking the distribution of aggregate profits and wages with the system of determinant prices. To borrow Marshall's phraseology, Ricardo was indeed "feeling his way," not toward a utility theory of value, but to one based upon a notion of absolute value, a conceptualization akin to Marx, rather than to neoclassical theory.

The significance of Ricardo's measure of value did not escape Dudley Dillard, as he observed:

Ricardo felt it would be a great advantage to have an invariable measure of value, comparable to a foot or yard in measuring length, against which all other values could be compared in order to ascertain which of two commodities had altered in (absolute) value when their ratio of exchange (exchangeable value) altered. He acknowledged that a perfect, that is, invariable, measure of absolute value was in practice impossible, but he was interested in ascertaining what the criteria of an ideal measure of absolute value would be. . . . The practical conclusions are not basically different from those of the *Principles*. The following passage from the manuscript [written shortly before his death] seems to indicate that Ricardo continued to view labor as the measure of value and also as the source of

value: "Everything is originally purchased by labour—nothing that has value can be produced without it That the greater or less quantity of labour worked up in commodities can be the only cause of their alteration in value is completely made out as soon as we are agreed that all commodities are the produce of labour and would have no value but for the labour expended upon them."

(Dillard 1953, p. 98)

The Post-Sraffa Literature

Several conclusions are warranted about the profession's evaluation of Sraffa's *Ricardo*. No reviewer in the professional journals wrote with all eleven volumes in hand. Their publication over twenty-two years⁹ meant that reviews were piecemeal. Although several urged that a "definitive" evaluation be prepared when everything was available, this was never done, and fragmentary reviews do not constitute such an evaluation.

Since the appearance of Sraffa's *Ricardo*, numerous articles have been published, but these have dealt mainly with particular aspects of Ricardian theory. None provides an overall assessment, although some reevaluation and reinterpretation of Ricardo's economics has come to light.¹⁰ In addition to articles on his theory, several books have been devoted to various aspects of Ricardo's work. Of special importance was Carl S. Shoup's *Ricardo on Taxation* (1960) and Mark Blaug's *Ricardian Economics* (1958). The former, while in preparation long before the appearance of Sraffa's *Ricardo*, was greatly revised in the light of the new correspondence that was made available, as well as some of the other new material. But since Shoup's volume was limited to an analysis of Ricardo's theories on taxation, it by no means comes close to being an overall evaluation of Ricardian political economy.

Blaug's volume was broader than Shoup's in scope, since it analyzed Ricardo's economic system, but it was as much concerned with post-Ricardian theory as with the original system. Written from a neoclassical viewpoint, Blaug's *Ricardian Economics* is not so much devoted to the development of Ricardo's thinking and

⁹ In 1933, when Keynes published his paper on Malthus, he commented on the missing letters of Malthus to Ricardo. He concluded his discussion by observing, "But Mr. Piero Sraffa . . . has discovered the missing letters in his researches for the forthcoming complete and definitive edition of the *Works of David Ricardo*, which he is preparing for the Royal Economic Society to be published in the course of the present year." (Keynes 1933, p. 138; italics added)

The "present year" turned out to be 1951, not 1933. Moreover, it not only took Sraffa twenty-one years to publish the first four volumes of Ricardo's *Works*, but another twenty-two years passed before the publication of the eleventh volume. The *Principles* (vol. I), Ricardo's *Notes on Malthus* (vol. II), and two volumes of pamphlets (vols. III and IV) appeared in 1951. The next year, 1952, Ricardo's *Speeches in Parliament* (vol. V), and the four volumes of correspondence were published, followed in 1955 by a volume of *Biographical Miscellany* (vol. X). The *General Index* (vol. XI), promised in 1951, was published in 1973.

¹⁰ The most significant literature centered in the 1960's on the so-called Cambridge controversy over the role of capital. The dispute owes much of its origin to Sraffa's critique of neoclassical theory in his *Production of Commodities*, the latter being an extension to his "Introduction" to the *Ricardo Works*. Cf. Harcourt 1972. pp. x, 272; M. Blaug 1974, pp. ix, 102.

writing on economics, as it is to evaluating that economics in historical perspective. Moreover, the emphasis which Ricardo gave to value theory throughout his life would suggest that he considered the issue fundamental to his whole system. Blaug does not agree with Ricardo's own view and devotes only six pages to the labor theory of value. Blaug did not consider the theory analytically significant to Ricardo's system in contrast to writers such as Sraffa (*Works*, Vol. I, especially p. xxx-xlix), Dobb (1973, Chapter 3, especially pp. 73-84), and even Schumpeter (1954, p. 588). Blaug's work, while the most detailed volume to appear after the publication of Sraffa's *Ricardo*, still does not provide the kind of interpretation which the eleven volumes make possible. Since Blaug did not intend an intellectual biography, or even a biography, his book should not be viewed as attempting a definitive evaluation of the development of Ricardo's thinking.

Two other volumes on Ricardo should be mentioned, one by Michael Gootzeit (1975) and the other by David Weatherall (1976). The first of these is a somewhat terse and abbreviated statement of certain elements of Ricardo's monetary system, the Corn Law controversy, and some aspects of his system of production and distribution. The book was not intended as biography, or a definitive work, and its abbreviated style and stress on why Ricardo was wrong so frequently, especially in the light of neoclassical theory, hardly emphasizes Ricardo's contribution to economics.

The Weatherall biography does contribute to an understanding of Ricardo's life. Its major defect is that it does not pretend to evaluate his economic thought or its development, even though there are chapters on the *Principles* and the Corn Law controversy.

On the positive side, Weatherall relies not only upon Sraffa's *Ricardo*, but also seems to be the only author aware that Sraffa published eleven volumes altogether. Moreover, Weatherall had the advice and aid of Professor Arnold Heertje of the University of Amsterdam, a matter of considerable importance.¹¹ It was Heertje who aided Sraffa in compiling the index to the *Works*, the highly elusive and belatedly published eleventh volume.¹²

But of all the scholars who have studied Ricardo over the last 169 years, Piero Sraffa undoubtedly understands and has done more research than anyone else. Consequently, if anyone has ever been qualified to prepare the definitive evaluation of Ricardo's life and contributions to economics, Sraffa is that person. But the closest he ever came was his publication of *Biographical Miscellany*. Unfortunately, Sraffa actually wrote only approximately ninety pages of that volume, the rest confined to various family letters. Included also is the obituary

¹¹ In 1973, Heertje read a paper, on the Amsterdam origins of the Ricardo family, before the Jewish Historical Society of England (British Museum) (Heertje 1974). Weatherall relies heavily upon the Heertje manuscript for his chapter on the history of the Ricardo family. Chapter three of this volume is likewise greatly dependent upon Heertje's paper which I was able to locate in 1975, prior to the publication of Weatherall's volume.

¹² Maurice Dobb claimed in 1975 that as early as 1956 he had prepared an index to Sraffa's, *Works* but "Sraffa did not like my index, so he sacked me and said he would find someone else to prepare it the way he wanted." Conversation with Maurice Dobb, Cambridge, May 1975.

written by his brother Moses and Ricardo's own account of the Grand Tour which he took with his wife and daughters in 1822.

Certainly, I do not suggest that Sraffa prepared only ninety pages on Ricardo and his work. Far from it. Scattered throughout the ten volumes is a mass of material of his own: footnotes, background sketches, and annotations to the numerous pamphlets and speeches of Ricardo. These not only provide useful factual information, but also greater insight, especially into the manner in which Ricardo lived and thought. Sraffa is the single most important source of all that is now known about Ricardo, his life, and his works. As that source, Sraffa deserves a unique place in the history of economic thought in general and economic theory in particular. All who labor in the Ricardian vineyards owe him our respect and our admiration, for his is one of the greatest achievements in the history of the discipline. The remaining chapters of this volume will give evidence, time and time again, of my dependence upon his accomplishments. What remains is the integration and analysis of those contributions. A full intellectual biography of David Ricardo is not only warranted, but also long overdue.

The Ingredients of Biography

An intellectual biography draws from several disciplines. Of first importance is the development of the individual's intellectual powers, and this would suggest a biographer must have first-hand knowledge of the field in which his subject was interested. That is, because David Ricardo was a political economist, someone familiar with economics should be his biographer. But the biographer also must be in sympathy with his subject's theoretical orientation, if for no other reason than to be able to present a perceptive image of the individual's contribution to the field (in my case, see Henderson 1955, 1956, 1959, 1976, 1977).

The biographer also must draw upon the work of various types of historians. Foremost are the social historians, since the social conditions surrounding his subject provide essential data. Most typically, social history, of which economic history is a branch, is concerned with

the daily life of the inhabitants of the land in past ages: this includes the human as well as the economic relation of different classes to one another, the character of family and household life, the conditions of labour and of leisure, the attitude of man to nature, the culture of each age as it arose out of these general conditions of life, and took ever changing forms in religion, literature and music, architecture, learning and thought.

(Trevelyn 1942, pp. vii-viii)

Social historians are concerned with the broad forces of change which move across the centuries rather than with the day-to-day events of a particular court or palace. Social history is macroscopic, while that which deals with kings and queens often is microscopic. In one sense, social history is history devoid of politics, since

it stresses the importance of the overriding forces of change which set off one age from another.

Social historians have nothing against kings and queens, or even prime ministers, but they assign little if any influence to the role of particular individuals in the course of history. Some historians believe in the great man theory of history, or that history is the result of particular activities. According to social historians, change occurs not because certain individuals behave in a certain manner, but because of the overall patterns of group phenomena, and these take their direction from some dialectic process. The dialectic may be idealistic or materialistic. One of the greatest of the social historians was, of course, Marx, and he believed that an individual was significant in the historical process only through his membership in a class; it was the interaction between classes which forced the dialectic and shaped the pattern of individual behavior. Hegel had it the other way around, and hence their differences.

For the biographer, the mold of the social historian presents a problem: a biography obviously must assign some importance to the activities of the person about whom it is being written. If David Ricardo, for example, did not have any influence upon the course of history, then there is little need to know much about his ideas, how they developed, what kind of person he was, or how he interacted with his contemporaries. Such knowledge might be interesting, but it would be of no historical importance. It has been said of the contributions of Ricardo, and his contemporary and critic, Malthus, that

there is much to be said for the view that the corn laws were of little use to the landed interest and did little harm to the consumer, and that most of the arguments brought forward on either side of the question were economically unsound or exaggerated.

(Woodward 1962, p. 62)

The author of these words, Llewellyn Woodward, would not say that individuals have never influenced the course of history, or that the ideas of all men are of no significance, but he is selective as a social historian and does not attach a great deal of significance to economic ideas. In other words, it is possible to be a social historian and still believe that some individuals matter; some matter, while others do not. Even Marx would admit the influence of individuals, perhaps as leaders of the classes or subclasses, pushing or nudging the dialectic along its course. The dialectic process is not a continuum; it is a series of vicissitudes, and so, at times, individuals do count.

In the age in which a particular individual lives, there are interruptions in the pace of life. These may be of great importance in some ages, while in others the movement may be slight. Not all ages experience violent interruptions; some are characterized by relatively peaceful and slowly evolving changes. The age of David Ricardo was marked by a quickening of the social process. It stemmed from the transition of a society dominated by the system of labor-land production to one

characterized by labor-capital activity. The social and economic forces which brought about such change are the subject of social history, and it is against this background that the activities and behavior of individuals must be studied. It is to social history, therefore, that the author of an intellectual history owes most allegiance and responsibility. Only an appreciation of the times in which Ricardo lived, and the forces of change that were loose in the land, can provide the requisite ingredients for evaluating his thought and activity, let alone the characteristics he revealed within that context.

Against the forces of change in the social and economic fabric of society, an individual may respond with at least four distinct patterns of behavior. The nature of the response, its intensity, and its duration are each manifestations of the personality formation of the particular individual. Some men see life as it is and ask why, others ask what it may become. The study of individual behavior in response to various stimuli involves the area of psychology, a discipline upon which a biographer draws.

One response to social changes is to view them as unrighteous and detrimental to the human spirit. This reaction usually leads to escape, an extreme form being monasticism. The individual seeks refuge from the consequences of living in a world of which he does not approve or cannot accept. Escapism is not necessarily limited to times of significant and perceptible changes in the pace of social and economic life, but the frequency of such behavior is apt to intensify at such times.

A second response to changing ways of life, perhaps brought about through the emergence of new technologies or the quickened encroachment of market forces on people's daily lives, is to deny that such events are occurring. This is the behavior of the solipsist, whose mind discerns no changing forms of social activity, for the only reality is that which the individual believes exists.

The third type of reaction to new forms of behavior is that of the opportunist. He views new social institutions as welcome, for they provide yet another method by which the individual may achieve success. The individual accepts these changes for what they are worth. He pays little if any attention to the broader social implications of the new ways of life; he is myopic, perceiving the new institutions only in terms of his own self-interest. They create a tide of new currents in which he can swim.

The fourth attitude an individual may take toward new forms is to accept them, but at the same time search out ways to modify and adjust their possible impact. This type of individual seeks the implications of changing events. He may work for changes at the margin, or for those more radical in content. The person who seeks modification is the policy-maker, recognizing that a policy may be of small or great magnitude and significance.

Describing this fourth type of individual requires an intellectual biography. If an individual seeks modifications and advocates some degree of control over new and emerging forms of behavior, then he will be a man of ideas. Moreover, if he participates in the new processes and is active in the social and economic world, he will not find much time left for the serious analysis of events. Reflective thinking

requires leisure, and the interruption of the process is extremely frustrating to a man of thought.¹³

While he was still an active member of the London Exchange, David Ricardo began thinking and writing about English monetary matters. Once the opportunity presented itself, he retired from business in order to avoid daily interruptions and to seek solitude in which to think and write. But there is an ironic twist to Ricardo's retirement. He had made his fortune in the stock market, trading in the public and private debt, and if he had followed the trends of the times, he would have invested his holdings in the burgeoning English manufacturing sector. Instead, Ricardo used his accumulated wealth to purchase land. Apparently, he believed he would not have to worry about declining values and could take less time over personal business affairs. He could relax, think, and write.

Of the four categories of reaction to which I have alluded, David Ricardo obviously falls into the fourth. During England's transition from a labor-land to a labor-capital system, many new institutions and social customs arose, not to mention the great changes that took place in the daily lives of Englishmen. As this process unfolded, Ricardo became a reformer—not an escapist, solipsist, or opportunist—an intellectual who was never satisfied with the world as he saw it.

As I have indicated, to write an intellectual biography, one must know the discipline which engaged the subject, as well as the social history out of which his particular theory and policy developed. But one also must learn something of the individual, including the way he interacted with others, his own behavior patterns and personality structure. Here, the biographer approaches the area of psychology, including the new group of historians, those who write psychohistory. To some degree they are the modern advocates of the great man theory. They place much stress upon the role of the structure of a man's personality, and they suggest that the individual is responsible for the events which occur during his lifetime. Personality disorder, for example, thus becomes a causal factor in history. But psychohistorians frequently place their subjects in a strait-jacket, for within their theoretical structure, individuals can respond in only a limited number of ways. Similarly, in a Freudian theoretical structure, biological instincts drive an individual to maximize

¹³ Schumpeter claimed that the major reason John Stuart Mill was not the greatest mind of the nineteenth century, as his father had intended, was that John had to report to the East India Company each day, where his duties consisted of opening the mail as it came in from Company agents in the field. Mill did not have to answer the mail, all he did was to decide which branch of the Company should handle the correspondence. The job required only a few hours a day, and had been obtained by James Mill for his son, because he could leave him very little in the way of a legacy. The job, however brief as it was, represented an interruption, with Schumpeter observing that "not only interruption but also the mere anticipation of possible interruption paralyzes creative research." (Schumpeter 1954, p. 528)

That Schumpeter was correct about the effects of interruption upon reflective effort, there is not much doubt. Adam Smith obtained his long period of peace, by accompanying the future Duke of Buccleuch on the Grand Tour; Ricardo made his fortune and retired early, while Malthus had the sinecure of a parsonage where he did not do anything except officiate at funerals. He also taught at the East India College, as the Company subsidized yet another economist. From then on, the economists who counted had the protection of Oxbridge, where the Dons are not expected to do much except think and write. The great exception was Marx, who let his family starve, and when things got too bad there was always another loan from his comrade, Engels. Marx did not have the protection of a university, he just let his family suffer, while he wrote of the system's over-production.

gratification, independent of the social process. The drive of these instincts, the id, comes into opposition with the ego and superego in a predetermined fashion, and it is assumed that this framework is applicable in all situations.

In the process of writing about the life of David Ricardo, I was impressed by the applicability of the psychoanalytical life-cycle hypothesis of Erik H. Erikson (Erikson 1962, 1975). An individual experiences a number of conflicts in the course of a lifetime, and these lead to a number of compromises between the individual and society. Whereas Freud tended to restrict his analysis to the intrapsychic conflicts of infancy and early childhood, as they influenced the formation of the personality, Erikson is more concerned with the later conflicts of life. As psychoanalysts, both Freud and Erikson are, of course, concerned with the process of conflict as it leads to personality disorder, where the resolutions lead to a neurosis, one that contributes to the success or failure of the individual.

What struck me about the Erikson life-cycle hypothesis was its applicability to Ricardo's life. While Ricardo was a success, just as Erikson's Luther was, the former does not appear to have suffered emotionally from passing through the several crises, or certainly not to the degree that Luther did. The delineation of Erikson's life-cycle hypothesis will indicate just what it is that I have in mind.

In infancy the conflict between the individual and society naturally revolves around the dependency relation between the child and the parents, with strong instinctual drives during the oral, anal, and phallic stages of development. This part of the schema is almost identical to Freud's, but Erikson believes these early childhood conflicts are followed by the crises of adulthood: identity, intimacy, generativity, and ego integrity.

The identity crisis occurs in late adolescence, as the young adult comes in conflict with the goals of his parents, and as he attempts to work out his own goal according to his aspirations and developing ideals. The conflict of intimacy occurs when the young adult attaches himself to new personalities and develops new relationships, which replace the old relations with the parents, severed during the resolution of the identity crisis. Some individuals, of course, never resolve the identity crisis, never strike out on their own. If there is no separation from the parents, the individual will probably never experience the intimacy crisis.

Generativity is the crisis of middle adulthood. The individual's own immediate concerns are given less importance, and more attention is attached to the needs of others, such as one's children, or even society at large. Generativity is characteristic of the active and socially oriented individual. The final crisis is aging, or late adulthood. The important biological and social roles of the individual decrease as he experiences and struggles with the problem of accepting the approach of old age. Naturally, adjustment at this stage of life is dependent upon how well the individual has resolved the earlier crises.

David Ricardo's life shows a remarkable conformity to Erikson's life-cycle hypothesis. There was an identity crisis, at the time when he broke with his parents, left the Sephardic enclave, married outside the faith, and entered upon his own business career. The period of intimacy followed, wherein he developed new

relations, most of which were far removed from his previous activities, as he entered his second career as a political economist. He had great success in his new relations, and this can be attributed to the degree of his adjustment during the identity crisis. Ricardo's period of generativity began when he became primarily concerned with social issues, and began to write and become interested in politics. There is also great evidence of increasing concern with his family, as his own immediate desires were reduced in importance. He accepted a new life-style, in part because he could afford it, but mainly because his wife and children desired it. As for the aging crisis, Ricardo died in his fifty-first year, and he never had to grapple with the possibility of declining social and biological roles. However, he wrote in a letter to his friend, James Mill:

You are mistaken in supposing that because I consider life on the whole as not a very desirable thing to retain after 60, that therefore I am discontented with my situation, or have not objects of immediate interest to employ me. The contrary is the case—I am very comfortable, and am never in want of objects of interest and amusement. I am led to set a light value on life when I consider the many accidents and privations to which we are liable.—In my own case, I have already lost the use of one ear, completely—and am daily losing my teeth, that I have scarcely one that is useful to me. No one bears these serious deprivations with a better temper than myself, yet I cannot help anticipating from certain notices which I sometimes think I have, that many more await me. I have not I assure you seriously quarreled with life,—I am on very good terms with it, and mean while I have it to make the best of it, but my observation on the loss of esteem and interest which old people generally sustain from their young relations, often indeed from their own imperfections and misbehaviour, but sometimes from the want of indulgence and consideration on the part of the young, convinces me that general happiness would be best promoted if death visited us on an average at an earlier period than he now does.

(*Works*, Vol. VIII, p.253. David Ricardo to James Mill, 25 September 1820)

When he wrote this letter, Ricardo was only forty-seven years old, but it indicates an ability to recognize what approaching old age implies.

The discussions in the chapters which follow delineate the changing life-style of David Ricardo as he shifted from one career to the next, and the next. Since I have no psychoanalytic skills, it would be presumptuous to try to apply them. Still I am impressed with the heuristic value of Erikson's hypothesis. The field of psychohistory is controversial, to say the least (see Ryan 1975), and one reason is that most psychohistorians apply ideas of modern "psyche" to people of the past, without bothering to make much of the difference in time and culture. Ricardo's

environment was quite different from the typical Freudian-Erikson conceptualization, and a question must be raised as to the degree to which Erikson's hypothesis is pertinent. It can only be answered in the telling of Ricardo's story.

Almost any biographer must have some difficulty with the issue of objectivity. Something attracts a would-be biographer to a particular historical figure; something about the person's life seems to justify telling his or her story. The "something" may vary, of course. Sir Lewis Namier's biography of George III (Namier 1957; see also 1930) was written with the intention of challenging the accepted interpretation of a demented George, while Freud's volume on Moses (Freud 1939) was written to show the applicability of a particular theoretical aspect of Freudian psychoanalysis (Fenichel 1945, pp. 29ff and *passim*). In more recent times, Erikson's biography of Luther was written to illustrate the probative value of the life-cycle hypothesis.

That "something" which initially attracted me was the great contrast I found between what Ricardo wrote as compared to what other economists have written about his economics. When, for example, I read Frank Knight on Ricardo (Knight 1935), and then reread Ricardo, it seemed that Knight and I were not "reading" the same books and pamphlets. As I have indicated elsewhere (Henderson 1976), the difference in "reading" arises because of the difference in points of view, a difference in *Weltanschauung*, or, as more currently stated, a difference in paradigms.

Obviously I liked what I read in Ricardo, and that was my initial reason for a biography, and I must admit that I have not advanced beyond my first response of respect, admiration, and love. The more I have learned about him, the more I have grown to respect the man and his ideas. Some writers have claimed, for example, that he was unscrupulous. If he believed so strongly in the need for greater suffrage and a reformed Parliament, why then did he buy his way into the House of Commons, and why did he not stand for a seat when he was offered the opportunity? Others have said that he was unscrupulous for joining the rentier class, while at the same time writing economic and political tracts which would reduce that landed gentry's status and position.

Personally, I do not find this behavior so difficult to explain. In politics, Ricardo was a pragmatist; given his Jewish heritage, he would have had no chance of being elected to a seat in Parliament, so he bought one. But when it came to economic theory, Ricardo was not a pragmatist; he held his initial ground to the last. Whether there are flaws in his economic theory, as many have claimed, is a matter of interpretation, and here I freely admit to theoretical prejudices in Ricardo's favor.

Finally, I must issue a caveat about my interpretation of several events in Ricardo's life. In some instances there is no evidence as to whether something did or did not occur, and I fall back upon what I call "Minsk-Pinsk" logic. This type of reasoning is part of Jewish folklore, to wit: such and such an event occurred in a certain way because it could not have occurred in any other way, given the nature of

Jewish culture. In stories employing this form of logic, the setting varies,¹⁴ but the most common is that of an elderly Jew riding on a train, let us say, from Minsk to Pinsk. It stops at the town where the old man had lived for many years, and a young man boards. He sits in the old man's compartment, and they do not speak, but the old man notices that the youth is wearing a new suit and hat. He is carrying a small bag in which he has some additional clothing and a prayer shawl, but not enough clothing for a long visit. Having lived for years in the boy's village, the old man knows the names of all of the men and their various age groups. He easily figures out that the young man is Isaac, son of Abraham Ambaras.

As the journey continues, the old man notes that Isaac is wearing a new suit and concludes that he is going to meet the young girl with whom his marriage has been arranged. The question is, who is the girl? Accordingly, the old man goes through the process of figuring out where all the prospective young brides might live along the railroad line, and whose daughters they would be. As each town passes, the field is narrowed. Eventually, as the conductor announces the next stop, the old man observes that the young man has become restless and fidgety. Ah, the old man tells himself, Isaac Ambaras is to marry the daughter of Aaron Goldberg! As the train pulls in, the old man rises, extends his hand, and offers the young man his good wishes on his betrothal to Sarah Goldberg. Since the two have not spoken, the young man is shocked: "But how did you know?" The old man replies: "It is obvious."

In a highly structured and traditional culture, the variability in the life of any particular individual is very narrow. Accordingly, the predictability of events is extremely great, and "Minsk-Pinsk" logic is highly applicable. The old man knew his culture and its traditions. The young man would only have a new suit if he were about to marry; the young girl would have to be of a certain age and of the same culture.

Since David Ricardo was born and reared in the highly structured and traditional Sephardic culture, it is with a high degree of probability that we can speculate about his life in its early period, even when there is little evidence. In later life, the problem is not as serious, for there is an abundance of correspondence and other memorabilia.

¹⁴ My late colleague, Herbert Kisch, showed me his uncle's version of the Minsk-Pinsk logic. See Egan Kisch 1948, pp 172-176.

Chapter II

THE SEPHARDIC HERITAGE IN ENGLISH SOCIETY

. . . I do not relish the approximation of Jew and Christian, which has become so fashionable.

Charles Lamb (1821)

Out on Mile End Road, about three kilometers from the center of the City of London, is Beth Haim, the original burial ground of the Sephardic Jews of the City. Bequeathed to them by Oliver Cromwell in 1657, the year after he ignored Edward I's banishment of the Jews from England, Velho was the final resting place of the Sephardim until 1734, when a second burial ground was opened farther out Mile End (Hyamson 1951, p. 24). In the late seventeenth century, adjacent to the first burial site, a communal hospital was built. Originally intended for confined women and children, it soon became a general hospital, as it was the only one in England where meals were prepared in accord with the dietary laws. An addition to the hospital was built, Beth Holim, for indigent and aged Sephardim.

The burial ground, the hospital, and the old folks home were maintained by the Sephardic Congregation of Bevis Marks Synagogue. As the number of Jews in London increased, primarily because of immigrations from Eastern Europe, new hospitals were built, and Beth Holim became exclusively a home for aged Sephardim. Today, entrance to the Sephardic cemetery is gained through the halls of Beth Holim, now the home of Sephardim who in recent times have migrated to London from Egypt, and other Arabic countries. Although still maintained by the Bevis Marks Congregation, seldom do any London-born Sephardim now need to take refuge in Beth Holim. The current condition of the burial ground reveals a great deal about the Sephardim, in contrast to the condition of the first burial ground of the London Ashkenazim.

At Beth Haim, the grass is now knee-high, and weeds abound; the graves are unkempt, the markers broken and crumbling, weathered by the centuries. In some

instances, tree roots have grown through the marble grave coverings, still more evidence of the ravages of time. As shown in Figure II-1, all of the markers are horizontal, of equal size, and at ground level. By now the Hebrew inscriptions are barely visible. The burial ground of about an acre is surrounded on three sides by a six-foot stone wall; there is no regular grounds keeper and, of course, no watch.

Beyond the western wall, lies the original cemetery of the Ashkenazim, opened in 1706. The grass is mowed weekly, the weeds pulled, and in the spring, flowers bloom. A year-round groundsman and his watchdog are evidence of the care and protection afforded the ancestors of today's large Ashkenazi London community. Here, shown in Figure 2, stand monuments of varying size and shape, some ten to twenty feet in height and width. Their wide range of ornamentation and adornment is in sharp contrast with the simplicity of the uniform, ground-level vaults of the Sephardim. The contrast reflects a basic democratic and egalitarian spirit among the Sephardim as opposed to the recognition of status and distinction among the Ashkenazim.

The half-century gap between the opening of the two burial grounds reflects the late arrival of the Ashkenazim. A London census, in 1695, listed 716 Jews, about 73 percent (519) of them Sephardim, the rest Ashkenazim (Hyamson 1951, p. 70). Moreover, 97 percent of the former lived within the wall of the City while the Ashkenazim lived outside. When the Ashkenazim first began to arrive in England, they were unwelcome and barely tolerated by the established Sephardic community. With some reluctance, the Ashkenazim were admitted to the Bevis Marks Synagogue, and a few even were permitted burial rights in Beth Haim. Obviously, there were numerous cultural and social differences between the two groups, even though they practiced the same religion (Hyamson 1951, Chapter I, *passim*).

The seventeenth century Sephardic community in London was extremely conscious of the necessity for group control and solidarity to foster its survival in a hostile world. Control of their synagogue was exercised through the annually elected Mahamad, which interpreted and enforced the written constitution of the Congregation, the Ascamoto. The Ascamoto specified that

As death makes no distinction of persons, it has been a very laudable custom in our Congregation . . . not to make any distinctions among the deceased, whether in respect to the graves, or the honours conferred in Synagogue.

(Hyamson 1951, p. 338)

Among the Sephardim was a common Spanish and Portuguese ancestry, and Amsterdam had been their most recent home before their migration to England. The Ashkenazim, in contrast, were a mixture from all over Eastern Europe, emigrants from cultures more hierarchical than that from which the Sephardim had come in Holland. In the countries from which the Ashkenazim had emerged was a cultivation of nobility, and the trappings of status. The great diversity in the grave monuments in the Ashkenazim cemetery is testimony to the fact that status was tolerated and encouraged.



Figure II-1. London Burial Ground of the Sephardim, Opened 1657.



Figure II-2. London Burial Ground of the Ashkenazim, Opened 1706.

At no time did the number of Sephardim in London exceed a few thousand, even as late as the early eighteenth century; by the middle of the eighteenth century, the Ashkenazim numbered in the tens of thousands. The source of the two groups of Jews in London is described by Dorothy George:

During the Protectorate [Cromwell] and in the reign of Charles II a body of Spanish and Portuguese Jews had settled in London. These, the Jews of the Sephardim, were for the most part rich and respected. The beginning of the Ashkenazim settlement in London consisting of Jews using the German ritual dates from the end of the seventeenth century. . . . All European disturbances in which the Jews were sufferers stimulated the migration to England. . . . These immigrants were for the most part poor, and came to England relying on the charity of the Jews of the Sephardim, to whom they were far from welcome, and from about the middle of the century the burden became increasingly heavy.

(George 1966, pp. 131-132)

By the time the Ashkenazim began to trickle into London in the 1660s and 1670s, the Sephardim had become a thriving and rigorous community, with strong ties to the older Sephardic society in Amsterdam. Among the Sephardim the occupations of merchant, stockbroker, banker, exporter, importer and physician were prevalent, and there was a strong predilection for self-sufficiency. The major anxiety the Sephardim had about the Ashkenazim was that the latter lacked the training and skills necessary to function in the London economic world. The one thing the Sephardim did not want was for the Ashkenazim to become recipients of welfare, and the Mahamad prohibited any Sephardim from giving alms to Jewish beggars. Compared to the Sephardim, the Ashkenazim were economically, socially, and culturally disadvantaged. The Sephardim were conversant in many of the Romance languages, in contrast to the tongues of the Ashkenazim. The *lingua franca* of the latter was Yiddish, which was unknown to the Sephardim, since it was an adaptation of the German spoken in the Rhine Valley. These language differences came into greatest conflict in the synagogue, in the pronunciation of Hebrew.

All Jewish services are conducted in Hebrew, of course, and there is widespread participation by all male members of an orthodox synagogue. The services consist exclusively of the recitation of prayers and reading from scripture. The text is the Pentateuch, the books of Moses: Genesis, Exodus, Leviticus, Numbers, and Deuteronomy. On each sabbath a prescribed selection from the Pentateuch is read, followed by complementary selections from the remaining books of the Old Testament. Beginning with Rosh Hashanah, in September or October, the Pentateuch is read in a yearly cycle, on successive sabbaths. Any male may be called upon to read from the several texts, and there is wide participation.

The difficulty between the Sephardim and Ashkenazim over the reading of Hebrew arose primarily because Hebrew is written with no vowels. The reader must know where to insert them, and pronunciation is in large measure a matter of tradition. The Bevis Marks Congregation was hearing Hebrew pronounced in a new way, and to this they strongly objected. In an orthodox congregation, if a Yehidi pronounces a word incorrectly, those who are following in their own *Chumash* will pound on their prayer tables to inform the reader he has made a mistake in pronunciation. Since the Old Testament is the received word of God, correct pronunciation is of particular importance to all Jews.

These differences over the reading of Hebrew reflected the great diversity in recent origin and background of the two groups. Neither was happy, and as the Sephardim pushed the Ashkenazim out of their congregation, the latter also pulled away to form their own. In 1722, the first Ashkenazi synagogue was opened, just inside the wall, at Aldgate, but away from the center of the City where Bevis Marks was located.

In 1656, when the Sephardim settled in London, there was still living space within the wall of the City. By the time the Ashkenazim arrived, this was no longer the situation, and they settled outside the wall with the other new immigrants, the Irish and French. The poorer of the lot settled in London's East End, and it was there that the newly arrived Ashkenazi located. This geographic separation only made more difficult any interchange between the two groups of Jews and reinforced the diversity of their origins.

Religion and Commerce

An archaeologist studying the two London burial grounds might hypothesize that the Ashkenazim conquered, or destroyed, the Sephardim. He also might conclude that the Ashkenazim were of a higher civilization, in which there was considerable differentiation of status and position. In one sense, he would be correct, for certainly the Ashkenazim swamped the Sephardim. But in another sense he would be incorrect; it was not so much a situation where the Ashkenazim was absorbing and conquering as it was of the Sephardim becoming assimilated into English society and ceasing to exist as an enclave.

As the activities of the wider culture become more and more important to the members of an enclave, their practices, mores, and customs decline in importance. The assimilation is seldom a one-way process, for very often the various practices of the enclave are adopted by the wider culture. With respect to the Jews, that is exactly what happened in the course of the emergence of commercial capitalism in Western Europe. For centuries the Jews' economic activities were at odds with the prevailing religious beliefs of Christian Europe, but in time the latter were altered, and the economic practices of the Jews prevailed.

Early Christianity had its origins in the most messianic of Jewish sects, the Essenes. Jesus and his apostles preached a religion of the hereafter, and the earthly state of man was temporary. Early Christianity viewed commercial activity as

dangerous and undesirable, and because most of its adherents were engaged in either pastoral or primitive agricultural activity, this disdain was widely accepted. The origin of this attitude is found in *Leviticus* :

And if your brother becomes poor, and cannot maintain himself with you, you shall maintain him; as a stranger and a sojourner he shall live with you. Take no interest from him or increase, but fear your God; . . . You shall not lend him money at interest, nor give him your food for profit.

(Leviticus 25.35-37)

This aspect of the law of Moses was the first expression of the antithesis of the contract society, and upon that principle Jesus based his teachings. For while Moses's original prohibition was fashioned to protect the poor from the ravages of the market, it was interpreted by Jesus and his followers so as to call into question all forms of commercial activity. Like those of Moses, the teachings of Jesus were fashioned for a society of goatherds and shepherds, a pastoral and nomadic society, and early Christianity's anti-commercial orientation was embraced by the agricultural population of the Mediterranean basin, and later, by Western Europe.

Some Jews did not accept this particular interpretation of the law of Moses, and they participated in trade and commerce as they moved westward across the Mediterranean. These were the Jews who many centuries later became known as the Sephardim. As leaders in the growth of commerce, they became the principal agents of change in Western Europe. Such agents frequently are not held in high esteem by those whose customary ways are being disrupted.

The change from status to contract is revolutionary in any society. The old code of values goes, and the community may indeed disintegrate, even in the moral sense, until new traditions form and gain respect. It is not only the economic relations that are affected; the decline of status in economic affairs corrodes also the old ideas about status in political organization, and in the family, and simultaneously challenges the religious precepts which safeguarded the old rights in status, and thus religion itself. Reintegration does not therefore occur until the community has found new kinship and new political arrangements . . . This process took a long time to work itself out in Western Europe; it took some time to formulate a new political philosophy based on the idea of the social contract; and to reconcile a contractual outlook with a religion based on revelation and authority.

(Lewis 1955, p. 46)

Commerce and trade grew apace, and by the thirteenth century the small stream had become a raging torrent. The Christian disdain for commercial activity began to fade as more and more of the population participated in markets. The

prohibitions against interest and profit also were relaxed and turned aside. By the middle of the sixteenth century, the original teachings of Jesus had been redefined in such fashion as to make them compatible with a commercial world. A similar change already had taken place among the Jews.

The original teaching of Jesus, which shunned the world of commerce and trade in favor of a communal and pastoral existence, was an ideological and ecclesiastical detour in the course of history. Many centuries before Jesus, the Jews had recognized the need to modify and redefine the law of Moses. The result was the Talmud, the written codification of the oral tradition (Mishna) which had been passed down over the centuries, and which was necessary primarily because the teachings of the Pentateuch no longer satisfied the economic and social conditions in which the Jews found themselves after the fall of Jerusalem in 586 B.C. In a similar vein, the redefinition and gradual modification of Christianity into the branch known as Protestantism became necessary, in part, when the original theology no longer satisfied the economic and social conditions of sixteenth-century Christians, surrounded as they were by commercial capitalism. To some extent, both the Talmud and the doctrines of Protestantism reflect religion's adaptability to the changing conditions of economic life. Judaism, however, made the necessary adaptation over two millennia before the adaptation associated with Calvin and his followers.

England, of course, was far from immune to these changes. Oliver Cromwell, the residuary legatee of Puritanism, recognized the economic necessity for trade and commerce and entered into rapprochement with the Sephardim of Amsterdam.

A society of peasants could be homogeneous in its religion, as it was already homogeneous in the simple uniformity of its economic arrangements. A many-sided business community could escape constant friction and obstruction only if it were free to absorb elements drawn from a multitude of different sources, and if each of these elements were free to pursue its own way of life, and—in that age the same thing—to practice its own religion.

(Tawney 1926, p. 205)

His religious tolerance sprang more from pragmatism than from idealism.

Because Judaism began to make doctrinal adjustments two millennia before the changes which eventually occurred in Christianity, the Jews early pursued economic activities at odds with the dominant norms of Western European behavior. The key to these differences in life style, and the patterns they entailed, had origins in the fact that the Jews were the first peoples to be separated from the land, a disenfranchisement of the fourth century B.C., during the Babylonian captivity. Of necessity, the Jews became proficient in trade and commerce, and Judaism itself was transformed in the process. Their members were few, just as trade and commerce were small, in contrast to the dominance of the pastoral and agricultural economies. Their numbers, their religion, and their economic pursuits reinforced the Jews' isolation.

Trade and commerce made significant inroads upon the pastoral and agricultural societies of Western Europe, and the small trickle of those streams had their source in the eastern Mediterranean. At the source was a culture based upon Judaism, and out of that culture emerged the change agents of Western Europe.

By the time David Ricardo was born, the transformation of the traditional English society was entering upon its final stages, but being born a Sephardic Jew, his heritage had been honed in a hostile environment. To understand and appreciate the interaction between Jew and Christian, between a monetary and agrarian society, it is necessary to understand Judaism's development over several millennia.

The Judah-Israel Kingdom

The supremacy of the Israelites was achieved about 1000 B.C., when David became undisputed ruler of a united Judah-Israel Kingdom. According to Moses, God initially had promised Canaan to Abraham, so that His chosen people could live in peace. The original covenant between God and the Jews was thus made with Abraham, and confirmed with Moses on Mt. Sinai, as he led the twelve tribes of Israel out of Egypt on their way to the Promised Land. Under the leadership of Joshua the conquest was completed. The land was distributed among the various tribes, and it was not until David's time that these tribal lineages were fused into a single kingdom.

David also built an empire from the valley of the Upper Euphrates to the Gulf of Aqaba on the Red Sea. The only empire to ever arise out of Palestine, it soon became the center of trade and commerce for Egypt, Syria, Arabia, and Babylonia, and its traffic reached as far as Spain and, perhaps, the British Isles.

David cemented his kingdom with religion, its symbol being the Ark of the Covenant, originally built to house the tablets on which Moses had written the Ten Commandments. The Covenant was that Yahweh would be the only god of the Israelites, in return for which observance He would protect and aid His chosen people, but only so long as they kept His commandments and obeyed His laws. In the course of centuries, as Judaism became progressively more anthropomorphic and monotheistic, the Ark was viewed as containing "the presence," rather than just Moses's tablets. Accordingly, by bringing the Ark to Jerusalem, David solidified the religion of the Jews with the political reality of his kingdom. Moreover, by reinterpreting the Covenant as an agreement between Yahweh and the King of the Israelites, rather than between Yahweh and the people of Israel, David established himself as the intermediary between Yahweh and the chosen people. Unlike Moses, who represented his people before God, David became the representative of God to the people, and from this reinterpretation arose the belief in a "messiah," the King who would be the leader of the children of Israel. This marked the beginning of messianism, an idea not found in the Pentateuch.

Upon David's son, Solomon, rested the responsibility for building the great Temple to house the Ark of the Covenant. Solomon's Temple, with its Holy of Holies, symbolized the religious, political, and social history of Judaism. There the

later prophets received their guidance from Yaweh and wrote the fifth book of the Pentateuch, Deuteronomy. A reiteration of the law of Exodus and Leviticus, Deuteronomy was the final codification of the Pentateuch, its significance being that it appeared after the temple was built.

Having historically been nomadic herders and caravan leaders, the Israelites knew little of architecture and construction, and to build the Temple, Solomon imported the more highly skilled Phoenician craftsmen and artisans. The Phoenicians not only were essential to the building of Solomon's Temple; as the greatest sailors of the Mediterranean, they were integral to the commercial and territorial expansion of the Israelite Empire, as it became the fulcrum of the commercial and economic world of the first millennium B.C. Its commercial influence extended throughout the western Mediterranean basin, to the valley between the Euphrates and Tigris rivers (Mesopotamia), and to the Persian Gulf. Solomon's traders were found on the Red Sea to the south, on the Mediterranean to the west, and on the Persian Gulf.

The success of Judah-Israel proved to be its undoing, but depending upon one's interpretation of history its destruction was caused by different forces. According to the prophets, the empire was destroyed because the Jews ignored the Covenant, for in the eighth and seventh centuries B.C., they again took to worshipping Baal, the god of the fertility of soil and cattle, of sensuousness and licentiousness.

As the chief god of the Phoenicians, Baal's great temple was in Ugarit, but Solomon also built temples to Baal, at the request of his 700 wives, many of whom were not Israelites. In addition, these temples were more luxurious than the Temple in honor of Yahweh. Figuratively, hedonism, greed, and idolatry became dominant over the ancient Judaic virtues of justice, mercy, and love for fellow man. Baal was substituted for Yahweh, and He therefore punished His chosen people, destroyed their empire, as the Assyrian and Babylonian armies threw them into captivity. As Jeremiah warned,

Thus says the Lord: "Let not the wise man glory in his wisdom, let not the mighty man glory in his might, let not the rich man glory in his riches; but let him who glories glory in this, that he understands and knows me, that I am the Lord who practice steadfast love, justice, and righteousness in the earth; for in these things I delight, says the Lord.

"Behold, the days are coming, says the Lord, when I will punish all those who are circumcised but yet uncircumcised—Egypt, Judah, Edom, and the sons of Ammon, Moab, and all who dwell in the desert that cut the corners of their hair; for all these nations are uncircumcised, and all the house of Israel is uncircumcised in heart."

(Jeremiah 9.23-26)

And the Prophet Amos warned,

Woe to those who lie upon beds of ivory,
 and stretch themselves upon their couches,
 and eat lambs from the flock,
 and calves from the midst of the stall;
 who sing idle songs to the sound of the harp,
 and like David invent for themselves instruments of music;
 who drink wine in bowls,
 and anoint themselves with the finest oils,
 but are not grieved over the ruin of Joseph!
 Therefore they shall now be the first of those to go into exile,
 and the revelry of those who stretch themselves shall pass away.

(Amos 6.4-7)

The prophets were the first sociologists, analyzing the social structure of Judah-Israel, and showing the contrasts between its multilayered classes. At the top were the political leaders and priests, each group intent upon increasing its own wealth, power, and prestige. At the bottom were the large masses, the vinedressers, goatherds, shepherds and laborers. According to Isaiah, Jeremiah, Hosea, and Amos, this structure was faulty, as there no longer was any identification between the masses and the nobility, priests and scribes. The latter held diverse goals from those who believed in a dedication to the human spirit. The empire had become corrupted by its great economic success and enhanced political power. The leaders of both the Temple and the Empire had begun to ignore the fundamental bases of the Covenant.

Following the death of Solomon in 931 B.C., the united Israelite Kingdom was divided into the Kingdom of Judah and the Kingdom of Israel, a division in itself which reflected the beginning of the decline of the empire which David and Solomon had solidified. The Kingdom of Israel was destroyed in 722 B.C. by the Assyrians (Assyrian Captivity), while the Kingdom of Judah was destroyed in 586 B.C. by the Babylonians. Out of the Babylonian captivity there eventually emerged two groups of Jews who continued to adhere to the religion founded by Moses.

Of the original twelve tribes that followed Moses out of Egypt, ten had settled in Israel. In the eighth century B.C. the Assyrians killed the most important of their leaders, captured the remaining priests, elders, craftsmen, and merchants, and dispersed them throughout the far flung Assyrian empire. By relocating the elite, the Assyrians destroyed ten of the tribes of the Israelites. The sheep herding and agricultural laborers remained in Israel under new hierarchies imported from other parts of the Assyrian Empire. In the course of time, their assimilation meant that the ten tribes became "lost," their leadership having been destroyed.

Under King Nebuchadnezzar, the Babylonians conquered the remaining Israelites, those of the Kingdom of Judah. But instead of dismembering the two tribes of Judah, the Babylonians took them into captivity, and they existed in Babylon as an enclave for centuries.

Jeremiah witnessed the destruction of Jerusalem, the Temple, and the Ark:

This is the number of the people whom Nebuchadnezzar carried away captive: in the seventh year, three thousand and twenty-three Jews; in the eighteenth year of Nebuchadnezzar he carried away captive from Jerusalem eight hundred and thirty-two persons; in the twenty-third year of Nebuchadnezzar, Nebuzaradan the captain of the guard carried away captive of the Jews seven hundred and forty-five persons; all the persons were four thousand and six hundred.

(Jeremiah 52.28-38)

In 538 B.C. the Babylonian Empire was conquered by the Persians and ruled by them until 331 B.C.; thereafter, until 198 B.C., they ruled as satraps in Alexander the Great's empire.

What was particularly significant about the Babylonian captivity was that the individual captives continued to work in their professions and occupations. Most of those taken into captivity were the elite of the two tribes of Judah, the merchants, traders, craftsmen, politicians, priests and scribes. A large percentage of the Jews prospered, since skilled manpower seldom rots in prison. Moreover, the Jews of Babylon not only were allowed to participate actively in economic life, but also were permitted to practice their religion, and as a community, the Judaic culture continued almost uninterrupted.

During this period many Jews were allowed to return to Jerusalem, and under Ezra and Nehemiah they built a second Temple. As a result of this return to Canaan, two centers of Judaic culture existed, one in Babylon, the other in Judah. The largest was the latter, since the numerous agricultural workers, who had not been taken into captivity, were now reunited with the returning exiles. This dualism, between the Jews who returned to Jerusalem and those who remained in Babylon, should not be confused with the fact that two tribes were taken into captivity, those of Benjamin and Judah. The desire to return or stay was not drawn along tribal lines, but primarily reflected religious, nationalistic and economic motives.

Those Jews remaining in Babylon obviously were not interested in returning to Jerusalem because they had found new outlets during the captivity. Eventually, they spread into the Mediterranean to such an extent that, by the beginning of the first century B.C., one-half the population of Alexandria was comprised of Jewish migrants from Babylonia. As each century passed, trade and commerce moved farther west and the Jews became major participants in that expansion. By the fourth century A.D. there were Jewish settlements in Carthage, Athens, and Grimaldi, on the islands of Majorca, Sardinia, and Crete, and in Spain and Portugal. The Jews who left Babylon to settle elsewhere were the ancestors of the Sephardim; the Jews who returned to Jerusalem eventually were dispersed throughout Eastern Europe, and to them the Ashkenazim owe their origins.

For several centuries, the Babylonian and Jerusalem communities remained in contact, and it was during this period that Judaism codified the oral tradition of its forefathers in the Talmud. But as might be expected, because of the diverse interests of the two groups, for some time there were two Talmuds. The conflict was resolved, to some extent, by the Romans in 70 A.D. when they banished Jews from Palestine and destroyed the second Temple. This meant that Babylon once again became the single center of Judaism. But the division between the two groups had not been just a matter of geography, but a reflection of basic philosophical differences. One group was pulled in a very traditional direction, grounded in the Temple and a strict interpretation of the Pentateuch; the other group was more worldly centered and urged an adaptation of Judaism to the changing conditions of life. In one sense, the latter were the Jews who recognized that Judaism was no longer a religion of a particular locality, but a religion of a people who would continue to be dispersed, existing often in a hostile world. It was not a matter of some Jews having less respect for the religion of their forebears, but of a necessity to adapt to new forms and new institutions. The Pentateuch had been written for a nomadic society, and when the Jews found themselves engaged in commerce and trade, there was a need for modification and reinterpretation of the original law of Moses. Private property and the right of inheritance were but two areas where there was a need for new law. Nor was retribution necessarily limited to physical sanction, as the function of a monetary system began to be accepted for new social relations.

It was during the period of the Babylonian captivity that many changes occurred in Judaism, and the manner in which the religion was practiced. One might even say that the changes were fundamental and radical, albeit there were strong links with tradition. The most important new forms were the Talmud, the rabbinate, and the synagogue, along with the demise of the Temple and the priesthood.

The Talmud includes the basic law of Moses, as outlined in Exodus, Leviticus, and Deuteronomy, as well as the oral interpretations of that law as they emerged over the centuries. The initial oral interpretation was the Mishna, while the Gemara emerged as a second interpretation, a commentary on the commentary. The codification of the Mishna and Gemara commenced in Babylon, but after the second Temple was built there were two versions, a Palestinian rite and a Babylonian rite. The Palestinian rite was more nationalistic vis-à-vis Judaea, and contained a messianic orientation, in accordance with the later prophets, Haggai and Malachi. Despite a great deal of assimilation between the Palestinian and Babylonian rites after 70 A.D., differences remained. The Babylonian Talmud was followed by the division of the Jews who eventually became known as the Sephardim, while the Palestinian Talmud was adopted by the Ashkenazim. The nationalistic orientation of the Palestinian rite never seems to have influenced the Sephardim, as they adjusted quickly to the economic and social characteristics of the particular country in which they happened to live. In addition, the Sephardim do not appear to have been greatly influenced by a messianic calling.

The Talmuds were written by the great scholars of Judaism, the rabbinate, as they interpreted religious law and the necessary modifications of that law to fit new social and economic conditions. As teachers, members of the rabbinate instructed the exiles of Jerusalem on how to remain faithful to the intent of the laws of the Pentateuch. Accordingly, it was only with the Babylonian captivity that the rabbinate appeared, and their emergence as Talmudic scholars coincided with the demise of the priesthood, which Moses had created.

As a member of the tribe of Levi, Moses selected the Levites to be the protectors of the Ark, and the Tabernacle which surrounds it. Moreover, Moses's older brother, Aaron, was established as a high priest (Kohan), and his sons lesser priests. Only those in Aaron's lineage could perform sacrifices and carry on sacramental rituals; the law was more rigid for the Kohans than for the rest of the Israelites for anthropomorphic reasons. Moreover, Levi was a landless tribe, perhaps because of its religious caste.

When Solomon built the Temple, the Kohans constituted the priesthood, while the remaining Levites were assigned to defend it from attack, and to be the musicians. Until the Babylonian captivity, the three tier hierarchy of Kohans, Levites and Israelites remained, and if anything was intensified with the merging of Judaism and the nation state of Judah-Israel. Nebuchadnezzar decimated the Kohans and the Levites, and while some were taken captive, they lost their hierarchical role, since there was no longer a Temple.

During the captivity the synagogue emerged as an alternative house of prayer, previously limited to the Temple. The synagogue signaled the democratization of Judaism, a dropping of the cultism and priesthood of the Temple, and a decline in the influence of anthropomorphism. It also marked definite break with the hierarchical structure imposed by Moses during the Exodus. Religious services thereafter centered on the reading of the Torah, a practice which could occur whenever seven bar mitzvahed Jews assembled, especially on the sabbath. The symbol of the synagogue was the *bimah*, or reading stand, to which members of the congregation were called to read the selected portions of the Torah. There was no sacrificial offering, no sacramental ritual, and most important, no priesthood.

As an institution, the synagogue symbolized the adaptability of Judaism, and a dedication on the part of the Jews to preserve their religion outside the promised land. Participation in the religious services of the synagogue was a right of any Jewish male, but a reading and oral knowledge of Hebrew was essential to that participation. Judaism thus became an intellectualized participatory religion, and not one in which a priesthood preserved the rite of ritual. While the rabbinate interpreted the law as it pertained to the day-to-day activities of the Jews, they did not exert any special role within the synagogue itself. As scholars and teachers they interpreted and taught the law, but they did not replace the priesthood which had administered the Tabernacle and the several temples. As the Jews became dispersed throughout the Mediterranean basin, they established synagogues in which to participate in their religion, and to read the scripture of their forefathers.

The Early Jews of England

The earliest record of a Jewish population in the British Isles dates to the time of William the Conqueror, during the last quarter of the eleventh century. Most probably, Jews accompanied the invaders from Normandy, for they had a large settlement in the trading center of Rouen. The economic and social activity of the Jews in England during the eleventh century is open to speculation, but by the thirteenth century, they were well established as moneylenders and traders (Jacobs 1887, pp. 39-43) [?]. Because the usury laws, applicable to Jews and Christians, prohibited transactions in money alone, thirteenth-century records reveal transactions in wool and corn as the essential economic activity of the Jews. But this was probably a subterfuge, as their essential role was that of moneylender, or short-term financier. They would make loans and specify the date for delivery, payment to be made in pounds of wool or bushels of corn, with the expectation that the future prices would yield a sum in excess of the initial loan. This procedure involved some speculation, but given the trade restrictions of the time, moneylenders were not apt to lose by taking future delivery in commodities, rather than specie.

Throughout the thirteenth century England prospered, her wealth accumulating under the weight of the plough, and on the backs of her sheep. The extension of both cultivation and sheep grazing increased the value of land, and the ownership of this particular scarce resource began to acquire an economic significance never before realized (Postan 1952, pp. 232-243). The possession of land, of course, had always been the *sine qua non* of Anglo-Saxon medieval life. For the peasant, whether wealthy or poor,

The possession of land was an object to be pursued in all circumstances and at all costs. To him land was not only a "factor of production" . . . but also a "good" worth possessing for its own sake, and enjoyed as a measure of social status, a foundation of family fortunes, and a fulfillment and extension of the owner's personality.

(Postan 1966, p. 626)

At the apex of the land ownership system stood the magnates, and their acquisition of additional land was a primitive form of accumulation. The magnates were to benefit not only from rising land values, tied to the ever-increasing scarcity of land, but also from rising agricultural prices, which emanated from the expanding markets of nascent commercial capitalism. By the end of the thirteenth century, English agriculture had been transformed from a system of petty land holdings to one with significant concentration of land ownership. Production was more and more geared to the cash market rather than to subsistence. However, there was considerable unevenness in the beneficial effects of this transformation, the larger land owners deriving disproportionate rewards in two ways:

[I]t does not follow that all landlords should have benefited alike from both the rising land values and the increasing profits of cultivation. We know now that the two sources of landlords' income combined differently in different lordships, and that whereas some landlords depended mainly on rents, others involved themselves deeply with direct cultivation and with production of crops for sale. Smaller lay estates possessed limited opportunities for exploiting the rising land market; the smaller monastic houses of Benedictine type and small lay landowners, who themselves consumed the greater part of their demesnes' output, were also impeded from reaping the full benefits of a buoyant market for agricultural produce. The economic climate should therefore have been more favourable to magnates, less favourable to smaller estates and especially to the estates of smaller monasteries, petty knights and *francolani* [freemen].

(Postan 1966, p. 593)

The economic and social status of the Jews in thirteenth-century England was bound up with the transfer of agricultural resources from the many to the few. In the ensuing and ongoing struggle for scarce land, both peasants and smaller landowners lost out to the magnates, the former through enclosures and encirclement by the market, the latter as a result of the financial transactions which found them at the mercy of the moneylenders, Jews and non-Jews alike. But due to the prohibition against usury, a prohibition which even Christians sometimes honored in the breach, moneylending had become primarily an institution restricted to Jews. Furthermore, there were prohibitions against foreigners or Jews owning land in England. Since the craft guilds were also closed to Jews, the only economic enterprise open to them was lending and commercial trade. The small landowners, forced by the encroaching market to borrow to keep their estates under cultivation, pledged their meager holdings to the moneylenders. Victims of the financial pressures of the times, they were forced in many instances to forfeit their land, which the magnates snapped up. "The Jewish mortgages," in this fashion, "provided the mechanism whereby great men were getting hold of the smaller men's land." (Postan 1966, p. 595)

The chief clients of the moneylenders were small landowners. The chroniclers of the day reported that the influence of the magnates was on the side of the Jews, and Postan alleges the chroniclers probably were accurate, since the Jews carried on their moneylending activities with the surplus funds of the magnates.

Speaking of the Jewish moneylender of the period, Maurice Powicke has said:

He had delved to the roots of society; every man of standing, who needed ready money, turned to him; yet his business, his wealth, his life, hung by a thread. He might be slain in a riot, his money might be confiscated, his business ruined. Custom protected him in times of peace, but could give him no security; it

was not generally known and had none of the prestige which maintained the common law. It was merely the body of practice, including recognized practices of Jewish law, observed by the justices of the Jews, who in their turn were merely the agents of the crown. The Jew had no standing under the common law. His *contenementum* was not protected. His debtors could not appeal to a well-known and well established mercantile code, which gave a legal and moral sanction to, and imposed clear-cut safeguards against, abuse of the payment of interest. Prejudice and theology combined to make these things unthinkable. The disturbances of 1263-8 exposed both the evils and fragility of the system. The expulsion of the Jews was but a matter of time.

(Powicke 1947, p. 517)

The Jews were performing an economic function as money-lenders, but the social implications of this role grew as the concentration of land ownership altered the class structure. The small landholders who lost out obviously regarded the Jews as responsible for their plight, but it is doubtful whether this hostility was sufficient to accomplish the expulsion of the Jews from England in 1290. Of greater importance was the Jew's involvement in the growing conflict between the king and the nobility, which centered around the king's right to demand funds. When the nobles refused to be taxed, the kings turned to the Jews as their financiers of last resort.

King John (1199-1216) and his son Henry III (1216-1272) were constantly at odds with the barons, frequently at war, and always in debt. John's signing of the Magna Carta, in 1215, was symptomatic of the reluctance of his feudal barons to support him financially. Chapter 12 of the Great Charter prohibited the levying of a tax, except as approved by the Great Council (Parliament). But the Jews were not protected from taxation, and both John and Henry exploited them at will (Powicke 1953, pp. 36-37). As early as 1233, Henry ordered the expulsion of any Jew who could not prove he was of service to the king, as "the Jew can have nothing that is his own, for whatever he acquires, he acquires not for himself, but for the King" (Powicke 1947, p. 125).

In the thirteenth century, the struggle between the English monarch and his royal vassals reached a bellicose stage. It was the period of the Plantagenets,¹ monarches more interested in retaining or expanding their French birthright than attending to matters at home. The major reasons for friction between the king and the nobility were (1) the propensity for Plantagenet kings to rely upon foreigners for political and economic advice, (2) undue Plantagenet sympathy for the Papacy and

¹ The last of the Norman kings was Stephen (1135-1154) who died with no issue. Henry I (1100-1135), Stephen's uncle, succeeded in having his daughter Matilda accepted as heir. Matilda married Geoffrey of Anjou, the first of the so-called Plantagenets, a name derived from Geoffrey's hunting tactics. Henry II (1154-1189), an only issue of Matilda and Geoffrey, was the first Plantagenet king, followed by his sons Richard I (1189-1199) and John (1199-1216), and the latter's son Henry III (1216-1272).

its problems, and most important, (3) the need to finance continental activities through taxing the English monarch's vassals.

In the wake of England's increasing prosperity, the feudal barons grew less and less inclined to finance the king's adventures abroad. The Great Charter of 1215, the Provisions of Oxford in 1258, and the Baronial War of 1263-1267 were but stepping stones to the eventual retrenchment of the crown. The War of the Barons came about because of Henry III's continental politics and continuous attempts to ignore the Charter and the Provisions of Oxford.

In return for his loyalty to papal causes, the Pope absolved Henry III from his oath to observe the Provisions of Oxford, which limited the king's taxing powers. In 1264, Louis IX of France, acting as an arbitrator in the dispute between Henry and his barons, finally declared the Provisions invalid. Open conflict ensued. Led by Simon de Montfort, the barons took up arms, captured Henry at Lewes, and reasserted their rights, especially the provisions of 1215 and 1258. The major forces opposed to Henry III were the young barons, the knights, the lesser clergy, the townsmen of London and Oxford, and the sheriffs and bailiffs of the shires. For several months the tide was with the barons.

As in any civil disturbance, different factions fought for different reasons and to right various alleged wrongs; the country was at sixes and sevens. The unrest and anarchy led to frustration, and the people inevitably sought a scapegoat. Already unpopular because of their moneylending activities, the Jews were the obvious choice. The rabble sacked their homes in London and Oxford, held them up to public ridicule, and desecrated their synagogues. For the Jews, there was no winning side. If Henry were victorious, he would continue to extort, and Simon de Montfort disliked the Jews intensely. One of his more ruthless and vigorous supporters, John Fitz John, led the London mobs in raids upon the Jews' homes and synagogues (Powicke 1947, pp. 447, 451, 465).

The rebels did not plan to dispense with the monarchy, but merely wanted to reassert their rights, won initially with the granting of the Great Charter. They wanted to establish limits upon the king's use of the country's resources. Since Henry was a helpless captive, his son, the future Edward I (1272-1307), led the military forces loyal to the crown. Edward's triumph at Evesham, in 1265, was not so much a victory for his father's views as it was the beginning of his own reign. Although Henry III did not die until 1272, monarchical control actually passed to his son at the conclusion of the civil war. Recognizing the need for many of the constitutional reforms demanded by the rebel forces, Edward set out to appease and pacify the country. As heir apparent, he was given authority to control all foreign merchants, a move which permitted him to control England's rising commercial enterprise for the benefit of the crown.

In 1283-1285, the Statute of Merchants was promulgated, providing for (1) a speedier mechanism for the clearance of foreign accounts, (2) encouragement to foreign merchants to establish trade relations with England, (3) the crown's authority over the sheriffs and bailiffs of the shires, as parochialism might prove detrimental to the increasing commercial activity of foreign merchants, and (4)

exclusion of Jews from the protection afforded to other merchants. Edward's statute was evidence that the country previously had had no strong proclivity for foreign trade. To promote the expansion of England's cloth manufactures, new outlets had to be found and new markets exploited. There had to be a new reliance upon foreign merchants, yet it was foreign influence over the crown that had led to the War of the Barons. Edward needed to placate his opposition, especially the smaller landholders, the sheriffs, and the bailiffs of the shires in order to gain public support at the local level (Powicke 1953, p. 322). The bribe Edward offered was the expulsion of the Jews. In the public eye, foreign merchants and Jews were one and the same, but since the Jews were more often moneylenders than traders, it was they who were the most despised. If the Jewish moneylender was excluded, then other foreign merchants would be tolerable.

The experience of the Jews in twelfth- and thirteenth-century England was difficult, arduous, and cruel. The chronicle of events reveals a heavy incidence of extortion and a history of harassment:

- 1130: The Jews of London fined £2,000 for allegedly killing a sick man with magic, various potions, and medicines.
- 1168: The Jews of London charged £3,300 for the right to live in the City.
- 1188: A tallage of £40,000 upon the Jews to support the King, whose annual income was £65,000.
- 1195: A tallage of £478 upon the Jews.
- 1211: Joseph V. Baruch appeals to his fellow Jews to return to the promised land.
- 1226: A tallage of £2,665 upon the Jews.
- 1230: A tallage of £4,000 upon the Jews.
- 1233: *Domus Conversorum* enacted to convert Jews to Christianity.
Decree of Henry III, fixing the rate of interest at two pence per pound per week, and ordering the expulsion of any Jew who does not financially demonstrate his loyalty to the King.
- 1236: Seven Jews hanged in London, for allegedly circumcising a Christian child.
- 1241: A tallage of £13,300 upon the Jews.
- 1244: The Jews of London fined £40,000, as the marks on a murdered child's body suggested attempted circumcision. Public burial of the child demonstrates the wrath of the populous.
- 1255: An undisclosed number of Jews sold to the King's brother, Richard of Cornwall, for £5,000.
- 1256: Eighteen Jews publicly executed for alleged murder.

- 1259: Jews fined £300 to pay Henry III's passage to France, since his vassals refused to support his venture.
- 1263: Simon de Montfort's forces burn the homes and synagogues of the Jews.
- 1264: A tallage of £40,000 upon the Jews.
Seven hundred Jews killed in the Baron's War.
- 1275: Statute of Edward I forbidding the Jews to lend money at interest and urging them to become traders, artisans, or agriculturalists²
- 1277: A tallage of £17,500 upon the Jews.
- 1278: 680 Jews imprisoned in the Tower; 267 hanged for clipping coins, their houses and chattels confiscated by the King.
- 1279: A youth murdered in North Hampton, and several Jews brought to London and hanged for the crime.
- 1283: Synagogues closed by order of Peckham, Bishop of London.
- 1287: A fine of £12,000 and all Jews in the realm ordered imprisoned.
- 1290: Edward I orders the expulsion of all Jews from England
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(Powicke 1953, pp 618 and *passim*)

The two primary roles that the Jews had performed in England during the twelfth and thirteenth centuries had diminished greatly by the time of Edward I. Their money-lending role, which had accelerated the transfer of agricultural resources to the magnates, became far less important as the concentration of land ran its course and England emerged as the wool-producing center of Western Europe. Although still predominantly agricultural, England shifted from a subsistence economy to one dominated by cash crop production, that is, wool. Financial institutions associated with commercial capitalism, such as banking and the stock exchange, were still nascent, so the Jews could not move into new areas of financial enterprise. The Jews' other function, as involuntary source of funds for the crown, had been eliminated by Edward I. Edward shied away from foreign entanglements, lessening the need for funds, while his political rapprochement with the nobility made them more agreeable taxpayers. The Jews' tenuous foothold in England virtually disappeared.

² As Jews were prohibited from owning land, it would have been impossible for a Jew to become an agriculturalist. In addition it would have been difficult for a Jew to become an artisan because of the observance of the sabbath. The law prescribes that Jews be in their homes prior to sundown on Friday, which would mean that a Jewish artisan would have to cease work soon after midday on Friday to be able to walk the necessary distance to his home. This says nothing, of course, about the willingness of artisans to accept Jews into their ranks in 1275.

The Period of the Expulsion

Officially, the Jews were excluded from England for 365 years. Although the evidence is fragmentary, doubtless some Jews lived there during this entire period, primarily as Crypto-Jews (Wolf 1887), that is, keeping their religion a secret or perhaps publicly professing to be Christians. The Crypto-Jew was a phenomenon of the middle age of Christianity. Although the practice occurred in England after the expulsion of 1290, it reached its height in Spain and Portugal during the Inquisition. On the Iberian peninsula, the secret Jews who professed Christianity were called *Marranos*, the Castilian word for swine. After their migration out of Babylon, Jews always existed in enclaves, surrounded by larger societies, although with varying degrees of acceptance. In Venice, the city composed of an archipelago of islands and mud flats, one island was set aside for the Jews, "the ghetto," during the eighth century.

A possible explanation of why some Jews remained in or returned to England, despite the history of their abuse and mistreatment, is that they had lived in the country for several centuries. Aside from a not uncommon human reluctance to be uprooted, banishment often meant the loss of personal property of sizable proportions (Anonymous, pp. 55 et seq.). For some, conversion to Christianity was acceptable, although the London House for Converts was never heavily occupied. The great majority left after 1290, some to return illegally. In 1310, two decades after England's ban, a French Jewish mission went to England to request that the ban be lifted. The request was prompted by Philip IV's order of 1306 that Jews leave France. The request, of course, was denied by Edward I.

The English and French expulsions meant that the Sephardic communities in Spain and Portugal were the major havens in Western Europe during the fourteenth and early fifteenth century. As Spain and Portugal moved ahead of their rivals in trade and commerce, particularly surpassing France and England, financial institutions grew apace, and the Sephardim prospered and flourished. The Jews were a great asset, for their knowledge of the intricacies of trade was superior, as was their education and training in the business of business. On the Iberian peninsula, the Moors controlled agriculture, the Sephardim foreign trade and banking. This arrangement was shattered, of course, in the late fifteenth century.

The Spanish Inquisition was a means for creating an exclusively Christian Spanish state and for driving out "foreign" influence. The targets were the Jews and the Moors, to whom three alternatives were open: conversion to Christianity, expulsion, or the stake. The orders against the Jews (issued in 1492) and the Moors (in 1504) marked the first instances that the Inquisition was used against non-Christian sects, since previously it was an instrument for consolidating papal control. Between 1492 and 1494, approximately 200,000 Sephardim abandoned their homes, belongings, and businesses, principally in the cities of Saragossa, Toledo, and Seville.

The diaspora of the Spanish Jews, followed in 1496 by the expulsion from Portugal, led to the development and expansion of Sephardic communities in Amsterdam, North Africa, Italy, and South America (in some of which Jews had

lived previously). The same displacement, of course, also led to the revival of a Sephardic community in London, living as Crypto-Jews, since Edward's ban was still in effect. In 1494, the Spaniards requested the extradition of all Marranos living in England, and the confiscation of their property, but the request was ignored by Henry VII (Schischa 1974, pp. 214-215).

Under the reigns of Henry VIII and Elizabeth I, the number of Sephardim living as *Marranos* in London and Bristol increased.

They were encouraged by the business relations between the financial house of Mendes of Antwerp and Henry VIII of England, which gave the *Marranos* some feeling of security. This community was somewhat fluid, for members were continually leaving to settle in Antwerp, but there was a core of permanent residents who . . . were intimately absorbed into the surrounding population . . . There were three or four physicians, but otherwise most of the members of this group were merchants. That this was not merely a group of individuals but a community is clear, for one of them, Alvares Lopes, had a secret synagogue in his house, and was himself the spiritual head, in effect if not by title, of the small community. . . . The Jewish community of this period probably numbered about a hundred.

(Schischa 1974, p. 216)

The Tudors valued the Jews for their knowledge of the flow of New World bullion into Spain and Portugal, of navigation, and of international maritime trade. From Amsterdam, the Sephardim controlled a large portion of the traffic between Holland and Spain and Portugal, and the Levant trade also was largely in their hands. The Bank of Hamburg, a Sephardic institution, was very much involved in the Dutch East and West Indian companies. Given the Tudors' intent to control trade on the high seas, the Sephardim were extremely useful, and for this reason Jews were permitted and encouraged to settle in London and Bristol, despite the ban.

Aside from trade and financial expertise, the Tudors also sought out the Jews for their Biblical and medical knowledge. Henry VIII required the first in his politico-marital struggles with the Pope; Elizabeth made use of the second.

In 1532, Henry summoned from Amsterdam a group of Talmudic scholars to aid in the formulation of a theological justification for dissolving his marriage to Catherine of Aragon, his brother's widow. Mary was their only child, and Henry desired a male successor. He also desired Ann Boleyn. An intellectual well trained in scholastic history, Henry nevertheless sought aid from experts on the Pentateuch, since his case rested on the law of Moses, not on the New Testament.

According to the law of Moses,

If brothers dwell together, and one of them dies and has no son, the wife of the dead shall not be married outside the family to

a stranger, her husband's brother shall go to her, and take her as his wife, and perform the duty of a husband's brother to her.

(Deuteronomy 25.5)

The Talmudic scholars' interpretation was that Henry had fulfilled his obligation, but since the reason for the law was to preserve a lineage, Catherine's failure to deliver a son was sufficient ground for dissolving the union. God obviously did not concur in the marriage, since he had not blessed it with male issue. There was also some question as to whether the marriage between Arthur and Catherine had ever been consummated, in which case Henry would have had no responsibility to marry his brother's wife in the first place.

Although Henry consulted the Sephardim from Amsterdam, in the end he relied on his self-created position as head of the Church of England, and simply had the Archbishop of Canterbury decree the divorce. What was significant about this incident was that the scholarly abilities of the Sephardim were recognized and utilized by one of the leaders of the Reformation. He sought them in Amsterdam because that was the intellectual center of Judaism in the sixteenth century (and until well into the nineteenth). When the Sephardim were allowed to return to England, in 1656, all of the rabbis of the London community, save one, were imported from Amsterdam. Rabbi Solomon Ayllon was recruited from Palestine. He had been reared in a messianic sect and was himself greatly influenced by the Sabbathaian heresy.³ The Sephardic communities of Amsterdam and London did not participate in the heresy and were highly critical of Rabbi Ayllon. He survived for fifteen years (1685-1700) but was under constant attack from the Bevis Marks Congregation. His association with the London Sephardic community marked its last significant contact with Palestine.

As mentioned earlier, Elizabeth I relied upon the Jews' knowledge of medicine. Her personal physician was Dr. Rodrigo Ruy Lopez, a *Marrano*. Medicine originated in the Near East, where it had been practiced for more than a millennium. In Exodus, for example, Moses was directed by the Lord "to prepare an ointment after the art of the apothecary" (Exodus 30.25) Ancient Egypt had two distinct groups of physician-priests, one specializing in preparing remedies and potions, the other in visiting the sick and administering to their spiritual needs.

³ Hyamson, 1951, pp. 68-69. The Sabbathaian heresy revolved around Sabbatai Zevi (1626-1676). Born in Smyrna of Spanish descent, Zevi proclaimed he was the Messiah, and in 1666 would restore Judah to its original power and prestige. Zevi had a large number of followers throughout Judaism, particularly in Eastern Europe. In 1666 he went to Constantinople to lead his followers into Palestine and was arrested. The Sultan of Constantinople confronted Zevi with either execution or conversion to Muslimism, arguing that the last proclaimed Messiah had chosen crucifixion to prove his claim. Zevi converted to Muslimism and died in Albania

The Sabbathaian heresy reflected the continuing tendency in Judaism toward messianism. See Arthur A. Cohen, "Messianism and Sabbatai Zevi," Cohen, 1974.

The reason the Sabbathaian cult was so popular in Eastern Europe, as opposed to the Sephardic communities of Amsterdam and London, was that the Ashkenazim were in much worse economic and social status. A messianic image has a great appeal to the poor and oppressed, not to mention the level of education and knowledge that exists in poor cultures.

Among the Semitic peoples, the practices of the physician were strongly oriented toward drugs and medicines. The combined influence of the Moors and the Sephardim gave the practice of medicine in Western Europe the same emphasis, and the use of drugs became a specialty among Jewish physicians. Furthermore, it was written that the followers of Moses "shall not make any cuttings in your flesh," (Leviticus 19.38; 21.5) which meant that surgery was an alternative closed to the Jews. This prohibition was reinforced by the fact that surgeons arose from the ranks of barbers, who were skilled in the use of knives. Because Jews were forbidden to touch the face with a knife, there were no barbers in Jewish culture.

The Jews' familiarity with drugs and medicines frequently contributed to their persecution. The chroniclers recounted instances of actions taken against them in the thirteenth century, born in part of the public's fear of their knowledge of what seemed arcane practices. In the fourteenth century the Jews were accused by Pope Clement VI of poisoning the wells and thus causing the Black Death that ravaged Europe between 1347 and 1351. As a consequence, Jews were subjected to mass burnings, primarily in Italy.

The same sort of hostility emerged when Elizabeth's physician, Dr. Lopez, was accused of helping plot her assassination. In 1593 an intrigue was uncovered between Elizabeth's enemies in Spain and Portugal and her dissidents at home, the intent being to poison the Queen, and her trusted physician supposedly was to administer the poison. Dr. Lopez was executed in 1594, even though there was some question as to his involvement (Martin Hume, 1912, p. 27)

His trial and execution were widely publicized, and it has been suggested that Shakespeare's Shylock was patterned after this unfortunate doctor. Shakespeare's depiction of the Jewish money lender certainly would appeal to the zealot.

Go with me to a notary, seal me there
 Your single bond; and, in a merry sport,
 If you repay me not on such a day,
 In such a place, such sum or sums as are
 Express'd in the condition, let the forfeit
 Be nominated for an equal pound
 Of your fair flesh, to be cut off and taken
 In what part of your body pleaseth me.

The Merchant of Venice, Act I, Scene III

I am not bid for love; they flatter me:
 But yet I'll go in hate, to feed upon
 The prodigal Christian.

The Merchant of Venice, Act II, Scene IV

The Merchant of Venice was first performed in 1598, and Shylock was a moneylender, not a physician, so it is likely that Shakespeare was simply taking

advantage of the public animosity generated against the Jews by the events surrounding Dr. Lopez.⁴

Elizabeth, like her father, was not a religious fanatic. She tolerated the Roman Catholics and even the increasingly influential Puritans in the House of Commons. She was likewise tolerant of the Crypto-Jews, as her stance against all religious groups was that they should not meddle in the affairs of state, a viewpoint she held also with respect to Anglican bishops. So long as a religious sect stayed out of politics, it was permitted to exist. Upon her death in 1603, however, matters changed.

When James I ascended the throne, Edward I's ban against the Jews was once more enforced, and all traces of the Sephardic community were erased by 1609 (Hyamson 1951, pp. 8-9). The Sephardim reappeared in 1656, when Cromwell ceased enforcement of the ban, and Amsterdam Jews migrated to England.

Puritanism, not the Tudor secession from Rome, was the true English Reformation, and it is from its struggle against the old order that an England which is unmistakably modern emerges. . . . When, after 1660, Political Arithmetic became the fashion, its practitioners were moved by the experience of the last half-century and by the example of Holland—the economic schoolmaster of seventeenth-century Europe—to inquire, in the manner of any modern sociologist, into the relations between economic progress and other aspects of the national genius. Cool, dispassionate, very weary of the drum ecclesiastic, they confirmed, not without some notes of gentle irony, the diagnosis of bishop and presbyterian, but deduced from it different conclusions. The question which gave a topical point to their analysis was the rising issue of religious tolerance.

(Tawney 1926, pp. 198-199, 204-205)

English Puritans believed they were marching toward the commencement of the Millennium, when the holiness of the kingdom of Christ would reign upon the earth. To convert the Jews, it was necessary that they be permitted to live in England. In 1647, Cromwell had written:

I profess to thee I have desired from my heart, I have prayed for it, I have waited for the day to see wiser and right understanding between godly people, Scots, English, Jews, Gentile, Presbyterians, Independents, Anabaptists and all. . . . God hath justified us in their sight, caused us to require good for evil.

(Quoted in Blauvelt 1937, p. 167)

⁴ As to whether Shylock was fashioned after Lopez, there is some question. The plot, to poison Elizabeth, also involved an attempt on the life of Antonio Perez, Pretender to the throne of Portugal. Antonio, in *The Merchant of Venice*, is Shylock's antagonist, and this lends credence to the link between Shylock and Dr. Ruy Lopez. See Bullough 1957, Vol. I, pp. 445-476

In Amsterdam, the prophetic notion of the Millennium held by the Puritans was matched by the prophetic idea of Manasseh ben Israel, a rabbi and a physician by trade, that the Puritans were one of the lost tribes of Israel, with Cromwell the possible Messiah. In 1655 Manasseh ben Israel visited Cromwell to request the readmission of the Jews to England (Wolf 1901). Cromwell referred the request to his Council, speaking strongly in its favor, but Manasseh's mission produced no immediate results, and he returned to Amsterdam (Blauvelt 1937, p. 261). As Lucien Wolf observed: "Toleration and Messianic Movements proved unavailing for the purpose of the Jewish restoration" (Wolf 1901, p. iii).

In 1656, however, Sephardic Jews from the Amsterdam community began to live freely in London, Bristol, and other coastal cities. At the time of Manasseh's visit, the legality of Jews residing in England arose, and the prevailing opinion was that Parliament need not enter into the matter. Edward I's ban was issued by royal prerogative, and the opinion of Parliament also had not been sought in 1609, when James I re-instituted the ban. Since the monarchy had been abolished by Act of Parliament, the rulings of past monarches were null and void. Unless Parliament moved to exclude the Jews, they were free to settle there (Blauvelt 1937, p. 261).

In one sense, the Jews returned to England by default, but in a wider sense the religious toleration of the Puritans contributed to their readmission. In addition, "the triumph of Puritanism swept away all traces of any restriction or guidance in the employment of money" (Cunningham 1909, p. 25) [?], with the result that new Christian ideas on interest and usury replaced the anti-commercial prejudices of earlier times. In the 1660s a critic of the Puritan capitalists wrote:

They enjoy both the secular applause of prudent conduct, and withal the spiritual comfort of thriving easily and devoutly . . . leaving their adversaries the censures of improvidence, together with the misery of decay. . . . By engrossing cash and credit, they in effect give the price to land and law to markets. By commanding ready money, they likewise command such offices as they widely effect. . . . They feather and enlarge their own nests, the corporations.

(Quoted by Tawney 1926, p. 209)

As commercial capitalism made ever greater inroads upon traditional English society, dominated by the landed gentry, it encountered continuing and growing opposition. In large measure this was voiced by the intelligentsia, which tenaciously sided with the ancient regime. Men of letters, poets, and the authors of the new literary form, the novel, were products of the old rural society, upon which they were dependent emotionally and financially. The new financial institutions, such as the joint stock company, the national debt, the bourse, and the houses of banking and finance, were viewed as accursed. As these institutions grew in importance, London became the center of the new order, and anyone who ventured there did so at great risk to spirit and body.

Daniel Defoe's *The Anatomy of Exchange Alley* was not only an attack upon the Jews but also upon the bourse as an economic institution. It was the leading street in the early London stock exchange, located in loosely related coffee houses:

. . . the Alley throngs with Jews, jobbers and brokers, their names are needless, their characters dirty as their employment; and the best thing that I can yet find to say of them is, that there happens to be two honest men among them—Heavens preserve their integrity; for the place is a snare, the employment self fatal to principle. . .

(Defoe 1960, p. 41)

Defoe, of course, was a vigorous opponent of the new commercialism and a great believer in England becoming self-sufficient. He disliked economic change and characterized the bourse as an evil institution run by Jews; his view of the evils of the Stock Exchange persisted well into the nineteenth century.

The critics, however, could not change the fact that eighteenth-century London had become the center of England's rapidly expanding financial world. In that center the Sephardic community grew apace, but separate from the larger society.

The London Sephardim

Of great importance in the life of David Ricardo was the fact that he was born a Jew in English society. More important, he was reared in the Sephardic community of London. Abraham Israel Ricardo, his father, emigrated from Amsterdam about a century after the ban against the Jews was relaxed. But even in 1760, when Abraham reached London, the position of the Sephardim was still precarious. There was ridicule of individual Jews, extortion by high officials, such as the Mayor of London, and open hostility from the public at large. Fear of another expulsion was not unwarranted. Because of their uncertain position, the Sephardic community took great care to protect itself, especially by maintaining strict supervision over its members. Hyamson observes:

The reputation of the Community in view of the character and personalities of its best known members was considerable, and every Mahamad, as they succeeded to office was determined to keep it undiminished. The Mahamad had considerable power over the Yehidim, and they wielded this power sometimes somewhat dictatorially, but their object was the welfare of the Community as a whole, and this was recognized.

(Hyamson 1951, pp. 64-65)

The insecurity of the London Sephardic enclave in the seventeenth and eighteenth centuries led to the development of a system of self-regulation and sanctions. Out of this system there emerged a strict moral code which imposed

constraints upon members of the stock exchange, for the bourse was the economic center of the community. Personal accountability and a strong sense of responsibility to the group, whether in the synagogue or in the stock exchange, was not only expected but also demanded. It was within this atmosphere that David Ricardo's character was molded, the product of a social system responding to the prejudices of English society.

That system within the Sephardic enclave also fostered egalitarianism, responsibility, and tolerance. Forces within English culture also promoted these qualities, but David Ricardo's beliefs were derived from the system much closer to home. Moreover, his view of political economy and politics and his ability to analyze the operation of the English economy in no small measure were attributable to the system of values and practices of the enclave of which he was a member. His environment and parentage helped to make him a stockbroker and a financier, and his origins in a community apart gave him the objectivity of an outsider that made his economic analysis distinctly atypical among English economists.

The shaping of the value system of the Sephardic enclave was partially a function of the oppressive prejudices of the wider English society and partially of the way in which the enclave responded to them. Any enclave in a foreign and hostile environment may respond in one of two ways to the antagonistic atmosphere of the host culture. It may retreat from interaction, its members becoming more and more introverted. Inevitably, this isolation is damaging to the enclave's continued existence. Social and economic rigor mortis soon set in. The alternative is to develop new customs and behavior patterns which allow interaction with and survival in the host culture. This route also has damaging consequences, since the consequence is assimilation.

Whichever course is taken, the result is the same for the enclave—eventual elimination as a separate social system. But the outcome is not the same for the host culture. In the first instance, the death of the subculture will pass almost unnoticed. In the second, the process of assimilation will influence the host. The degree of this influence is variable. In the merging and interaction of the two cultures, the particular synthesis that evolves is subject to numerous combinations of factors, but there will be an effect.

Also variable is the degree of hostility a host culture exercises toward an enclave. To some extent it is a function of the basis upon which the subgroup is differentiated from the dominant culture. In the case of the Sephardim in England, the hostility and prejudice typically have been explained in terms of religion. In the most simplistic terms, the Jews were believed to have killed Jesus. As English Christianity moved away from Roman domination, the influence of the New Testament waned, and the Old Testament became more prominent, reaching its fullest sway under the Puritans. Despite this trend, the hostility toward the Jews remained, largely among the Anglicans who placed more emphasis on the New Testament. In addition to this religious bias, the Jews were regarded as "different" because of their physical appearance. But these religious and racist attitudes are insufficient to explain the fear and hatred focused on the Sephardim from the

twelfth century onward. Moreover, the hostility was not directed toward uncouth illiterates; the Sephardim were sophisticated, well-educated men of affairs. Ironically, perhaps, it is this that explains much of the dislike. These were men of financial affairs—moneylenders, traders, merchants, and stock-exchange brokers—and it was not their being different, in religion, dress, or social behavior that mattered, but their being engaged in economic activity that was strange to those who viewed agriculture as the proper way of life. The Jews were the vanguard of commercialism and the expansion of the market into more and more areas of English social and personal relationships.

As the financial and commercial network spread, the Christian prohibition against usury collapsed, and money-lending no longer was exclusively a Sephardic occupation. The Sephardim in England were merely the agents provocateur of the agricultural, financial, and commercial revolutions. As the centuries passed, the mechanics of change switched from mere moneylending to the institution of the stock exchange, a new nexus for cash exchange in the eighteenth and nineteenth centuries. It was in this institution that David Ricardo and his ancestors were nurtured.

Chapter III

THE FAMILY HERITAGE: EIGHTEENTH-CENTURY FINANCE

Seven years after Ricardo's death, a contemporary noted in his diary:

Ricardo's family . . . as they are now people of fortune and of some consequence, and landed gentry . . . do not like that the public should be reminded of their Jewish and mercantile origin. Indeed, all that Ricardo's family seemed to value in their father, was his kindness of disposition, and power of acquiring money. They never had any proper sense of, or respect for, his intellectual pursuits.¹

One consequence of the pretensions of the Ricardo children was that they persuaded their uncle, Moses Ricardo, not to write a biography of their father, since

¹ The diary was written by John Lewis Mallet, who was very active in the development of savings banks for small depositors and one of the original twenty members of the Political Economy Club. There is no evidence that he ever published anything on the subject of political economy, but as a member of the club he knew all the important people. In his diary he commented on the important political and economic events of the day. His most detailed observations centered on the activities of the Political Economy Club and its members. He initially met Ricardo in 1816 and knew him intimately during the very active period of Ricardo's second and third careers. Mallet was particularly attracted to Ricardo, and while more conservative and cautious with respect to his views on economic issues, he was in some sense a Ricardian. The diary contains several sketches of Ricardo concerning his background, intellectual abilities, business acumen, and role in the club. Mallet, who moved in the same social circles as the Ricardo family, particularly in Gloucestershire, maintained an association with them after Ricardo's death. (*Works*, Vol. X, pp. 16-17, J.L. Mallet's diary entry 24 June 1830.)

that would surely bring to the fore the Jewish and stockbroker origins. Another consequence was that they apparently sought the services of a genealogist, a member of that noble profession which frequently has obscured the humble beginnings of many a man of means. The children desired to trace their father's heritage to an aristocratic origin, one more in keeping with the wealth, status, and position they had acquired because of their father's successes. In the social circles in which the children moved, a Jewish and stock-exchange background was of questionable advantage, to say the least. Aristocracy seeks out aristocracy, not people of mundane origin.

The genealogist cooperatively claimed the Ricardos were the lineal descendants of a Spanish grandee, a sixteenth-century nobleman of the first rank from an Andalusian estate in Southern Spain. Any genealogist worthy of his fee would know, however, that the probability of a grandee being a Jew was very slight. Accordingly, the Judaic aspects of Ricardo's ancestry had to be an accident, or something akin to it. The genealogist handled the problem by explaining that a son of the grandee had married a woman of the Jewish faith. A son of this union migrated to Holland, accepted his mother's religion, but continued to use his father's surname. What was most important to the Ricardo children was the Spanish grandee, not the lone Jewish female ancestor.

The significance of the Jewish female is that it is only through the mother that one is a Jew. The Jewish religion is matrilineal; the mother determines a child's Judaic origin. A child born of a Jewish father and a non-Jewish mother is not a Jew; a Jewish mother and a non-Jewish father would have only Jewish children. The Jewish religion is patrilineal and patriarchal with regard to the organization of the synagogue, and the active participation in religious services is limited to males. But in terms of maintaining the heritage, the Jewish religion is matrilineal, if not matriarchal. Whether the genealogist was aware of these aspects of Judaism was unimportant, since aristocratic origin was what he sought for his clients, not the traditions of Judaic culture.

What the Ricardos' genealogist did not consult were the archives of the Sephardic synagogue in Amsterdam. Primarily due to the archival research of Heertje (Heertje 1974, p. 78; see also Hasson 1968)² it is possible to trace Ricardo's ancestry through at least five generations. There may well have been an Andalusian grandee of the same surname, but David Ricardo was not his descendant. Moreover, all of Ricardo's ancestors were of the Jewish faith, and they came to Amsterdam not from Spain, but from Portugal, by way of Italy. The surname Ricardo did not appear in Amsterdam until around 1720, when it was adopted by a family which previously had been registered in the synagogue as Israel, a fairly common name adopted by Jews to indicate their religious adherence. That is, the name did not refer to descent from a specific tribe, such as the Levites (Levy).

² Heavy reliance has been accorded this invaluable source in the preparation of much of the family history discussed in this chapter.

The Israel Ricardos

The first of Ricardo's ancestors in Amsterdam was Samuel van Mozes Israel, who migrated there from Livorno around 1662. Located on Italy's west coast, Livorno (Leghorn) had been annexed to Florence in 1421, but it continued to exist as a free city. At the time of the Inquisition, Livorno became a refuge for Sephardic Jews, encouraged to settle there by the Grand Duke of Tuscany. By the sixteenth century, Livorno was not only an important Italian coast town, but also the new center of banking and finance, having surpassed even Venice, no minor achievement. Livorno was also a great jewelry center, particularly of red coral, found in abundance in the area. Samuel van Mozes Israel was a jeweler.

How long Samuel lived in Livorno is not known, but when he died in 1692 it was registered that he had lived in Holland for thirty years. He was known both in the business world and the Amsterdam synagogue as Samuel van Mozes Israel of Livorno, the latter designation undoubtedly used to differentiate him from all the other Israels in Amsterdam. Surnames, of course, were not utilized until the late seventeenth century, and even then the practice was not widespread.

David Israel, one of Samuel's several sons, is the first known David of the lineage. He was born in 1652, and thus was about ten when his family left Livorno. The names recorded in the synagogue leave no question that the overwhelming majority were of Portuguese ancestry, and the "Israels of Livorno" were of the same origin. The Spanish grandee from Andalusia was the genealogist's figment. Moreover, during his lifetime David Ricardo was always referred to as having been born a Portuguese Jew.³

David Israel and his brothers were Amsterdam merchants and continued their father's practice of differentiating themselves as the "Israels of Livorno." In 1692, David married Strellied Amadious, also of Portuguese origins; the union was recorded in the synagogue in Amsterdam. Around 1720, late in life, David changed his civil name to David Israel Ricardo, although in the synagogue he continued to be listed as David Israel. The nomenclature "of Livorno" was cumbersome, and as Sraffa has indicated, the surname Ricardo was exceedingly common in Livorno (*Works*, Vol. X, p. 18, n.4). It probably was chosen to retain some link with the famous Italian city whence his father had emigrated. In any event, the surname Ricardo is of Italian origin.

David Israel Ricardo and Strellied Amadious had one son, Joseph, born in Amsterdam in 1699. Although his father was a merchant, Joseph Israel Ricardo became a famous stockbroker, a man of considerable wealth. The Sephardic brokers were extremely active in the Amsterdam Bourse at the time. One authority states that on a particular settlement day in 1764, 36 or 37 of the 41 brokers were "Portuguese Jews" (Wilson 1939; reprinted 1966, p. 263). The Jewish brokers were so prominent that the business days of the Amsterdam Exchange ran from Sunday

³ So listed at the time he became a member of Brooks's Club, 13 March 1818. (See *Memorials of Brooks's* . . . 1907, p. 92.)

through Friday, permitting them to honor their Sabbath. In 1739, Joseph was one of several framers of a new set of rules for the Amsterdam Bourse, the first of many attempts by more conscientious brokers to regulate the excesses and indulgences of their colleagues. Joseph was the first of three generations of Ricardo stockbrokers.

In 1721, Joseph married Hannah Abaz, a woman of Portuguese origins, but a Christian, who apparently converted to Judaism after her marriage. The records of the Sephardic synagogue in Amsterdam show "Gijoret" after her name, which in Hebrew means "female convert." Hannah probably had not converted to Judaism by 1721, at the time of her civil marriage to Joseph, since the marriage was not recorded in the synagogue until 1726, when the religious ceremony was performed.

Ironically, the marriage of Joseph and Hannah is the reverse of the genealogist's story. It was David Ricardo's grandmother who was born a Christian. Furthermore, until her conversion, her children would not be Jews. The only child of Joseph and Hannah for whom a birth date is known is Abraham, David Ricardo's father. There is some doubt as to the exact date, but his birth definitely occurred after his mother converted. In 1721, her dowry of 2,000 guilders was sizeable. Very little is known about Hannah's social and economic background, but she came from a wealthy family.

The double marriage between Joseph and Hannah has been the source of some confusion regarding David Ricardo's grandparents. In 1955, when Sraffa published *Biographical Miscellany*, he claimed that Joseph Israel Ricardo "was twice married; the first marriage being in 1721 to Hannah Israel, who died in 1725, the second in 1727 to Hannah Abaz, who survived till 1781" (*Works*, Vol. X, p. 19). Heertje's findings show Sraffa to be in error on two counts. Sraffa's sequence was incorrect, and Hannah Israel did not die in 1725. In 1973, when Sraffa published the *General Index to The Works and Correspondence of David Ricardo*, he attributed the source of the corrections to Heertje (*Works*, Vol. XI, p. xxix). Hannah Abaz probably became Hannah Israel, not as a result of her already being married to Joseph Israel, but because as a convert she could not take a tribal name, such as Levy (Levite).

Hannah Abaz and Joseph Israel Ricardo had four sons—David, Samuel, Moses, and Abraham—and two daughters, whom Heertje lists as Ribca and Rebecca. But there is some confusion with the record, since Ribca is Hebrew for Rebecca, and there could well have been only the one daughter. No official record of the birth of a female child is maintained by a synagogue, and the only reference to such an event would occur in the course of the father's reading from the Torah. Such information as is available on the chronology of Hannah and Joseph's children is reported in Table III-1.

The first son of Hannah and Joseph was David Hizkiau Israel, the second name probably being taken after the famous King of Judah. In business David Hizkiau Israel Ricardo was sometimes referred to as David "Junior" to distinguish him from his grandfather, also a David Israel Ricardo, the only difference being the religious name, Hizkiau. In the Sephardic tradition, children frequently are named after living relatives or friends, unlike the Ashkenazic rule where a child must be named after a recently deceased ancestor. Because of this Sephardic tradition,

several times we find two David Ricardos; the economist was born six years before his uncle's death in 1778.

**Table III-1. The Children of
Joseph Israel Ricardo and Hannah Abaz
(1699-1762) (? - 1781)**

Rebecca³	David Hizkiau¹	Samuel Israel¹	Moses Israel¹	Ribca³	Abraham Israel²
(?)	(? - 1778)	(? - 1795)	(?)	(?)	(1733 - 1812)

¹No birthdates were recorded in the Amsterdam Synagogue until 1736.

²Obituaries said he died "In his eightieth year." (*Works*, Vol. X, p. 20)

³No record in Amsterdam Synagogue.

All of the sons of Hannah and Joseph were given the name Israel, but eventually it was dropped, except in the synagogue records. When Abraham went to London in 1760, he was listed in the record book of the Bevis Marks Synagogue as Abraham Israel Ricardo, but in the business world he was known simply as Abraham Ricardo, stockbroker, and none of his eight sons subsequently were given the name Israel. The Israel Ricardos of Amsterdam were stockbrokers, as were the Ricardos of London. As the youngest son, Abraham was sent to London to administer his father's holdings in English securities, as well as to act as correspondent for other Dutch investors, undoubtedly other Sephardim. The Israel Ricardos proved to be very successful. Upon his death in 1762, Joseph Israel Ricardo left an estate in excess of £20,000, probated at £45,000 in 1812 (*Works*, Vol. X, p. 25).

This accumulation of wealth coincided with the growth of financial capitalism in Holland and England. Joseph was able to capitalize on the boom in the Amsterdam Bourse during the Seven Years War (1756-1763). Dutch neutrality meant that Amsterdam bankers and brokers could loan money to any of the belligerents, but England was the heaviest borrower. The large loans obtained from Dutch sources not only permitted England to support its own troops in Hanover, but also provided for generous support to its Prussian ally. The debt of the British government grew at an unprecedented rate, and an increasing share was held by Dutch bankers and brokers, many of whom were Portuguese Sephardim.

As Heertje has reported (Heertje 1974, pp. 76-77) the annual turnover of guilders in Joseph Ricardo's account in Amsterdam's Wisselbank offers some indication of his rising wealth during the Seven Years War. As shown in Table III-2 for the period immediately preceding the war, Joseph's account averaged about g286 per year. When it is recalled that Hannah Abaz's dowry was valued at g2000, Joseph's wealth does not appear to have been very great. Once the war started, however, his portfolio grew rapidly, rising to g37,333 annually.

Table III-2. Volume of Guilders in the Wisselbank Account of Joseph Israel Ricardo, 1743 - 1762

Period	Total Volume	Annual Average
1743-1750	g 2,000	g 286
1751-1758	g 20,000	g 2,500
1759-1761	g 112,000	g 37,333
1762 (6 months)	g 54,000	

(Source: Heertje, 1974, p. 77)

Joseph Ricardo purchased British government securities at annual annuities of 3 and 4 percent. He also bought securities in British joint ventures, particularly the East India and South Sea companies, and the Bank of England. When he died in 1762, his portfolio was balanced, and he had not fallen into the error of some Dutch brokers, who held only British government securities. Moreover, many Dutch purchases of those securities were on margin, which meant a pyramiding of borrowing on speculation. Had the Bank of England not partially supported the government debt, the panic that occurred in 1763-1764 would have been worse.

Adam Smith quotes Magens (1753, p. 13) as having been informed

that most of the money which the Dutch have here was in Bank, East India and South Sea Stocks, and that their interests might amount to one-third of the whole.

(Smith 1937, p. 91 n. 17)

Joseph Ricardo's investments in these three securities came to just over £8,000 in 1762; Smith estimated all foreign holdings of English securities at about £18,000,000. There is some reason to believe that Smith probably overestimated the significance of foreign holdings, but there is no question that the Amsterdam Bourse was crucial to the expansion of British loans, both public and private.

Joseph's decision to send Abraham abroad to oversee his investments was in part a recognition of the fact that London was rapidly replacing Amsterdam as the financial center of Western Europe. Abraham's arrival also coincided with the ascension of George III, at a time when there was considerable apprehension as to the changes which the new monarch might stimulate. It was an appropriate time for the elder Ricardo to have a family man in London.

During the seventeenth and early eighteenth centuries, Holland had been the *entrepot* of the Continent, playing the role of intermediary. This was partially a function of its strategic location at the hub of the trade routes, and partly because the other European countries lacked the necessary shipping and port facilities, as well as the cadres of financiers who could buy in one market and sell in another. Holland's economic supremacy was due to the proficiency of its traders, not its craftsmen. In fact, supremacy in the intermediary trade proved to be its undoing,

for so long as that trade flourished, there was no development of an economic base grounded in industrial activity.

Holland's inability to industrialize was due to a number of factors. It lacked the necessary raw materials, and high wages put it at a competitive disadvantage when selling processed goods in foreign markets. The Dutch had some industry, particularly textiles, tobacco processing, and gin making, but these products met increasingly difficult competition, primarily from the British and the French. The Dutch failure coincided with the development of direct trade among European nations, thus bypassing the intermediary role of Amsterdam and the other ports. Although 15 percent of England's imports came from Holland in 1696-1697, by 1772-1773 the figure was only 4 percent. So far as England's exports were concerned, 42 percent went to Holland in 1696-1697, only 13 percent in 1772-1773. During this same period, English imports increased from £3.5 million to £11.4 million, while exports rose from £3.5 million to £14.8 million (Wilson 1966, pp. 255-256).

Holland's decline would have been more rapid if Amsterdam had not become the great banking and financial center of Europe in the mid-1700s. Dutch firms, which had previously engaged in importing and exporting staples, began making loans in foreign ports, financing bills of exchange, buying mortgages, and purchasing foreign securities. Primarily because Dutch commodity trade was declining during this period, domestic interest rates also fell. In Holland the rate of interest was 2.5 to 3 percent in mid-century; in comparison, Bank of England stock was paying 6 percent, other British securities 7 and 8 percent. As Adam Smith observed, the Dutch circumstances "no doubt demonstrate the redundancy of their stock, or that it has increased beyond what they can employ with tolerable profit in the proper business of their own country" (Smith 1937, p. 92).

The higher rates of interest offered by British securities reflected a greater risk, and the wave of speculative fever that dominated British finance in the early eighteenth century was tied to the political instability of the time. People had for a long time been expecting British success in their struggles to dominate trade and defeat their Spanish and French enemies. That success occurred in 1815, but only after seventy-five years of nearly continuous war. One consequence was that the British national debt rose enormously during the eighteenth and early nineteenth centuries. This was the major financial phenomenon of the times, and the second and third generations of Ricardo stockbrokers traded almost exclusively in the British public debt.

When Abraham Ricardo arrived in London in 1760, he entered a new financial environment, one in which government debt was the major instrument of trade. In Amsterdam the bourse was a financial institution adopted to Dutch foreign trade and finance; in London it became geared to the military and colonial activities of the British government. The directions and tendencies of that state of affairs had emerged during the early eighteenth century, long before Abraham's arrival. With his settlement in the City, the Ricardo family's business interests became dependent upon the successes of the British government, and their social

and religious affairs became linked to the activities of the Sephardic enclave in London.

The New Instruments of Credit and Finance

The last decade of the seventeenth century was a watershed in the growth of the English joint-stock company, and in the emergence of a bourse for the transfer of stocks and issues of indebtedness. Not only did the flood of bullion from the New World produce a profit inflation throughout Western Europe, but also new credit instruments began to circulate in ever-increasing quantities, as bankers issued notes on the basis of bullion reserves. It was a period of great liquidity and speculation. Moneymaking became a new way of life in England, as the holders of wealth benefited from overseas successes. It was the era of England's first gains in the struggle to dominate commerce, a period of what Marx called "primitive accumulation."

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of blackskins, signalled the rosy dawn of the era of capitalist production. These idyllic proceedings are the chief momenta of primitive accumulation. On their heels treads the commercial war of the European nations [Seven Year War], with the globe for a theatre. It begins with the revolt of the Netherlands from Spain, assumes giant dimensions in England's anti-jacobian war. . . .

The different momenta of primitive accumulation distribute themselves now, more or less in chronological order, particularly over Spain, Portugal, Holland, France, and England. In England at the 17th century, they arrive at a systematical combination, embracing the colonies, the national debt, the modern mode of taxation, and the protectionist system . . . they all employ the power of the State, the concentrated and organized force of society, to hasten . . . the process of transformation of the feudal mode of production into the capitalist mode, and to shorten the transition.

(Marx 1906, Vol. I, pp. 823-824)

The ease with which the Bank of England was established in 1694 was symptomatic of the large quantities of liquid wealth held by members of English society, anxious to wet their feet in the rising tide of commercial and financial capitalism. The Bank syndicate raised £1,200,000 in less than six months, lending the entire sum to the British government in return for an annual interest payment of £100,000 (8.3 percent simple interest), with another £4,000 guaranteed annually for

management. The funds accumulated by the Bank represented about 2.5 percent of national income and more than 25 percent of all tax revenues for fiscal year 1694-1695.

The 1690s also witnessed a new wave of joint ventures. In 1688 only 15 existed; by 1695 there were over 140 such syndicates, organized to promote activities as diverse as the production and distribution of plate glass, tapestries, burglar alarms, wallpaper, diving equipment, fine linen, sword blades, and numerous items of ordnance. The combined capital for such companies came to £4.5 million; added to the Bank's paid-up equity, the total was over £6 million (Morgan and Thomas 1969, p. 16).

The major reason for the sudden increase in joint ventures, particularly in manufacturing and distribution, was the great success this type of business organization had experienced in maritime merchant activities. The best example was The Governor and Company of Merchants of London trading in the East Indies, chartered in 1600, the famed East India Company. Several of its unique characteristics established a pattern for future private financial enterprises. Shares were of fixed value, and although initially issued in large denominations, they were later reduced in size, thus permitting much more widely dispersed ownership. Shares were available to anyone, so that cronyism ceased to be the only basis for participation in joint ventures. But each of these characteristics also invited the corruption and embezzlement associated with many of the new companies. The size and anonymity of firms meant that shareholders could easily be persuaded to buy shares in companies whose products were imaginary or whose ships had dummy bottoms.

Since such unethical conduct undermined public confidence in all joint-stock enterprises, a primary objective of stockbrokers was to police fellow brokers to reduce the frequency of fraud. Government intervention in the Stock Exchange came about through the licensing of brokers by the City of London, thereby extending to stockbrokers the same type of guild regulations which had been enforced in other arenas for centuries.

The need for government oversight also was prompted by the large increase in the public debt. The government not only regarded its debt as permanent, but also believed it would need to be expanded in the future, since borrowing was preferable to taxation, even though more costly. Morgan and Thomas have described the process:

The growing power of the central government was raising the costs of administration, wars were becoming larger and more expensive, and the rise of prices in the late sixteenth and early seventeenth century caused an ever-growing discrepancy between the traditional sources of revenue and the expenses of the state. Elizabeth was usually prompt in paying interest on her loans (if not in repaying the principal) and her credit remained fairly good. Her Stuart successors were less scrupulous and, as arrears of capital and interest accumulated, they found it more and more

difficult to borrow. In 1619, it was necessary to postpone the funeral of the Queen for lack of funds, and James I's credit was so low that tradesmen were charging double prices for goods supplied to the Royal household. Whatever their other virtues, the Roundheads were no better financial administrators than the Cavaliers; in 1655, Cromwell had a debt of over £700,000 and by 1659 this had grown to £2¼ million; soldiers and sailors were being paid in debentures instead of cash and these were selling at a heavy discount. The height of financial stringency was reached, however, between the Restoration and the Revolution of 1688. In 1665, Pepys was bewailing "the horrible crowd and lamentable moan of the poor seamen that lie starving . . . for lack of money" and writing to his superior that "The whole company of the 'Breda' are now breaking the windows of our office . . . swearing they will not budge without money. What meat they will make of me soon you shall hear in my next." When in 1667, the Dutch fleet appeared off the Nore and sailed up the Medway, the indignity was not due to any lack of skill or courage, but simply to the fact that, for lack of money, the British ships of the line were without stores, munitions or provisions, and could not put to sea.

(Morgan and Thomas 1969, pp. 17-18)

There was a need for continuous borrowing on a short-term basis, and "tallies of loan" became one of the new instruments of government debt,⁴ along with the lottery. "Tallies of loan" were issued in anticipation of future tax revenue and continued in circulation until paid, an arrangement that to some extent permitted the existence of a permanent public debt.

Short-term government debt was thus widely held, and often came into the hands of people who wanted to convert it into cash; there was an obvious need for a market, and the uncertainty of payment gave big opportunities for speculation. Active dealings seem to have taken place during most of the seventeenth century; "tally-brokers" are heard of well before stockbrokers and it was probably these dealers in short-term government debt who eventually turned their attention to longer-term debt and to company stocks and shares and so laid the foundation of the modern stock market.

(Morgan and Thomas 1969, p. 19)

⁴ A tally was one of the oldest negotiable instruments in English history, continuing in use until the late 1820s. Notches were cut in a strip of hazel wood, the size indicating some agreed value. After the transaction the stick was spliced, one to the payee, the other to the payer. The notches matched, each party with a record of transfer. The Exchequer in charge of collecting taxes, gave tally receipts.

In a similar fashion, the Government circulated tallies of loan; virtually impossible to counterfeit, they were transferable, and ideal for loan purposes. Since tallies of loan were dependent upon tallies of receipt for taxes for repayment, there was always a market for tallies of loan, with sometimes very high rates of discount.

The other instrument of government debt, the lottery, came into being in 1694. While the terms of the lotteries changed over time, the one in 1694 was fairly typical. Parliament, in borrowing £1,000,000, sold tickets for £10 each, agreeing to provide an annual sum of £140,000 for the next sixteen years. From this annual appropriation, each ticket-holder received a 10 percent interest payment, the other £40,000 being awarded to prize winners. At the end of sixteen years, all accounts were cancelled, and the government had no need to repay the initial outlay (Morgan and Thomas 1969, p. 20). Parliament could issue a new lottery at any time, to pay the amount due on old lotteries, with the result that a new source of public debt was constantly in the offing.

The success of the lotteries was partly attributable to their appeal to the English love of gambling. Long the home of card playing and the dice tables, the lotteries were but one more vent for Englishmen to participate in games of chance. The middle classes participated just as actively as did the nobility and the aristocracy. Despite the eighteenth century inflation, lotteries were a major source of government finance; players apparently were unconcerned that they were rewarded with depreciated currency.

The joint-stock company also appealed to the English propensity to gamble, and that was undoubtedly the reason for its early success. It has been claimed that the highly speculative character of the Amsterdam Bourse, during the eighteenth century, was attributable to the large number of Portuguese Jews who dominated it. But this could hardly have accounted for the speculative character of the English market, since Jewish participation was greatly restricted. More Sephardim worked in the London stock exchange than in any other industry, such as manufacturing or transport, but the Englishmen of the time did not need to learn about speculation and gambling from the Jews. The practice was as much a part of English culture as roast beef and plum pudding.

Origins of the London Stock Exchange

The large number of shares involved in the new joint-stock companies, the Bank of England, and the government debt required a marketplace for brokers and traders. The first location was Sir Thomas Gresham's Royal Exchange, at the intersection of Cornhill and Broad Streets.

Originally built in 1566-1567, the Royal Exchange was the meeting place for bankers, merchants, goldsmiths, and blacksmiths; weavers, drapers, skinnners, clothmakers, silk-throwers, dyers, girdlers, haberdashers, and tailors; iron-mongers and fishmongers; bakers and beer and gin distillers; coopers, masons, joiners and glaziers, pewterers, lorimers, tinplaters, potters, and long-bow stringmakers. Each craft or guild had its own section of the exchange, its own "walk," where hawkers strolled in the quest of buyers for their wares. In the second half of the sixteenth century the merchants of the City of London controlled 80 percent of all of England's trade, and Gresham's Bourse, as it was originally named, was the center

of the commercial world. Merchants and traders from all the principal countries met to negotiate their rapidly expanding commercial and financial activities.

The importance of the Royal Exchange was evidenced by its reconstruction within three years of the Great Fire in 1666. Rebuilt with brick, rather than wood, and opened in 1669, the Royal Exchange once again became the center of trade and commerce for both London and England. When the market for public and private securities developed in the last several decades of the seventeenth century, the "stockbrokers' walk" became part of the Royal Exchange, adjacent to the "walks" of the grocers and druggists, the salters, and the Italians. In the eighteenth century, Jewish brokers had become of sufficient importance to warrant a "Jews' walk."

The growing number of companies after 1695 prompted a change in the quality and location of the stock market. The increase in issues traded, the altered quality of the market, and the change in venue were interrelated, of course. By the 1690s the City of London had a population of about 500,000, making it the largest city in Europe. Accompanying this population growth was an acceleration in the amount of trade and commerce, and an increase in the number of merchants using the Royal Exchange, particularly stockbrokers. The Exchange became overcrowded, and considerable pressure was put on the most recent entrants, the stockbrokers, to leave. Of even greater concern were the nefarious, fraudulent, and deceitful practices of some brokers. In addition, there was a general distrust of anyone who dealt in securities, or the instruments credit and finance. There was disapproval of the practices whereby people made money, not by selling goods, but by gambling in money and taking usury. Daniel Defoe, one of the most outspoken critics of financial market institutions, claimed:

I know they upon all occasions laugh at the suggestion, and have the pride to think it impracticable to restrain them; and one of the top of the function the other day, when I casually told him, that if they went on, they would make it absolutely necessary to the legislature to suppress them, returned, that he believed it was as absolutely necessary for them to do it now, as ever it could be. But how will they do it? It is impossible, said he, but if the government takes credit, their funds should come to market; and while there is a market we will buy and sell; there is no effectual way in the world, says he, to suppress us but this, *viz.* That the government should first pay all the public debts, redeem all the funds, and dissolve all the charters, *viz.*, Bank, South Sea, and East India, and buy nothing upon trust, and then, indeed, says he, they need not hang the stockjobbers, for they will be apt to hang themselves.

I must confess, I in part agree that this is an effectual way, but I am far from thinking it the only way to deal with a consideration of usurers, who having sold the whole nation to usury, keep the purse-strings of poor and rich in their hands, which they open and shut as they please.

(Defoe 1960, pp. 2-3)

As Tawney has noted,

In such an atmosphere, the moral casuistry, which had occupied so large a place in the earlier treatment of social and economic subjects, seemed the voice of an antiquated superstition.

(Tawney 1926, p. 250)

There could be no turning back, and while some men lamented the encroachment of the marketplace, the system moved forward.

Forced out of the Royal Exchange in 1698, the stock-brokers moved to the coffee houses located in the network of byways and lanes centering upon Exchange Alley, where Cornhill and Lombard streets meet (See Figure III-1); the area was vulgarly referred to as Change Alley. Even before they were expelled from the Exchange, stockbrokers and traders had been meeting in the less crowded coffee houses, where one could at least sit while conducting business.

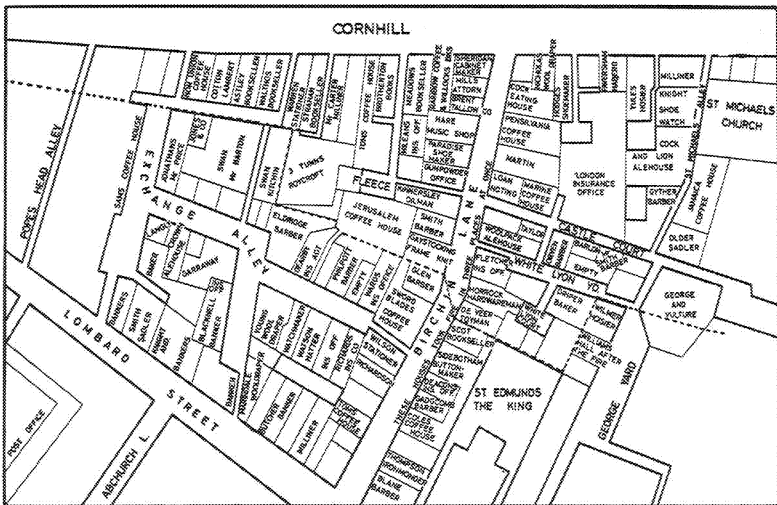


Figure III-1. Exchange Alley and the Coffeehouses

By the early eighteenth century, coffeehouses had become the center of social life in London, as well as the meeting places of politicians and professionals. Each group had its own coffeehouse.

The *beau monde* assembled at White's Chocolate House in St. James's Street, where, as Harley bitterly complained to Swift, young noblemen were fleeced and corrupted by fashionable gamblers and profligates. Tories went to the Cocoa Tree Chocolate House, Whigs to St. James's Coffee House. Will's, near

Covent Garden, was the resort of poets, critics, and their patrons; Truby's served the clergy, and the Grecian the world of scholarship; nor were there lacking houses for Dissenters, for Quakers, for Papists and for Jacobites. The "universal liberty of speech of the English nation" uttered amid clouds of tobacco smoke, with equal vehemence whether against the Government and the Church, or against their enemies, had long been the wonder of foreigners; it was the quintessence of Coffee House life.

(Trevelyn 1942, p. 324)

Jonathan's and Garraway's coffeehouses in Exchange Alley, and Lloyd's on Lombard Street, were the centers of the Stock Exchange from 1698 until 1773, when a new location was found in Threadneedle Street, across from the northeast corner of the Royal Exchange. Meanwhile, the Stock Exchange and Exchange Alley were one and the same.

During the day, the coffeehouses were the meeting places for stock traders, while at night they became centers for other types of gambling, such as faro, whist, and the ever-present dice tables. During the day, tea, coffee, and chocolate were available, but no gin or other heavy spirits. The latest financial newspapers from Amsterdam were always available, and the latest political and literary gossip. But more important, in Exchange Alley the subscription lists of financiers in search of fresh capital were available, in many cases for enterprises of a questionable character. In one instance a company was formed "To carry on an Undertaking of Great Advantage but Nobody to Know what it is" (Duguid 1901, pp. 40-41).

Altogether there were thirty taverns and twenty-six coffeehouses, most of them with easy access to Exchange Alley. Defoe defined the area, which he said thronged with Jews:

The limits are easily surrounded in about a minute and a half, *viz.*, stepping out of Jonathan's into the Alley, you turn your face full south; moving on a few paces, and then turning due east, you advance to Garraway's; from thence going out at the other door, you go on still east into Birchin-lane; and then halting a little at the Sword-blade Bank, to do much mischief in fewest words, you immediately face to the north, enter Cornhill, visit two or three petty provinces there in your way west; and thus having boxed your compass, and sailed round the whole stock-jobbing globe, you turn into Jonathan's again; and so, as most of the great follies of life oblige us to do, you end just where you began.

(Defoe 1960, p. 35)

The route of Defoe's journey can be traced in Figure III-1. One writer described the activity in Exchange Alley in 1703:

The manner of managing the trade is this; the Monied Man goes among the Brokers (which are chiefly upon the Exchange, and at Jonathan's Coffee House, sometimes at Garraway's and at

some other Coffee Houses), and asks how Stocks go? and upon information bids the Broker buy or sell so many Shares of such and such Stocks if he can at such and such Prices: Then he tries what he can do among those that have Stock, or power to sell them; and if he can, makes a Bargain.

(Quoted in Morgan and Thomas 1969, p. 20)

Another, in 1707, wrote:

Brokers of Stock are such as buy and sell Shares in Joint Stocks for any one that shall desire them; as if I am minded to buy two shares in East India Stock, I speak to a Broker if he knows of any to sell, he enquires and find one that will sell two Shares, which the Broker buyeth for me at the Price current on the Exchange, and when the same are transferred to me in the Company's Book, I pay for them. And it has been usual to give these Brokers for their Brokage or Provision as followeth: For Hudson Bay Stock, 1£ per Share; for East India Stock, 10s. per share; Africa Stock or other petty Stocks as Glass, Lead, Linnen, Copper, etc., 5s. per Share. And at this Rate there are some have got £1000. or £1500. per An.

(Quoted in Duguid 1901, pp. 14-15)

Quite early in the history of the London Stock Exchange, a distinction was drawn between "stockbrokers" and "stockjobbers." The former functioned almost exclusively as agents for clients, buying or selling upon request, and typically they did not participate in the market on their own behalf. Stockjobbers traded in futures, making "puts" and "calls" for themselves, rather than for clients. They of course, were the speculators who were in and out of the market when a particular security, whether government or private, changed several points. It was because of them that the zoology of "bulls" and "bears" came into existence. Futures were normally settled every three months, with the "bulls" expecting a rise in the market, the "bears" hoping for a fall, since they would be selling short. A "lame duck" was a jobber who sold short, but could not meet his commitment on settlement day, since the market had risen against him.

The most famous and notorious stockjobber was Sir Josiah Child (1630-1699), economist, Governor of the East India Company, and mercantilist philosopher. It was generally assumed that Child was rigging the price of East India Stock to his own benefit, being a bull or a bear as it suited his purpose. In the late 1690s, when the London Exchange was flooded with new issues of joint-stock ventures, Child was particularly active. Writing twenty years later about the influence of Sir Josiah, Defoe described the practice of stockjobbing. He published anonymously, obscuring only slightly the various individuals he was attacking, in this instance Child.

. . . if we may believe the report of those who remember the machines and contrivances of that original of stock-jobbing, Sir F ____ C _____. There are those who tell us letters have been

ordered, by private management, to be written from the East Indies, with an account of the loss of ships which have been arrived there, and the arrival of ships lost; of war with the Great Mogul, when they have been in perfect tranquility; and of peace with the Great Mogul, when he was come down against the factory of Bengal. . . as it was thought proper to calculate these rumors for the raising and falling of the stock, and when it was for his purpose to buy cheap, or sell dear.

Every man's eye, when he came to market, was upon the brokers who acted for Sir F _____. Does Sir F _____ sell or buy? If Sir F _____ had a mind to buy, the first thing he did was to commission his brokers to look sour, shake their heads, suggest bad news from India. . . "I have commission from Sir F _____ to sell whatever I can," and perhaps they would actually sell ten, perhaps twenty thousand pounds. Immediately the Exchange . . . was full of sellers; nobody would buy a shilling, till perhaps the stock would fall six, seven, eight, ten, per cent, sometimes more. Then the cunning jobber had another set of men employed in purpose to buy, but with privacy and caution, all the stock they could lay their hands on; till by selling ten thousand pounds at 4 or 5 per cent loss, he would buy a hundred thousand pounds stock at 10 or 12 per cent under price.

These honest methods laid the foundation, we will not say of a fine great stone house, on a certain forest; but it certainly laid the foundation of an opulent family, and initiated the crowd of jobbers in that dexterity in tricking and cheating one another, which to this day they are the greatest proficients that this part of the world ever saw.

(Defoe 1960, pp. 14-15)

Defoe published his attack upon what he called that "scandalous trade" of stockjobbing in 1719; the next year, the infamous affair of the South Sea Bubble occurred. The Bubble proved to be the most notorious episode in British financial history, and it had numerous repercussions for the future of eighteenth-century financing.

Chartered in 1711, the South Sea Company was organized to trade in South America, buoyed by the expectation that English merchants would benefit from a British victory in the War of the Spanish Succession (1701-1713). While the war reputedly centered upon the issue of whether the House of Bourbon or the House of Habsburg would claim the throne of Spain, it was in effect a conflict that carved out the future channels of trade, with England the main beneficiary. The South Sea Company expected to be as successful in South America as the great East India Company had been in the Far East. As allies, England, Holland, and Prussia were not only expected to dominate the West Indian slave trade, but also to replace the Spanish domination over all trade and commerce in South America. The company's initial capital was proposed to purchase £9 million of the national debt England accumulated during the War of the Spanish Succession. This was not the

first occasion when public debt had been sold to private firms; both the East India Company (1600) and the Bank of England (1694) held large quantities of Great Britain's national debt. But in the case of the South Sea Company, the government directly converted a £9 million debt into the company's stock. Each £100 government security was converted to a £100 share in the South Sea Company, with Parliament guaranteeing an annual 6 percent interest on the initial £9 million, plus £28,000 for management and administrative fees, a total annual flow to the company of £568,000. The scheme also guaranteed the company a one-hundred-year monopoly on all trade in South America. In commenting on this arrangement, Morgan and Thomas observe:

One of the peculiar features of the time is the merging (or ingrafting as it was often called by contemporaries) of the public debt into the capital of the great joint-stock companies. This movement, which culminated in the disastrous South Sea Conversion of 1720, was the product of several different influences. In part it was just one of many expedients of a hard pressed government to raise money, and in part it was a product of the not unreasonable idea that citizens who receive monopoly privileges from the State should pay for them. This combination of rough social justice and satisfying the needs of the Crown can be seen in the payments by many smaller companies and in the sale of patents which was a bone of contention between the Stuarts and their Parliaments. There was also, however, widespread belief that arrangements of this kind were beneficial to the companies themselves. An annuity voted by Parliament and secured on the growing yield of indirect taxes in an expanding economy was a very different thing from the haphazard royal borrowing of former times. It was felt that the possession of such an asset would strengthen a Company, enhance its credit and facilitate its banking or trading activities. In the case of the Bank of England and the East India Company this belief was not unfounded. The whole of the Bank's initial capital was lent to the government but it was able to circulate bills and notes and attract deposits to build up its banking business. Similarly, the United East India Company had little difficulty in financing an expanding trade, although most of its capital was on loan to the government. It was only in the case of the South Sea Company that the experiment proved disastrous.

(Morgan and Thomas 1969, p. 30)

In February 1720, South Sea shares sold at £128; in March, £330; May, £550; June, £890; August, £1,050; late September, £175; December, £124. This type of financial speculation was not limited to the South Sea Company. In 1720, 190 new joint ventures put issues into circulation, among them insurance companies—fire, marine, and life, as well as those offering protection against highway robbery; companies for engaging in fishing and foreign trade in all parts of the world;

manufacturing companies to produce wool, cotton, iron, steel, salt, sugar, and paper; and numerous land speculation schemes (Morgan and Thomas 1969, pp. 34-37).

By late summer 1720, new stock shares for almost any type of venture were for sale at Jonathan's and Garraway's, and buyers were not particularly interested in studying the prospecti. All but a baker's dozen were patently fraudulent, but so long as the market rose, so did the wave of optimism. Most issues were bought on margin, which fed on borrowing. By the middle of the year it became clear that the South Sea Company was in no position to loan the government any significant amount of the £9 million to which it was committed, and its borrowing activities in the private sector were seriously restricted by the competition from the numerous new companies.

The mounting pressure of calls was bound to create a scarcity of money. . . . Once people found they had to sell stock in order to meet calls or to repay bank loans, prices were bound to fall and, the more prices fell, the more stock would be thrown upon the market.

(Morgan and Thomas 1969, p. 37)

The crash came in late autumn, and by 1721 the entire market was in a shambles. The speculation mania was stopped by passage of the Bubble Act in 1720, which prohibited joint-stock companies in all areas of industry, except insurance and maritime activities. Parliament's intervention meant that the new companies were in effect declared illegal, and the shareholders at once attempted to salvage what they could. Prices fell as margins were called, and more and more issues were thrown on the market. The South Sea directors tried to raise funds to maintain the price of their stock but finally had to default on the loan to the government. The £9 million liability was cancelled, and shareholders were able to rescue about 10 percent of what they had invested.

The bubble would have burst in any event, since neither the South Sea Company, nor any of the 190 new joint-stock companies, had an earnings potential that could justify the price of their stocks in the market. The price-earnings ratios were far out of line. But the fact that the company's directors, in collusion with the leaders of Parliament, brought about the crash was further evidence of the skulduggery which had surrounded its formation. The speculation in the South Sea Company had its roots in the highest offices of government, the Crown itself, and most of the important politicians of the day. Because of its political strength, the company was able to survive and carry on limited trade until it was dissolved in 1854.

The Bubble Act of 1720 was Parliament's reaction to stock market speculation gone awry. The act continued to be enforced until 1825, and English law favoring the establishment of joint-stock companies in manufacturing and trade did not change until 1844 (Shannon 1966). In the interval, only single proprietorships and partnerships were permitted outside the areas of insurance, banking, and maritime activities. Adam Smith went so far as to say these were the "only trades which it seems possible for a joint stock company to carry on successfully, without an exclusive privilege" (Smith 1937, p. 713).⁵

⁵ Leo Rogin claimed that Adam Smith, writing on the dawn of the industrial age, was naive as to the potential for large scale industry, and had he recognized the significance of economies of scale he would not have been so enamored with the virtues of free competition. (Rogin 1956, p. 107)

The Bubble Act was followed in 1733 by Bernard's Act, which prohibited "puts" and "calls" on the London Stock Exchange. These two pieces of legislation shaped the character of British industry for many years to come, and the London Stock Exchange was transformed, from a trading center for private debt and equity, to a bourse for government debt.

Because of the great restrictions placed upon joint-stock companies, manufacturing in England continued to be dominated by the craft guilds. The level of British manufacturing technology during the last half of the eighteenth century was not much advanced beyond what it had been in Tudor and early Stuart times. By prohibiting joint-stock ventures, Parliament limited the size of firms and the growth of large-scale aggregations of capital. Restricted to single entrepreneurs or partnerships, the scale of manufacturing was small, especially considering the potential.

The second consequence of the Bubble and Bernard Acts was that private savings were effectively closed to manufacturing and transport. These savings did, however, provide financing for the national debt, the most important financial activity of the century. Between 1740 and 1816, the compound rate of growth in the British national debt was 7.25 percent per annum. Following the war of the Spanish Succession, the debt reached £54 million, although Robert Walpole was able to reduce it to £44 million by 1739. But between 1739 and 1816 the debt rose to £709 million, with another £110 million in Irish debt. The growth of the national debt and the development of finance in eighteenth-century Britain were inextricably entwined, and that is why the London Stock Exchange became a government funds market.

Following the South Sea debacle, the limited risk associated with government debt was welcomed by investors. Between 1739 and 1815, England was at war 58 percent of the time, or 44 out of 76 years; when not at war, the country was preparing for it. The War of the Spanish Succession was followed by the War of the Austrian Succession, the Seven Years War, the War of American Independence, and finally the Napoleonic Wars. Throughout this long period, the London Stock Exchange was the source which enabled England to finance its imperialistic activities and defend itself against France.

There were many, like Defoe, who regarded the stock exchange as an evil growth. The belief that usury was immoral was centuries old, of course, and that view was reinforced by such financial manipulations as the South Sea Bubble and Josiah Child's activities in the 1690s. This negative attitude hardened, however, as the exchange became more and more a source for government borrowing; the stock-jobbers were no longer playing games with one another, they were taking advantage of a national emergency. Moreover, the yield on the national debt changed with the fortunes of war, just as the yield in East India Stock changed in accordance with the

Despite Smith's pin factory, and the benefits from the division of labor, in his day the scale of industry was small, attributable to the restrictions on the joint-venture. Smith was even critical of the trading companies, especially the South Sea, and his views were representative of prevailing opinion, especially among the guild masters and journeymen.

company's successes or failures. Many believed there were brokers in Exchange Alley who were aiding the enemy in order to depress the price of government bonds, or raise the rate of interest, which the government would have to pay on new issues. Defoe claimed such people were "guilty of treason against their king and country" (Defoe 1960, p. 21).

These antiquarian views, grounded in Thomistic philosophy, were by no means held exclusively by the members of the minor gentry, or such outspoken critics of the new order as Defoe. The same sentiments were found in the highest echelons of government. Furthermore, there was a clear distinction made between the merchants and traders on the one hand, and business men who engaged exclusively in finance. For example, William Pitt the Elder (1708-1778), mastermind of Britain's military activities during the Seven Years' War, was a firm believer in commerce, and received his greatest support from the City.

Pitt was not interested in empires, he was interested in trade and paying for the war by capturing its most lucrative branches. In this he had the complete support of the City, whose merchants supplied him with intelligence about the nature, value and location of French gum, fur, fish and sugar trades. By this method both Pitt and the City believed they could afford to pay the immense subsidies which our continental allies demanded and the cost of those diversionary attacks on the French coast which Pitt conceived as necessary to his strategy. But it was the capture of trade which haunted his imagination and which to him and his City supporters made the whole struggle a matter of life and death for England. Trade was wealth and power. The only rival was France.

(Plumb, 1950 p. 112)

But the strategy did not prove as successful as Pitt and the merchants had hoped. French trade was not destroyed, or even very seriously weakened. Pitt said of the Treaty of Paris (1763): "We retain nothing, although we have conquered everything." In addition, the national debt rose from £70 million to £130 million during the course of the war, or by about 11 percent a year. The debt was financed by what Pitt called the "monied interests." It was for these financiers that Pitt reserved his vituperation and censure.

There is a set of men, my Lords, in the city of London, who are known to live in riot and luxury upon the plunder of the ignorant, the innocent, the helpless; upon that part of the community, which stands most in need of, and that best deserves, the care and protection of the legislature. To me, my Lords, whether they be miserable jobbers of Change Alley, or the lofty Asiatic plunderers of Leadenhall Street, they are all equally detestable. I care but little whether a man walks on foot, or is drawn by eight horses, or six horses; if his luxury be supported by the plunder of the country, I despise and detest him. My Lords, while I had the

honour of serving his Majesty, I never ventured to look at the Treasury but at a distance: it is a business I am unfit for, and to which I could never have submitted. The little that I know of it has not served to raise my opinion of what is vulgarly called the 'Monied Interest'; I mean, that blood-sucker, that muck-worm, that calls itself 'the friend of government'; that pretends to serve this or that administration, and may be purchased, on the same terms, by any administration; advances money to government and takes care of its emoluments. Under this description, I include the whole race of commissaries, jobbers, contractors, clothiers, and remitters. Yet, I do not deny, that even with these creatures, some management may be necessary; and, I hope, my Lords, that nothing I have said will be understood to extend to the honest industrious tradesmen, who holds the middle rank, and has given repeated proofs, that he prefers law and liberty to gold. Much less would I be thought to reflect upon the fair merchant, whose liberal commerce is the prime source of national wealth. I esteem his occupation, and respect his character.

(Quoted in Sambrook 1973, pp. 11-12)

The onus was not upon those who waged war for trade and empire, but upon those who financed such activities. Pitt, Lord Chatham, expressed the opinion, frequently stated in eighteenth-century England, that he had a great preference for merchants, manufacturers, and agriculturists over the "monied interest," those Asiatic plunderers and "dirty Jews of Change Alley." Some sixty years after Chatham's speech to the Lords, William Cobbett wrote:

I see, that they have adopted a scheme of one Ricardo (I wonder what countryman he is) who is, I believe, a converted Jew. At any rate, he has been a 'Change-Alley-man for the last fifteen or twenty years. If the Old Lord Chatham were now alive, he would speak with respect to the Muckworm, as he called the 'Change-Alley-people. Faith! They are now become *every thing*. *Baring* assists at the Congress of Sovereigns, and *Ricardo* regulates things at home. The Muckworm is no longer a creeping thing: it rears its head aloft, and makes the haughty Borough Lords sneak about in holes and corners.

(Sambrook 1973, p. 110; from *Cobbett's Weekly Political Register*, 4 September 1819, p. 80; italics in original; also in *Works*, Vol. VIII, p. 74, n.1)

The Jacobite Threat

The future well-being of the London Sephardim, although an enclave, ultimately was tied to events in the wider culture, that is, political, social, financial, and economic developments. Accordingly, they were as concerned with the issue of the succession to the throne as was any native Englishman, Welshman, or Scot, not

to mention the Irish. The controversy turned on whether James II's male heirs had any rightful claims. Legally, the issue was decided by Parliament in 1701, when the Acts of Settlement specifically excluded them. But there was still considerable support for a Stuart monarch, particularly in the Scottish highlands and among English country squires. In addition, both the papacy and the French Bourbons believed that a Catholic king of England was the only desirable possibility. The several attempts of James II's male heirs to exercise their claims, and the financial and military support they received from France and Spain, constituted the "Jacobite threat."

The Jacobite question originated in 1689, when James II was forced to vacate the throne because it was not "proper for England to be ruled by a Catholic monarch." As a practical matter, however, the issue was not concluded until 1746, after James's grandson (Charles Edward) was repelled in his invasion attempt to claim the throne. As a subject of political debate the matter did not end then, for the Jacobites and their supporters kept the issue alive. The term "Jacobite" became highly derogatory, smacking of treason and treachery, and was applied to anyone who opposed the policies and tactics of the British government. Positions in the inner circle of government were denied to persons "believed" to be sympathetic to the "Jacobite cause," while court favor was gained by those with strong anti-Jacobite sentiments. In the latter category fell the Sephardim, for the community always took a firm stand with the establishment, whether it be Orange or Hanoverian.

The succession issue centered on whether heredity and tradition, as opposed to Parliament, should determine who sat on the English throne. Opinion became polarized and eventually congealed into two political parties, the Tories and the Whigs. Tory was a derisive Irish term for a "popish outlaw," while Whig was a Scottish term for a horse thief, applied in this instance to those who stole James's crown and denied his male heirs their due.

The Tories believed in the traditional prerogatives of royalty and the status quo, whereas the Whigs supported the pragmatism of Parliamentary control. The latter's control of Parliament meant that any non-Catholic monarch was preferable to a Jacobite, even if the new king had to be imported. Initially, this policy led to the investiture of William of Orange, and his wife Mary Stuart, together with closer economic and political ties with Holland. When William and Mary produced no issue, the Whigs turned to the Hanoverians, and even stronger links with the German provinces were established. Meanwhile, England's age-old struggle with France was intensified, due to the latter's support of the Jacobites.

The Sephardim supported the Whigs for negative and positive reasons. A Catholic monarch undoubtedly would have jeopardized their continued existence in England. Catholic attitudes expressed during the Inquisition had been strongly Anti-Semitic, and the conservatives who rallied to the Jacobite cause were cut from the same cloth as the supporters of Edward I and James I, both of whom had expelled the Jews from England. On the positive side, Whig political and economic policies were highly favorable to all who engaged in commerce, trade, and finance, especially as those policies led to greater ties to Holland and the Protestant provinces of Germany. Sephardic support for the Whigs manifested itself through

the stock exchange. Since a large portion of England's wealth was still concentrated in the traditional and predominantly Tory rural sector, financial backing for Whig causes had to come from the City, and in the City the Sephardim were certainly important. Furthermore, at least since Cromwell's time, the City had become a major anti-Catholic center, the home of staunch Dissenters. Had there not been a religious question involved, the Whigs might not have been able to strengthen their Parliamentary control to the degree they did. The combined elements of Sephardic financial help and popular support made the City a potent place in the Whigs favor.

As one of the two homes of the Reformation, England under Tudor tutelage had grown accustomed to the separation of church and state. Although an Anglican, Elizabeth did not approve of the church meddling in matters foreign or domestic; she tolerated almost all religions, provided they did not offer advice on secular issues. Moreover, the English grew accustomed to the absence of papal influence and the lack of a rigid religious mold. The Anglican church was not particularly monolithic, although some archbishops may have had such desires. By the seventeenth century, the Reformation and its effects had made a Catholic monarch untenable.

The conflict between the Stuarts and the people of England stemmed from the Stuart's Catholic inclinations and their tendency to marry Catholic princesses. The four Stuart kings, James I (1603-1625), Charles I (1625-1649), Charles II (1660-1685), and James II, were followed by two Stuart queens, Mary II (1689-1694) and her husband William III of Orange (1689-1702), and Anne (1702-1714).

Mary and William were chosen by Parliament to replace James II and to supersede his son, James Frances Edward. Some controversy surrounded the latter's legitimacy, but the primary objection was to his and his father's strong Catholicism. James Frances subsequently became known as the Old Pretender. When Anne died without issue, Parliament again withheld the succession from James Frances and decided upon Sophia, granddaughter of James I and wife of the Elector of Hanover. Their son, George I, succeeded Anne.

In the meanwhile, the Old Pretender constituted the "Jacobite threat." When the ousted James II died in France in 1701, Louis XIV recognized James Frances as James III, King of Great Britain. On three separate occasions the Old Pretender attempted to claim the throne. In 1708 and 1715, he landed in the Scottish highlands with sufficient French military support to invade England. Both plans failed, and James returned to France. In 1719 the Spanish sent a fleet to aid another of his invasions, but stormy seas aborted the effort.

Obviously, there was some domestic support for James, otherwise he would not have attempted so many invasions. His cause was aided in England by a number of political and social factors. There were those who still believed in a hereditary monarchy; since James II should never have been dethroned merely because of his religious beliefs, James III was the rightful king. Most who held this opinion were from the conservative elements of society—the squires, parsons, and craftsmen who controlled the monopoly guilds in the towns. Also involved were the Scots, not all of whom supported the Union of England and Scotland (1707), which deprived the

latter of its independent parliament and the right to create Scottish peers. Opposition was most fierce in the Highlands, and it was from there that James launched his first two invasions.

Support for the Hanoverians, who were considered foreigners, was half-hearted in some quarters. George I did not help matters, for he did not bother to learn English and was outspoken about his preference for Hanover over England as a place in which to live. Like him or not, many regarded George as the only alternative. Furthermore, although the crown sat on a Hanoverian head, real control rested with the Whig politicians, the Walpoles, the Stanhopes, the Sunderlands, and eventually the first Pitt. Their chief supporters were the merchants, and the numerous dissenters of varying hues, not to mention the advocates of increasing influence for Parliamentary control. The Whigs rallied support for the Act of Settlement, whereby Parliament decided the question of succession. And that went far in establishing its right to decide much else. With Whig help, England successfully repulsed James's efforts to return a Stuart to the throne.

After his final attempt in 1719, James III retired to Rome to live out his remaining years. The Jacobite cause was then championed by his son, Charles Edward, the Young Pretender. In 1745 he landed in Scotland and captured not only the Highlands but also the lowland towns, as he then sent his forces to invade England. They were eventually defeated at Derby, scarcely more than a hundred miles from London.

What Chatham called the "monied interests" rallied to the anti-Jacobite and Whig causes, financing the increasing national debt required to sustain not only the Hanoverian regime, but also England's continuing struggle with France. For this they were rewarded through their increasing wealth and positions of prestige and status. Many became peers, as such posts no longer were restricted to the landed gentry. By the middle of the eighteenth century, finance capital was well on its way to becoming dominant over agricultural wealth. The growing influence of the "monied interests" was felt most keenly in the Lords, as the Hanoverians rewarded their supporters with peerages.

For the Sephardim, an important segment of the "monied interests," the rewards came through a relaxation of some of the barriers to entry into the wider arena of English society. Sampson Gideon, for example, was the most prominent member of the Sephardic community at this time. He was also

one of the leading financiers in England—for a time the leading one—the financial adviser and trusted councillor of successive governments, the supporter of the Government of the day in every crisis that arose, a man under whose advice and with whose support the fortunes of his country rose continually while his own private fortune expanded at the same time. At the time of the Forty-five panic when the Young Pretender and his army were already in Derbyshire and the Hanoverian King was preparing to retire to the Continent, Gideon placed both his valuable advice

and his outstanding credit at the disposal of the Government and in this support he was seconded by the other Jewish brokers and merchants to a man. The Government, in the emergency, needed money. Gideon placed himself at once at the head of a small group that provided the Government with £1,700,000 for its immediate needs. Together with others he formed an association, when the credit of the Bank of England seemed to be becoming unstable, to purchase its notes at par, and the whole body of the Jewish merchants, encouraged by the Synagogue authorities, came forward in their support. Others devoted their efforts to importing bullion from abroad and lodging it ostentatiously with the Bank of England. Those who owned sea vessels placed them unreservedly at the disposal of the Government.

(Hyamson 1951, p. 129)

Parliament expressed its gratitude by passing a special bill permitting Gideon to buy land, the first professed Jew officially and openly to own such property in England. Gideon also wanted a peerage, but this was out of the question for a Jew; even Roman Catholics were barred, and they, after all, were at least Christians. A compromise was reached, however. Although an active member of the Sephardic synagogue, Gideon was married to a Christian, thus his children were not Jews. The only son, Samson, attended Eton, and at age 15 was created baronet. Subsequently, the son assumed the surname Eardley, and in 1789, after his father's death, became Lord Eardley, nonhereditary Irish peer (*Dictionary of National Biography* 1890, Vol. 21, pp. 289-290).

The rest of the Sephardic community had little to show for its support of the Hanoverian regime. One benefit, the Jewish Naturalization Act of 1753, proved temporary, for the law was repealed the same year. In the mid-1700s, most Jews in England were foreign born. In addition to the Sephardim from Amsterdam and other Dutch cities, the Ashkenazim of Eastern Europe were beginning to arrive in ever-increasing numbers. To become a naturalized British subject was highly desirable, since London had become the world's leading commercial and financial center. But the "Jew Bill," as it was vulgarly called, elicited a raft of pamphlets and considerable public indignation. Some claimed that passage meant England would soon be owned by the Jews; a new Canaan would be proclaimed, complete with a Messiah, the most likely candidate being Sampson Gideon (Turberville, 1926, pp. 227-228).

Opposition was widespread, and while it has usually been argued that it was the rabble who forced the Act's repeal, they did not write the pamphlets. Moreover, the Whig leaders, such as the Pelham brothers, were worried about the upcoming elections in 1754, though the lower classes would not be participating, since the right to vote was tied to property. The furor came from the same conservative forces that supported the Jacobite cause, the country squires, parsons, and craftsmen. So intense was the opposition that some argued for its repeal on the ground that, if the law remained, alien Jews would never be accepted as citizens,

and the legislation would be of little benefit in any case. It was this type of reasoning that carried the day.

Within the Sephardic community, the legislation also caused a rift. Many of the Sephardim were foreign born, while others, of course, were second- and third-generation Englishmen. The Synagogue leadership considered the legislation highly desirable; accordingly it agitated for passage and then against repeal. The petitions carried the names of all members of the congregation, including that of Sampson Gideon. Ostensibly, because he was not asked if his name could be so used, Gideon was outraged and formally withdrew from the congregation. Having been born in London, the naturalization issue was of no moment to Gideon, and some suggested he feared jeopardizing his personal perquisites granted by the King. Although he formally withdrew from Bevis Marks, he anonymously paid the equivalent of his annual assessment, and at his own request he was buried in the Sephardic cemetery on Mile End Road (Hyamson 1951, pp. 131-133).

Also passed in 1753 was one piece of permanent legislation which did recognize the integrity and independence of the Jewish community, Lord Hardwicke's Marriage Act. The law provided that no couple could be married in Great Britain except by an Anglican priest, and then only after banns had been read on three consecutive Sundays in the resident parish. Exemptions were accorded to the royal family, the Quakers, and the Jews. Significantly, no such immunities were granted to Dissenters or Roman Catholics.

The exclusion of the Quakers and Jews from the Marriage Act reflected the opinion that they would not be likely to participate in clandestine and irregular marriages, practices which the legislation was specifically designed to prevent. Quantitatively speaking, such marriages had a particularly high frequency among sailors, who would awake from a boisterous night ashore only to find themselves married to some wench from Fleet Street. One minister in the area, for example, reportedly performed 6,000 marriages a year, or more than sixteen a night. Qualitatively, clandestine marriages occurred between daughters of the well-to-do and young attractive fortune hunters of questionable reputation. Practically speaking, Lord Hardwicke's Act was designed to protect income and property, the former in the case of sailors, the latter in case of heiresses.

In the mid-eighteenth century, there remained bigotry, stereotyping, snobbery, and the walls of contempt for the Jews, walls that had been reinforced and strengthened as the centuries passed. Some individuals, such as Gideon, could overcome the obstacles to land ownership and citizenship, but only if they withdrew from the Sephardic community and/or abandoned their heritage. For those who remained, there continued to be ridicule and stigma. In speaking of the role of the Jew in English history, and of his place in society, one writer has said:

He was ubiquitous and enterprising, persistent but not pugnacious; he ran after customers without regard to his dignity, and made a profit out of articles and transactions which other people rejected or despised. For international finance the Jews had a special bent, overcoming by their tribal bonds the boundaries of nations, and

yet as individuals retaining that mental detachment which is so necessary to financial success.

(Fay 1928, p. 128)

The Family of Abraham Israel Ricardo and Abigail Delvalle

When Abraham Ricardo arrived in London in 1760, he was in his early or mid-twenties. When he died in 1812, obituaries in both the *Times* and *Gentleman's Magazine* reported that he was "in his eightieth year," which means a birthdate in 1733 (*Works*, Vol. X, p. 20). But Heertje fixes the year as 1738, as reported in the registry of the Amsterdam synagogue (Heertje 1974, p. 77). One explanation for the discrepancy is the fact that the Amsterdam synagogue did not record births until 1737; Abraham may have been registered at that time, although born in 1733. Undoubtedly, the source of the obituary information was Abraham himself, as relayed to his children and then to the journalists. As the chief executor of his father's estate, David Ricardo probably handled such matters, and knowing something of his ability with figures, the author accepts the birthdate, 1733 (See Table III-1).

Of necessity, Abraham initially was a stock jobber, since only 12 Jews were permitted to be registered as stock brokers. He established his business headquarters at Garraway's Coffee House. That the move to London was considered permanent is confirmed by Abraham's acceptance into the Bevis Marks Synagogue in November 1760, the initial assessment being £1 per annum. In the following year, this was raised to £1.6s. 8d.. From his search of the 1764 assessment lists of Bevis Marks, Sraffa reports that the lowest was 2s. 6d., the highest £18.15s.; Abraham Ricardo was assessed £2, and his future father-in-law, Abraham Delvalle, £4.16s. 8d. (*Works*. Vol. X, p. 21).

Abraham's son, Moses, in writing of his father, remarked that he was

a man of good natural abilities, and of the strictest honour and integrity, and made a corresponding progress; acquiring a respectable fortune, and possessing considerable influence within the circle in which he moved.

(*Works*, Vol. X, p. 3)

That circle was the Sephardic community and the stock exchange, as he quickly became a successful broker and eventually one of the important elders of the Synagogue.

Although Abraham moved to London in order to supervise his father's investments in British securities, he quickly became a holder of government bonds in his own right. On the 27 February 1761 Stock Ledger, Abraham Ricardo is listed as a holder of four percent annuities of 1760 (*Works*, Vol. X, p. 22). In 1771, along with six other foreign-born Jews, he became a naturalized citizen, in order "to settle

and trade" in the London exchange. In 1773 he was appointed to one of the 12 brokerships reserved for Jews on the exchange. He held the position until 1784, when his brother-in-law, Isaac Delvalle, was appointed in his place, a move undoubtedly motivated by Ricardo's continuing practice of aiding his wife's less financially successful family. Although no longer officially a member of the exchange, he continued as an active trader until his death. In 1799, when Abraham was 67 years old, he was chosen to serve on the Committee for General Purposes of the Old Stock Exchange, a body organized to formulate reorganization policies. How active he was is unclear, since he formally resigned six months later.

A major reason for reorganizing the exchange was to provide better control over questionable traders. Another purpose was to remove the political influence exercised by the City, since it controlled the number of brokers. In the exchange established in 1801, membership was extended to only those applicants approved by current members, a move toward cartelization. Even after gaining admission, tenure was not assured. Each year, upon written request only, all memberships were renewed or rejected, which allowed policing of practices and past behavior. Abraham Ricardo's initial membership, in 1801, was never voted upon, as the rules were suspended for a select number of "privileged proprietors." The next year, Abraham's request for renewal was written in his own hand, but thereafter it was submitted on his behalf by one of his younger sons.

Abraham Ricardo "was always in affluent circumstances," as his son Moses observed (*Works*, Vol. X, p. 4), and "most respectably connected." One of the reasons for the respect and status he enjoyed in London, which his son did not mention, was his position within the Sephardic community as a member of the Mahamad. As previously discussed, the Mahamad was the executive committee of the Elders of the Synagogue, authorized to "deal on their own responsibility only with routine matters that arose from day to day" (Hyamson 1951, p. 275). These matters involved not only the financial and business affairs of the Synagogue, but also the relations of the community with the wider society, as well as who had the right to be buried in Volho, or admitted to Beth Holim. Not being of the rabbinate, the Mahamad did not interpret Judaic law, but certainly it had a say in all matters affecting the Sephardim. The Mahamad was composed of six members, four *parnaassim*, or wardens, and a *gabay*, or treasurer. Three were chosen each year on the eve of Rosh Hashanah, and the other two were elected a month later, to provide for experience and continuity. Members were eligible for reelection but seldom served again, undoubtedly because of the amount of time the office required.

Abraham Israel Ricardo was first elected to the Mahamad in 1781 (5541 on the Jewish calendar), and at four-year intervals he continued to be elected over a span of 21 years (Hyamson 1951, pp. 437-439). Unlike some members of the congregation, who refused to serve, Abraham always accepted the responsibility. Moreover, he undoubtedly aided the Mahamad even when not officially a member, for he served as broker for the Synagogue. In reference to such activities, one author has said:

Abraham Israel Ricardo carried out many transactions of this nature to the great satisfaction of his brethren, and nearly every

year a vote of thanks was awarded to him by the electors, for the care and zeal which enabled him to hand over to them by no means contemptible profits.

(Picciotto 1875,⁶ quoted in *Works*, Vol. X, pp. 23-24)

While acquiring his large personal fortune and his reputation as a man of great integrity and honor, both in the Bevis Marks congregation and in the secular community, Abraham Ricardo also sired a very large family. On 30 April 1769, he married Abigail Delvalle, and from this union there were at least seventeen children. At the time of their marriage, Abigail was sixteen years old, and Abraham thirty-six. Sraffa cites a family story to the effect that Abraham married late in life because "he did not wish to have a large family" (*Works*, Vol. X, p. 24).

Abigail Delvalle was the eldest of eight children born to Abraham Delvalle and Rebecca Henriques de Sequeira (see Table III-3). On her mother's side Abigail's London ancestors can be traced to 1674 (Hyamson 1951, pp. 426-427), in which year a Joseph Henriques and an Abraham de Sequeira were members of the Mahamad, and at some point there must have been a union of the two lines. Nothing is known of their business activities, but undoubtedly they were connected to either trade or finance, the only activities open to Jews.

Table III-3.

The Maternal Grandparents of David Ricardo

Abraham Delvalle - Rebecca Henriques de Sequeira
(1731-1785) (?-1807)

Abigail	Isaac	Leah	Joseph	Rebecca	Sarah	Abraham	Esther
(1753-1801)				(1761-1848)			

The Delvalle family had been in London for at least three generations when Abigail married Abraham Israel Ricardo. Her grandfather was Isaac Delvalle, an "eminent snuff-merchant" and apparently something of a Talmudic scholar. Although the interpretation of the Talmud was the prerogative of the Haham, or chief rabbi, the London Sephardic congregation had numerous clashes with its Hahams, and Isaac Delvalle was a member of what might be called a "rabbinical tribunal," or board of appeals. As mentioned previously, the Pentateuch, the

⁶ In the original, Picciotto referred to the "electors" casting a vote of thanks to Abraham Israel Ricardo, but Sraffa substituted "elders" for "electors," since on 13 October 1799 the Bevis Marks records show that the "elders" passed a special vote of thanks to Ricardo. The confusion between "electors" and "elders" is misplaced, since in Bevis Marks the terms were synonyms for the elite. A general meeting of the Yehidim occurred about once every fifty years (Hyamson 1951, p. 275), and in the interval the "elders" or "electors" determined the membership of their executive committee, the Mahamad.

Mishna, and the Gemara are all subject to interpretation, and a rabbinical tribunal apparently was a means of achieving consensus. In 1721, Isaac was a member of a panel to consider whether God could have "spoken" to Moses, since God was not anthropomorphic, a strange type of issue to be raised in the Jewish year 5482.

Isaac and his brother Daniel had a snuff-manufacturing establishment in Bunhillfields (Bunhill Fields), an area north of the City, where they grew their own tobacco. Daniel died in 1737, apparently without issue, and the business was inherited by Abigail's father. His trade card (Hyamson 1951, opposite p. 144) showed him to be a resident of Bury Street, St. Mary-Ax, and a manufacturer, wholesaler, and retailer of "all sorts of snuffs and tobaccoes" at his place of business in Featherstone Street, Bunhillfields. He also advertised a great variety of foreign snuffs, neat, as imported. Abraham Delvalle's Synagogue assessment was more than twice that of Abraham Israel Ricardo, so he must have been financially successful.

At the time of Abraham Delvalle's death in 1785, the family business was inherited jointly by the second son, Joseph, and his mother, Rebecca Delvalle. In the preceding year, it will be recalled, the eldest son, Isaac, had become one of the twelve Jews in the London Stock Exchange, filling the vacancy created by the resignation of his brother-in-law, Abraham Ricardo. Normally, the eldest son would inherit the family business, but Abraham Delvalle was "persuaded that with due care and attention" his son Isaac would be successful as a stockbroker. Such expectations proved ill-founded; in 1789 Isaac Delvalle declared bankruptcy and had to give up his seat on the exchange.

Abraham Ricardo's will provided life annuities for all his brothers- and sisters-in-law, except Rebecca, Esther, and the youngest son, Abraham. Rebecca Delvalle married Wilson Lowry (1762-1824), an engraver, famous geologist, and Fellow of the Royal Society (Hyamson 1951, p. 29). She obviously did not need a Ricardo annuity, nor did Esther Delvalle, who had married Isaac Lindo, a stockbroker. It is not known why an annuity was not provided for the youngest of the Delvalle children, Abraham. He was a coal merchant in Lambeth and later a wine merchant in Covent Garden. Based upon correspondence, in 1815, between him and his nephew, David Ricardo (*Works*, Vol. X, pp. 141-143; David Ricardo to a Wine Merchant, March 1815; A. Delvalle to David Ricardo, 6 November 1820), it would appear that Abraham Delvalle was not much more successful as a merchant than his brother Isaac was as stockbroker.

Abraham Ricardo's will, drawn in 1802, also provided a life annuity of £20 for his mother-in-law, Rebecca Delvalle, but she died in 1807, five years before her son-in-law. Sraffa reports that 1811 was the last year the Delvalle Snuff Manufacture was listed in the Post Office Annual Directory, and he concludes that it went out of business at that time. The decline in the business was related, perhaps, not only to poor management, but also to the rapid decline in the use of snuff in the early nineteenth century.

There is no proof that Abraham Ricardo vacated his seat on the stock exchange so that his brother-in-law Isaac could have the position, but the inference seems justified. There is little doubt that Abraham continually rendered

considerable financial assistance to his wife's family. Being much more successful than any of his three brothers-in-law, Abraham did not need to hold an exchange seat, for by 1784 he was primarily trading for himself, and was actually a stockjobber rather than a stockbroker. To trade in government debt, the major fund available in 1784, one did not need to be a member of the exchange, since the old licensing practices of the City of London were increasingly ignored. As the discussion has indicated, Abraham Ricardo was so well respected in the business community that he did not need to be designated, or licensed, as "one of the 12 Jews." As it might have helped his brother-in-law, perhaps Abraham gave him the opportunity for this reason, although, unfortunately, it did not work out.

Of Abigail and Abraham Ricardo's seventeen children, eleven were sons and six were daughters. Joseph, the eldest, was born on 26 June 1770; the youngest, Solomon, who died in infancy, was born on 2 June 1795 (See Table III-4). With the exception of Rebecca, Jacob, and Abigail, all the births were recorded in the Bevis Marks registry, but the Synagogue records are incomplete for this period (*Works*, Vol. X, p. 54). Even by late eighteenth-century standards, the number of births is astounding, and there is even some evidence that Abigail Ricardo gave birth to more than twenty children.

The evidence about these births comes from Percy Ricardo, son of Abigail's twelfth child, Raphael. They may have been stillborn, as Sraffa suggests, or perhaps did not survive long enough to be registered in the synagogue. In the case of a male child, there would be no registry until the eighth day, when the *brit milah* (circumcision) would occur. For a female child, registry in an orthodox synagogue occurs any time within the first thirty days. David Ricardo's grandson, William Austin, in a letter of 18 July 1899, also mentioned other children: "There were six others who died early" (*Works*, Vol. X, p. 54). It should be recalled that the Sephardic tradition is to name children after either the living or the dead. The second child, Abraham, was undoubtedly given his father's name, and Isaac, that of Abigail's oldest brother. Joseph was probably named for his grandfather, and David for his great-grandfather, David Israel Ricardo.

From their marriage in April 1769 until July 1773, the Ricardos lived at 36 Broad Street, just south of its intersection with Winchester. The family then moved to 1 Bury Street, about two blocks away. They lived there, near the Delvalles, for nineteen years, moving in 1792 to the east end of London, to Old Ford, near Bow. The first four children must have been born on Broad Street, the next eleven on Bury Street. The world of the Ricardo family must have been very circumscribed, encompassing only the Stock Exchange district in Exchange Alley, and the Synagogue on Bevis Marks Street, near the intersection of Bury Street. As his son Moses wrote, Abraham

was a man of good intellect, but uncultivated. His prejudices were exceedingly strong; and they induced him to take the opinions of his forefathers in points of religion, politics, education, etc., upon faith, and without investigation.

(*Works*, Vol. X, p. 5).

Table III-4.
The Family of Abigail Delvalle and Abraham Israel Ricardo

1	2	3	4	5	6
Joseph (1770-1847) Merchant Hatter Unmarried Buried Nunhead	Abraham (1771-1839) Gentleman Unmarried Buried Mile End	David (1772-1823)	Hannah (1773-1850) Married 1797 David Sumada Buried Nunhead	Isaac (1774-1774) Buried Mile End	Moses (1776-1866) Surgeon Married 1806 Fanny Wilkinson Buried Briton
7	8	9	10	11	12
Rebecca (1778-1838) Married 1808 Issac Keyser Buried Kensal Green	Jacob (1780-1834) Stockbroker Married 1810 Harriet Levy Buried Paris	Abigail (1782-1847) Unmarried Buried Nunhead	Daniel (1783-1865) Stockbroker Married 1821 Eliz. Lucy Alexander Buried Nunhead	Rachel (1784-1851) Married 1826 Wm. A. Wilkinson Widower of Esther Ricardo Buried Nunhead	Raphael (1785-1875) Stockbroker Married 1819 Charlotte Lobb Buried Nunhead
13	14	15	16	17	
Benjamin (1787-1841) Stockbroker Married Anne Barnes and Miriam Lindo Died in Cape Town	Esther (1789-1823) Married 1818 Wm. A. Wilkinson (1796-1865) Buried Nunhead	Sarah (1790-1862) Married 1814 George R. Porter (1792-1852) Burial Unknown	Samson (17921862) Unmarried Buried Nunhead	Solomon (1795-1795) Buried Mile End	

It is interesting to observe, in retrospect, that the only children of Abraham and Abigail to be buried in the Sephardic cemetery on Mile End Road were the two infants, Isaac and Solomon, and young Abraham, who apparently was mentally retarded. Abraham and Abigail, of course, were buried there, but their fourteen children who grew to full maturity became integrated into the wider English society. The first child of Abraham and Abigail to become a member of that wider society was the third son, David.

Chapter IV

BOYHOOD IN LONDON AND AMSTERDAM

"When a man is tired of London he is tired of life."

Samuel Johnson (1777)

Given the predominance of agriculture in eighteenth century Britain, it is not surprising that the vast majority of the intelligentsia were born and reared in the countryside, not in the cities. Moreover, members of the *literati* extolled the many virtues of a pastoral life, and the quiet, gentle and peaceful remembrances of their childhood. In London evil stalked: footpads, pick-pockets, and loose women. In the countryside and villages there was virtue. In the new literary form, the novel, the heroes found only misery and injustice in London, and they returned to the countryside to find peace and happiness. Even Samuel Johnson, though he personally thrived on city life, claimed that agriculture was "the most necessary and most indispensable of all professions."

Luxury, avarice, injustice, violence, and ambition, [he wrote] take up their ordinary residence in populous cities; particularly London; while the hard and labourious life of the husbandmen will not admit of these vices. The honest farmer lives in a wise and happy state, which inclines him to justice, temperance, sobriety, sincerity, and every virtue that can dignify human nature.

(Johnson 1756, vol. X, p. 303) [?]

The years of Johnson's life (1709-1784) encompassed a proliferation in the great achievements of literature and the arts. The novel was born of Defoe, and perfected by Richardson, Fielding and Smollett, just as Swift, Pope and Addison dominated prose. This was England's Augustan Age¹ when literary patronage was the hand-maiden of the landed aristocracy. It was the age of Christopher Wren, of Hogarth, of Gainsborough: it was a Golden Age when, for the first time, Britain could boast of a true intelligentsia. The period stretched from the Restoration to the beginning of the wars with France.

Before 1660, what had mattered most in English civilization was the kings, the court, and the clerics. After 1800, commerce and industry were the dominant forces, their influence marked eventually by the Reform Act of 1832 and the abolition of the controversial Corn Laws. Between these periods the landowning classes were the English elite. Augustan literature reflected the essential essence of the age, stressing the theme that man should shape his daily life in accord with taste, nature and reason. The bellicose and contentious atmosphere that had prevailed in seventeenth century England gave way in the next century to a concerted striving for amiability and good taste. When Samuel Johnson defined taste as that "intuitive perception of consonance and propriety," he was merely setting out what he believed to be a social consensus. His was not prescription, but description of the attitude of men of *belles lettres*.

Augustan literature reflected the interests of the landowning class, extolling the simple virtues of the countryside, as against the unnatural requirements of trade and commerce. The landscape was venerated, with the Georgian palatial estates reflecting a quiet and peaceful image. Augustan literature and Georgian architecture both portrayed England as a pastoral paradise.

Thus when David Ricardo, after Waterloo, fashioned the economic theory of the new labor-capital economy, he seriously threatened the idyllic image of the labor-land system that had dominated eighteenth-century Britain. Ricardo's economics was not just a new system, but one that tore at the roots of all that was cherished and admired.

During his professional career, Ricardo was in open opposition to those who believed that village life was not only economically superior to the growing industrial economy, but also more virtuous. He had many critics of varying hues, from his good friend the genteel Thomas Robert Malthus, on the one end, to William Cobbett on the other. Malthus was always amiable and personable, never vindictive, most certainly in possession of what Johnson called the "intuitive perception of . . . propriety" [?]. Cobbett, on the other hand, was the protégé and founder of that peculiar nineteenth-century English institution, the vituperative penny press. His attacks upon Ricardo appealed to the baser instincts of intolerance

¹ The analogy is to the great Roman revival of literature and art, in the reign of Emperor Caesar Augustus, exemplified by the works of Virgil and Horace. Augustus brought an end to Rome's long civil war, ushering in a period of peace and tranquillity. It was during his administration that Rome enjoyed its greatest reputation as an enlightened empire.

and prejudice which had been honed into English culture. Malthus and Cobbett were of the village, Ricardo of the City.

Countryside and City

England's initial *litterati*, the age of Shakespeare, Bacon, and the Elizabethan balladeers, had never cut as wide a swath of knowledge and learning as in the age of Johnson. Moreover, those sixteenth-century beginnings of an English intelligentsia had come crashing down under the onslaught of the Puritan reformers. During the turbulent years of the Cromwells, literature and art were all but forgotten. But the original Elizabethan spirit was rekindled in the eighteenth century, and the breadth and depth of that influence was widespread, as society began to support a large class of men of letters. Only the universities were a wasteland.

The views of the *litterati*, however, are seldom the catalytic agents which shape events and transform society, since frequently their views reflect the image of a past age. Beyond question, that was the shape of things in eighteenth century Britain. The issues which brought about the initial division between Whig and Tory did not obfuscate the fact that stalwarts in both parties looked to the continuation of a rural domination over English life. The works of the poets, the novelists and the essayists reiterated such a view. The idyllic society was built upon the world of the squires, the landlords and the bishops, topped by a ceremonial monarch. The worship of the Roman classics, the veneration of the Latin form, and the search for enlightenment, each was a reaching out to the past to find the simplicity of the natural life. For too long, the country had been torn apart, as the Civil War, the Restoration and, finally, the Glorious Revolution, had taken their toll and contributed to the upheaval. What the new literature sought was a means to reflect upon and enjoy the tranquil life, with Sunday-school children reciting the rhyme which set the tone for the age:

God bless the squire and his relations
And keep us in our proper stations.

(Quoted in Trevelyan 1942, p. 364)

While the words of Swift and Pope soothed the savage breast, and Addison and Steele refined the public taste, another group of men of ideas were fashioning the path to an entirely new way of life: the scientists and the engineers. Arkwright, Hargreaves, Watt and Wedgwood were some of those who brought forth the world of the industrial revolution, and they also belonged to the eighteenth century. While the poets and novelists praised the pastoral life, the men of science buried it in the ashes of the social and economic changes that transformed England into the workshop of the world. The future was in the towns, not the country, while the intelligentsia struggled to keep afloat and swam in the backwater of the onrushing current.

The idealistic view of the English countryside contributed to the way in which Englishmen looked upon life in the growing cities. In contrast to the rural life, with its bountiful supplies of succulent roast beef and plum pudding, there was only an "existence" for the manufacturing centers. As Malthus saw it in 1814:

an *excessive* proportion of manufacturing population does not seem favorable to national quiet and happiness . . . the situation and employment of a manufacturer and his family are even in their best state unfavorable to health and virtue, and it cannot appear desirable that a very large proportion of the whole society should consist of manufacturing labourers. Wealth, population and power are, after all, only valuable, as they tend to improve, increase, and secure the mass of human virtue and happiness.

(Malthus 1814, pp. 117-118; italics in original)

As time passed, as revealed in later chapters, Malthus dropped some of his emphasis that an agricultural state was preferred on grounds of virtue, arguing instead that the inevitable vicissitudes of a manufacturing system were too disruptive of the human spirit for a country such as England. But there remained the common thread to all of Malthus's arguments, that agriculture was a more natural state and more synchronized with man's basic instincts. In his first *Essay on Population* (1798), Malthus stressed the basic and continuous conflict between the results of the proclivity of the sex drive, and the niggardliness of the land's productivity, with the resulting waves of misery coming from the pressure of excess population. But such a state was natural, and therefore best for mankind, nevertheless. The virtues of an agricultural society dignified human nature, as Samuel Johnson claimed, and it was Malthus's view of the nature of human nature that separated him from Ricardo.

As far as William Cobbett was concerned, the age of Swift and Pope still existed, and a rural simplicity was the best of all possible worlds. His haven was Botley, a small village on the Husble River, between Southampton and Portsmouth in the South Downs. In times past that region had called out to Julius Caesar, the Saxons and to William the Conqueror. It was there that Henry VIII courted Ann Boleyn, and to Cobbett it was a paradise, not lost but found. In 1805 he wrote:

Botley is the most delightful village in the world. It has everything in a village, that I love; and nothing of the things I hate. It is in a valley. The soil is rich, thick set with woods; the farms are small, the cottages neat; it has neither workhouse, nor barber, nor attorney, nor justice of the peace, . . . Two doctors, one parson. No trade, except that carried on by two or three persons, who bring coals from the Southampton Water, and who send down timber. All the rest are farmers, farmers' men, millers, millers' men, millwrights, publicans who sell beer to the farmers' men and the farmers; copse-cutters, treestrippers, bark-shavers,

farmers' wheelwrights, farmers' blacksmiths, shopkeepers, a schoolmistress, and in short, nothing but persons belonging to agriculture, to which indeed, the two doctors and the parson belong as much as the rest.

(Sambrook 1973, pp. 58-59)

The village culture that Cobbett idealized, and to which most Englishmen hearkened, was dependent upon the good graces of the landed gentry, as they called the tune of English agriculture. When the opportunity arose, they too succumbed to the call of the cash nexus, transforming the countryside into the commercialized agriculture upon which England's industrial preeminence became dependent. By the end of the eighteenth century, there were few villages to fit the description of Cobbett's Botley. Centuries earlier the death knell of traditional agriculture had rung out in the Midlands and Highlands. By 1805, Botley was an oasis in English agriculture, and like most idyllic versions, no longer a reflection of reality. One by one, the enclosures had swept aside traditional agriculture, the village sacrificed "to the pecuniary interests of a great proprietor, who made a desert where men had worked and prayed" (Tawney 1926, p. 148). The process that began slowly in Warwickshire in the middle of the fifteenth century² continued apace well into the eighteenth, as each Chronicler told of more land being turned to pasture, and of estates growing larger and larger. By the 1730s:

There were a few winners and a multitude of losers lower in the social scale of rural society, although both were fewer than later in the [18th] century. The agricultural labourer had eked out a precarious living by using his small allotments and his common rights, but with enclosure, which always required a considerable capital expenditure, these disappeared, and the consequence was a growth in rural poverty which became the nightmare of local administration. The small proprietor—the peasant or yeoman—suffered in a similar way. More often than not he lacked the capital for enclosure: if he was a small tenant farmer, he became unprofitable to his landlord and out he went. The dispossessed swelled the ranks of the rural poor or were eaten up by the towns.

(Plumb, 1950, pp. 19-20)

The ostentatious Georgian estate, with the formal gardens and rolling landscape, protected from the peasant masses by the enclosures, transformed the land. There were many epic poems which cried out about the passing of village life, perhaps the most famous being Oliver Goldsmith's (1728-1774) description of his beloved Auburn, "The Deserted Village" (1770).

² "The first detailed account of enclosure had been written by a chantry priest in Warwickshire, soon after 1460. Then had come the legislation of 1489, 1515 and 1516, Wolsey's Royal Commission in 1517, and more legislation in 1534." (Tawney 1926, p. 138)

Sweet Auburn! loveliest village of the plain,
Where health and plenty cheered the laboring swain,

These were thy charms—but all these charms are fled.
Sweet smiling village, loveliest of the lawn,
Thy sports are fled, and all thy charms withdrawn;
Amidst thy bowers the tyrant's hand is seen,
And desolation saddens all thy green:
One only master grasps the whole domain,
And half a tillage stints thy smiling plain;

A time there was, ere England's griefs began,
When every rood of ground maintained its man;
For him light labor spread her wholesome store,
Just gave what life required, but gave no more:
His best companions, innocence and health,
And his best riches, ignorance of wealth.
But times are altered; trade's unfeeling train
Usurp the land, and dispossess the swain;
Along the lawn, where scattered hamlets rose,
Unwieldy wealth, and cumbrous pomp repose;
And every want to opulence allied,
And every pang that folly pays to pride.

(Goldsmith 1770, Lines 1-2, 32-38, 53-64)

As Cobbett saw it, there were evil men loose in the nation, as the monied interests were destroying the pastoral system. But one day soon that evil force would be destroyed, and virtue would return.

All things will return; these rubbishy things, on this common, will first be deserted, then crumble down, then be swept away, and the cattle, sheep, pigs, and geese will once again graze upon the common, which will again furnish health, furze and turf for the labourers on the neighboring lands.

(Cobbett, 1830, Vol. I, p. 37)

In the meantime there was the monster of the monied interests to be destroyed. The monied interests, after all, were responsible for the decline of what was good and respectable, and as Lord Chatham and Samuel Johnson were no longer around to goad their ox, Cobbett rode the rural areas, identifying the enemy.

The system of upstarts: of low-bred, low-minded sycophants usurping the stations designed by nature, by reason, by the Constitution, and by the interests of the people, to men of high birth, eminent talents, or great national services; the system by

which ancient Aristocracy and the Church have been undermined;
by which the ancient gentry of the Kingdom have transferred, by
the hand of the tax-gatherer to contractors, jobbers and Jews . . .

(Political Register, 20 April 1805, p. 597)

This, written by the reputed father of British socialism, was hardly a plea for egalitarianism, but the latest, and not the last, attempt to heap blame upon the Jews.

In the villages of their youth, Lichfield, Dorking and Botley, Johnson, Malthus and Cobbett had learned a proper respect for the countryside, and its way of life. Like most of the writers of the eighteenth century, whether poet, novelist or pamphleteer, they were not just enamored with the bountiful productivity of English agriculture, at the time second to none, but also with the type of daily existence which such a system provided. To a large extent it was the life style itself which they most admired, even though undoubtedly that view was idyllic. It is doubtful, for example, if there really was as much sobriety, sincerity and justice among the farmers and "farmers' men" as was claimed. In any society, there are sharp contrasts and conflicts between the reality and the ideal, no less so in the eighteenth-century English countryside.

In his youth, David Ricardo had no firsthand knowledge of the life style of a village, since he never lived in one. In cities, where his critics saw greed and ambition run amok, Ricardo found the hustle and bustle of his youth and that was "gratifying." Moreover, his attitude as to the advantages of city life did not change, even after he moved to Gloucestershire. On his estate, Gatcomb Park, he had the opportunity to compare country and city life, but it is clear that he always preferred the latter.

In the spring of 1822, David went on the Grand Tour of the continent, with his wife, Priscilla, and their two youngest daughters, Mary and Birtha. They were gone from July through November, as the trip dragged on incessantly. Throughout the tour, David kept a diary, and sent home long detailed reports of the fortunes and misfortunes of travel to be shared by family and friends. His greatest enthusiasm centered on the cities, and their economic activity. From Brussels, he wrote:

Our Inn is situated in the principal square close to the park, but it is so quiet that we cannot help regretting we did not go to a Hotel in a more busy part of the town. At Lisle our Inn was in a large square, but then it was a square full of shops, and thro' which carts, horses, men, women, and children were incessantly passing. Here it is in a more genteel situation and is proportionably insipid.

(Works, Vol. X, p. 188; David Ricardo to James Mill, 16 July 1822)

And,

Rotterdam is an excellent town. It is quite such a place as I like to see, full of business and bustle. The houses are very good—the canals full of ships and boats.

(Works, Vol. X, p. 195; David Ricardo to Osman Ricardo, 20 July 1822)

In Breda,

The sight of shipping, and the business which always accompanies it, is very gratifying to me.

(*Works*, Vol. X, p. 193; David Ricardo to Osman Ricardo)

From the Hague,

We have been in the business part . . . to day, to me not the least pleasing part. The shops are very good, and the people actively employed.

(*Works*, Vol. X, p. 203; David Ricardo to Osman Ricardo)

Schaffhausen appeared "to be a clean and pretty town," but the day Ricardo visited, it was "very dull," "the shops being shut up" (*Works*, Vol. X, p. 236; David Ricardo to Osman Ricardo). In Bale "the activity and bustle of a market day are always interesting," yet not much could be said of its market (*Works*, Vol. X, p. 233; David Ricardo to Osman Ricardo).

Moreover, in not all the cities he visited did Ricardo find the "hustle and bustle" which he so much enjoyed. Journal entries record his findings that Hamburg was a "poor wretched looking place" (*Works*, Vol. X, p. 224;), and Neuss a "very dull looking town" (*Works*, Vol. X, p. 213) as was Cassell, though the latter had a beautiful setting (*Works*, Vol. X, p. 183).

In Livorno (Leghorn), the city of his great, great grandfather, Samuel van Mozes Israel, Ricardo was critical of the inhabitants, and their manners.

The first appearance of Leghorn is pleasing, the principal street being wide, and the shops good, but before I came away I had a much less pleasing impression of it. The inhabitants seem to live in the streets and they are a very motley race—few if any genteel people crossed our path, but the beggars were innumerable, and in advancing their claims to your charity each had some dreadful personal deformity to expose. The harbour is an excellent one and the pier which encloses it on one side is a work very creditable to the town. The sea view is good—that with the number of ships in and about the port could not fail to be interesting. There is not much to see in Leghorn—The Promenade, or evening ride of the inhabitants, is very dull, on a barren heath—it would be supremely so were it not for the view of the sea on one side of it. We visited the Synagogue which is a very beautiful one—we saw a manufactory of coral beads, in which a number of people were employed in cutting, rounding, and polishing pieces of coral and fitting them for necklaces.

(*Works*, Vol. X, pp. 321-322; David Ricardo to Osman Ricardo, 24 October 1822)

We find no evidence that David was aware of his ancestral link with Livorno. Undoubtedly, the synagogue he visited had been the house of prayer of Samuel van Mozes Israel, and coral manufacturing his profession. There is no indication that David even was aware that his surname was of Italian origin, since his roots were in London and Amsterdam.

The City and Metropolis of London

Roman legions first garrisoned in London (Londinium) in 43 A.D., with southern England one of the five provinces of the Empire, under the Principate of Claudius I. The Roman interest in the Celt's land centered upon tapping the rich agricultural resources. To reach the heartland, the invaders sailed their galleys the fifty-odd miles up the Thames, to the head of the tidewater, the site of London. There is little archaeological evidence of how large a settlement the Romans found in London, but they certainly were not the first inhabitants. The City of London grew in importance as a Roman garrison, and the major geographical contours and the City's structure, as it is shown in Figure IV-1 were established under Roman tutelage.

After several burnings and sackings by Icenian tribesmen in the second century, the Romans built a wall around their site, with the Thames as the southern boundary. The encompassed area was approximately 677 acres, the size of the City of London. The Roman Wall had six gates: Aldgate, Bishopsgate, Cripplegate, Aldersgate, Newgate and Ludgate (see map, Figure IV-1). Providing the only entrances to the City, each gate was an opening to a major artery of the site. After the Romans departed in the fifth century, the Wall deteriorated; it was reinforced and improved by the Saxons in the seventh century, and by the Normans in the eleventh century. During the medieval period, two additional land gates were cut, Moorgate and Little Cripplegate, and four river gates added: Dowgate, Ebbgate, Billingsgate, and Irongate. The last contribution to the City's defense was the Tower, commenced by William the Conqueror and completed in the thirteenth century.

The City historically has always been a commercial and trading center, and the names of many of its streets and alleys reflect the early basic needs of its inhabitants; Fish Street, Poultry Street, Bread Street and Threadneedle Street, not to mention Old Fish Street, are but a few of the suggestive origins of commerce. It was on Lombard Street that early Italian bankers undertook their business, with Exchange Alley the center of foreign currency markets. Old Jewry Street, directly north of the intersection of Cheapside and Poultry Streets, was the residential area of the Jews who accompanied William the Conqueror. The area was vacated after 1290; when the Amsterdam Jews migrated to the City in 1656 they settled in areas further east, along Broad Street and Bury Street.

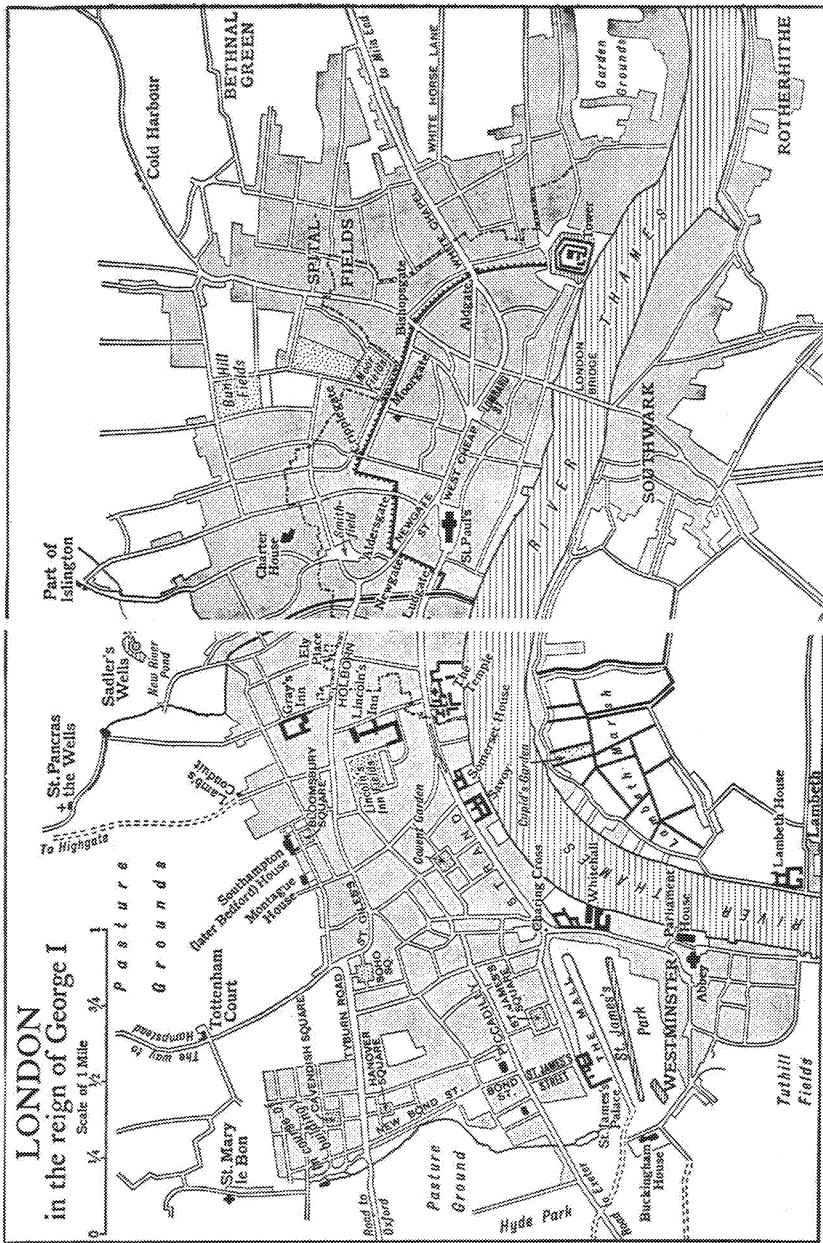


Figure IV-1. The City and Metropolis of London, 1714 - 1727

In addition to walling the city, the Romans also built the first London Bridge over the Thames, leading to the area of what became Southwark. In Roman times, the site of London was some fifteen feet above the Thames, and the bridge provided much easier access. Over the centuries, succeeding inhabitants maintained the original London Bridge, and in the twelfth century a new bridge was built between London and Southwark. With nineteen arches spanning its three hundred yards, the new bridge was a city unto itself. On either side of the bridgeway were rows and rows of shops, each topped by a house of three to seven stories. Until the reign of James I, the Tower was the official London residence of the ruling monarch, and in bellicose times the London Bridge was used as a fortress to the south.

Although the Tower was the residence of the king, the City was always independent, an autonomous walled area within the kingdom, an independence that developed because of the Wall. The independence preceded the Norman invasion, and although threatened at the time, it continued uninterrupted thereafter. Ruling monarchs even were required to request permission to enter the City from the Lord Mayor, and then resided there under his protection.

When James I moved his official residence to the City of Westminster, it was because the new site was more pleasing to his Scottish whim, and because he did not particularly appreciate the City's independent spirit. Furthermore, by 1603, the 677-acre area within the Wall was no longer sufficient to house both the burgeoning commercial activities and those of the central government. The separation reinforced the City's political independence, and also designated it as exclusively the commercial and financial center of England. While considerable population growth and overcrowding continued, the jurisdiction of the incorporated area never extended beyond the Wall; moreover, the outlying areas of the metropolis grew more rapidly than the City.

In 1760 the iron gates of the Wall were removed, as were those over the entrances to the London Bridge. These dismantlings were extremely symbolic; by the eighteenth century, "London" was defined as "the Cities and liberties of London and Westminster, the Borough of Southwark and parts adjacent." (George 1966, p. 313, n.1)

By the reign of George I (1714-1727), the growth of London "beyond the wall" was well advanced, and the Cities of Westminster and London were coming together, a solidification of the seat of government and the hub of commerce, trade and industry, under the guise of a metropolitan area. The population was spread to the west and north of the City; the western expansion, because of the increasing importance of government, spread to the north because of the settlement of the Irish immigrants. By the middle of the eighteenth century, the City was declining in industrial importance, as the restrictive practices of the guilds "within the wall" were driving the newer industries to the suburbs. In the seventeenth century the City of London had been alive with mercers, grocers and drapers, but by the eighteenth century it was bankers, stock-brokers, and commission agents of insurance and trading companies that dominated. One pamphleteer, in 1749, claimed:

it appears that the decline in trade so much complained of in the capital is . . . a variation and change of trade from one kind to another; a laying down of less lucrative and more hazardous employments in order to pursue others that turn to better accounts . . . compared with those of the merchant exporter, are those of agents, factors, brokers, insurers, bankers, negotiators, discounters, subscribers, contractors, remitters, ticket-mongers, stock-jobbers, and a great variety of other dealers in money, the names of whose employments were wholly unknown to our forefathers. As also are those of governors, directors, commissioners, and of a vast train of secretaries, clerks, book-keepers and others, their attendants and dependents, most of which employments are peculiar to London, and are more lucrative than that of merchant exporter, and the profits of many of them must be vastly increased by the late increase of the national debt.

(George 1966, p. 313, n.2)

By David Ricardo's time, the 677 acres of the City of London were covered almost exclusively with banking and financial establishments, an economic enclave within the burgeoning metropolis outside the City Wall. Within this same enclave was the enclave of the Sephardic community, so that he was doubly isolated from the urban environs, the gathering places of some of the most wretched and poverty-stricken masses on the face of the earth, the immigrants of the London metropolis.

The City of London was part of the ancient County of Middlesex, the land that lay between the West Saxons and the East Saxons. The City's size and its economic base meant that, historically, Middlesex was of secondary importance, with the Sheriff of the City also having jurisdiction over the County. Westminster and Southwark also were within the boundaries of Middlesex, but because they emerged many centuries after London, neither acquired an independent political status. The free freeholders of Middlesex had the right to elect two members of the House of Commons, just as the City of London selected its two members. By the middle of the century, Middlesex was a political entity which encompassed the metropolis, even though the economic base remained within the Wall. The changing numbers of the several regions of the metropolis are recorded in Table IV-1.

**Table IV-1. Population of the London Metropolis
in the Eighteenth Century**

Region	1700	1750	1801
City Within the Wall	139,300	87,000	78,000
City Outside the Wall	69,000	57,000	56,300
Borough of Southwark	100,000	94,700	98,700
Westminster	130,000	152,000	165,000
Parishes of Middlesex & Surrey	139,500	285,800	502,000
Total	674,350	676,250	900,000

Source: George 1966, p. 319

The largest and most distressed group were the Irish, whose emigration to London reached its height in the eighteenth century. Not only did Londoners worry about their great numbers, which was resulting in large pockets of unemployment, but the situation was aggravated because the Irish were typically unskilled, and therefore poorly paid, even by the standard of the times. The geographic distribution of the clusters of Irish immigrants reflected the diverse types of jobs which they were forced to find. The most wretched were centered in the parishes of St. Giles in the Field and Bloomsbury, both off Tyburn Road, in the northwest section of the metropolis. Although eventually these sections became some of the most fashionable in London, they were during the eighteenth century, the entry points for the arriving Irish immigrants. Tyburn Road was a gathering place for beggars and thieves, along with those on the bottom rung of the employment scale, the sewage porters, chairmen, and street hawkers of fruits, vegetables, and gin. People of varying ages squeezed into single rooms, the numbers sometimes running as high as thirty or forty. Muggings, murder and mayhem were daily occurrences, with little or no police surveillance. Particularly destitute and unprotected were the young Irish women, arriving in droves, in search of domestic employment. Supply typically exceeded effective demand, with prostitution the next most likely alternative. Their plight was described, as late as 1776, thus:

Immediately on their arrival . . . there are miscreants of both sexes on the watch to seduce the fresh country maiden, with infinite protestations of friendship, service, love and pity, to prostitution . . . the very carriages which convey them are hunted and examined; the inns where they alight are beset by these infernal hirelings.

(Quoted in George 1966, p. 120)

The environment of Tyburn Road bred a high incidence of crime, with most of the offenders being brought to the docket in Westminster. As a result, the City of Westminster was the first in the metropolis to establish a procedure for administering criminal justice, and to create a professional police force, the famous Bow Street runners. The leaders of this movement were the two Fielding brothers, Henry (1709-1754) and John (1721-1780). Each made crime a subject of study and research, though Henry became more famous as one of the first novelists. He served as a Westminster magistrate for many years, and his perception of the relation between the conditions of poverty and the incidence of crime was insightful.

If one considers the Destruction of all Morality, Decency and Modesty, the Swearing, Whoredom and Drunkenness, which is externally carrying on in these Houses on the one hand, and the excessive Poverty and Misery of most of the Inhabitants on the other, it seems doubtful whether they are most the Objects of Detestation or Compassion: for such is the Poverty of these Wretches, that, upon searching all the above Number the Money found upon all of them

. . . did not amount to One Shilling, and I have been credibly informed that a single Loaf hath supplied a whole Family with their Provisions for a Week. . . .

This Picture, which is taken from the Life, will appear strange to many, for the Evil here described, is, I am confident, very little known, especially to those of the better sort. Indeed, this is the only Excuse, I believe the only Reason, that it hath been so long tolerated: for when we consider the Number of these Wretches, which in the Out-skirts of the Town amounts to many Thousands, it is a Nuisance which will appear to be big with every moral and political Mischief.

(Fielding 1751, pp. 92-93)

Another cluster of Irish immigrants was found further north of St. Giles, in the parishes of Paddington and Marylebone. These were unskilled construction workers, and the pit-men employed on the Paddington Canal. Together with their families, they also were crowded into small construction site huts, along with their pigs, asses and dogs, surrounded by the ever present potato patch. The huts typically had neither windows, chimneys nor floors, and a dense smoky haze hung in the dwellings, with all matter of debris.

A third Irish settlement was located on the east Thames, at Wapping and Shadwell, the London centers of shipping. Here the men found casual employment as coal-hearers, ballast-men and longshoremen. Employment was irregular, and people endured large-scale idleness, with heavy consumption of cheap gin, fighting, family neglect, and the other usual products of poverty. For those who lived amongst the wharves, there was the additional hazard of being waylaid to complete a ship's crew. The large quantities of penny gin resulted in a derived supply of candidates available for shanghaiing.

Authorities have always disputed the effect of adverse living conditions upon the strength and endurance of workers. In eighteenth-century London, for example, it might have been expected that the environmental circumstances of the Irish would have had an adverse effect upon their ability to perform heavy physical labor. Quite the opposite was the case, since Irish laborers were preferred to the English because of their great strength, despite their poverty. Adam Smith attributed the strength of the men, and the beauty of Irish women, to the potato, the basic diet (Smith 1937, p. 161). Whatever the reason, the Irish dominated occupations requiring great strength and heavy lifting, such as sedan chairmen, porters, wood haulers and milk vendors. The greatest need for these services was in the City, but since the Irish could not afford to live within the Wall, they settled along Whitechapel Road, to the east of Aldgate.

Besides the Irish concentrations in St. Giles, Bloomsbury, Paddington, Wapping and Whitechapel Road, they also took up most of the jobs in the fruit and vegetable gardens and milk farms, in Middlesex north of the City. In the gardens the work was seasonal, and during the periods of job scarcity the workers would return to their own homesteads in Ireland. This meant there was a highly fluid work force in and out of Middlesex.

By the 1770s, the metropolis numbered about 725,000. Estimates considerably vary as to the size of the Irish population, but it was significant. In 1780, one authority estimated the number of Irish households at 14,000, another at 35,000 (Rude 1974, p. 286). Using a figure of eight, as the number of heads per household, this would set the Irish population somewhere between 112,000 and 280,000, 15 to 39 percent of the metropolis. Whichever estimate is accepted, the Irish represented the largest immigrant group in London. The next largest, the Jews, totaled about 7,500 (George 1966, p. 134), the vast majority being Ashkenazim. The other major immigrant groups, the French Huguenots and various blacks, were few.

As London grew, the open hostility expressed towards the Jews never wavered; if anything, it was on the increase because of the large number of poor from Eastern Europe³ But whatever the attitude toward the Jewish immigrants, it was the great increase in the number of Irish that most disturbed the English, especially after the middle of the eighteenth century. There were a number of sources of these feelings.

Fundamental to the English contempt for the Irish was the ancient matter of religion, since almost all of the Irish were Roman Catholics. When no other excuse was left to fall back upon, one always heard cries of "No Popery" and "Jacobite traitors." Not allowed to have their own church schools, and with their chapels suspect as the meeting places for popish agents, the Irish were constantly being downgraded for their religious beliefs. Undoubtedly, however, the religious issue was a subterfuge for more subtle concerns.

English chauvinism was rampant, expressing itself not only in regard to the superiority of Protestantism, but of everything English. For example, to actually eat any staple other than wheat was a mark of inferiority, and the Irish and their potato was a matter for utter contempt. Samuel Johnson expressed this English superiority when he defined oats as "a grain, which in England is generally given to horses, but in Scotland supports the people" [Henderson's paraphrase of "*Oats, the food of horses, . . . so much used as the food of the people*" (Boswell 1953, p. 707)]. Johnson had no such scornful barb for the potato, but it was generally viewed as a dangerous and contemptible tuber. Only an Irishman would stoop to dig it out of the dirt, and in the eighteenth century their average daily consumption was about eight pounds per person.

Other cultural differences tended to reinforce these historical prejudices, especially when the Irish brought their social customs with them, and continued to live in London as they had in Ireland. Dorothy George has called attention to at least three Irish customs which the English found especially offensive. First, they had a propensity toward sharing their living quarters with pigs, asses and dogs. Second, they practiced sub-tenanting, the renting of a portion of a room or bed to a stranger. Third, they observed the obnoxious vigil over their dead, the wake.

³ Speaking of the Jewish poor, one observer claimed that "they have greatly multiplied both by propagation and importation, but property has not kept pace with this increase. . . the bulk . . . have no regular trade whereby to earn a maintenance. The few they follow, such as dealing in old clothes, &c., are daily becoming less productive and at present they know no other." (George 1966, p. 135)

Poverty accentuated these cultural differences, and drove the wedge deeper between the Irish and the English. A wake, that in Ireland might extend to four days, in London would continue eight to ten days, allowing the deceased's family time to raise enough funds for a burial. The transitory character of much Irish employment meant that sub-tenancing was widespread. Flexibility was of benefit to not only the tenant, but to the landlord as well, as he was able to rent space for a day at a time, and to more than one person, as people slept in shifts. It was this practice that led to the excessive overcrowding of the Irish living quarters. The extreme poverty also meant that heat was seldom available, and given the damp and cold weather of London, a good source of warmth was pigs.

The London Mob

Far more threatening than the cultural and religious differences with the Irish was the competition the immigrants represented to English craftsmen and apprentices. As they were a cheap source of labor, the Irish jeopardized the jobs of the English. Robert Walpole (1676-1745), the first Whig Prime Minister, described the problem at the time of the disturbances of 1736, and the situation became even more exasperated as the century moved forward.

this complaint [Walpole wrote] against the Irish . . . is founded upon greater numbers than ordinary . . . of Irish being here, and not only working at hay and corn harvest, but letting themselves out to all sorts of ordinary labour considerably cheaper than the English labourers have, and numbers of them being employed by the weavers upon like terms . . . the master workmen discharged at once a great number of all sorts of labourers and took in . . . Irishmen who served for above one-third less per day.

(Quoted in George 1966, p. 124)

The Irish threat to English working men was the cause of two major uprisings, one in 1736, the other in 1780, at the time of the Gordon Riots. Although the events of June 1780 commenced over the relaxation of specific religious sanctions against the Irish, the disturbances quickly acquired the character of economic reprisal by the London Mob.

The riots of 1736 were precipitated by a gin tax, but the discontent generated by this action was manifest in the numerous outbreaks of the growing and festering Englishman's hatred for the Irish. One problem was that the Young Pretender had picked up his father's cudgel, and the Jacobite threat was once again on the horizon. The Irish were obviously suspect. But more important, the undercutting of wages, brought on by the ever increasing number of Irish immigrants, was what led to the cries of "Down with the Irish," and "it's the English against the Irish." The British workmen rioted for a week. Walpole's Government restored order, but this did not eliminate the tension.

Unlike the riots of 1736 and 1780, the riots in support of John Wilkes did not center on the Irish, since they were precipitated by George III's determination not only to curtail the freedom of the press, but to restrict the right of free elections. Elected to Parliament on five different occasions, once from the City and four times from Middlesex, Wilkes became the rallying point for those who opposed the encroachment upon their "liberties." He drew support from a wide base: the merchants and householders of the City of London, the smaller freeholders of Middlesex, and the "inferior" people of London, Westminster and Southwark. For two years, 1768-1769, the disturbances and rallies flared up, with Wilkes finally taking his seat, a victory for the "London Mob" which supported him.

On 2 June 1780, some 60,000 persons gathered in Southwark, summoned to a rally of the Protestant Association, under the presidency of Lord George Gordon.⁴ Though titled, Gordon was a Scottish peer, not a member of the House of Lords. He represented a Whig rotten borough in Wiltshire, and had been a member of the Commons since 1774. In the evening of the day of the rally, Gordon presented his petition to the Commons urging the repeal of the legislation of 1778, which had removed several of the English sanctions against the Irish. The War of American Independence had placed the British in need of soldiers, so the Irish were granted permission to join the armed services by taking an oath of allegiance to the Crown, without having to convert to Protestantism, in accordance with the Act of Succession. The legislation of 1778 also permitted Catholics to open their own church schools and to purchase and inherit land. To the leaders of the Protestant Association, these concessions once again opened the door to Popery and to the revival of the Jacobite threat. When the Commons failed to act upon Gordon's petition, signed by tens of thousands, his followers began to riot and loot, and for over a week the metropolis was in chaos. Their principal targets were the homes, churches and schools of the Irish Catholics, with "No Popery" once again the slogan. (See Figure IV-2).

The pages of the history and literature of the eighteenth century are heavily peppered with accounts of the London Mob, pages implying that it was composed exclusively of pickpockets, beggars, housebreakers and assorted unemployed persons and unreasonable malcontents. Such an impression is misleading, to say the least. As Walpole observed, the major cause of the disturbance in 1736 was the displacement of English craftsmen and apprentices by cheap Irish laborers, and it was not thieves and beggars who rioted, but working men. The supporters of John Wilkes, moreover, were merchants, householders and craftsmen from London and Westminster. In his novel about the Gordon Riots, *Barnaby Rudge* (1841), Charles Dickens referred to the rioters as "sober workingmen" (Dickens 1841, p. 133). It would be in error, of course, to deny that, once the rioting was in full force, marginal groups did not join in the looting and burning. But in all three disturbances, the London Mob was dominated and led by workingmen, not by the rabble.

⁴ There are numerous descriptions of the Gordon Riots. The discussion in the text is taken primarily from the work by Rude 1974, pp. 268-292.

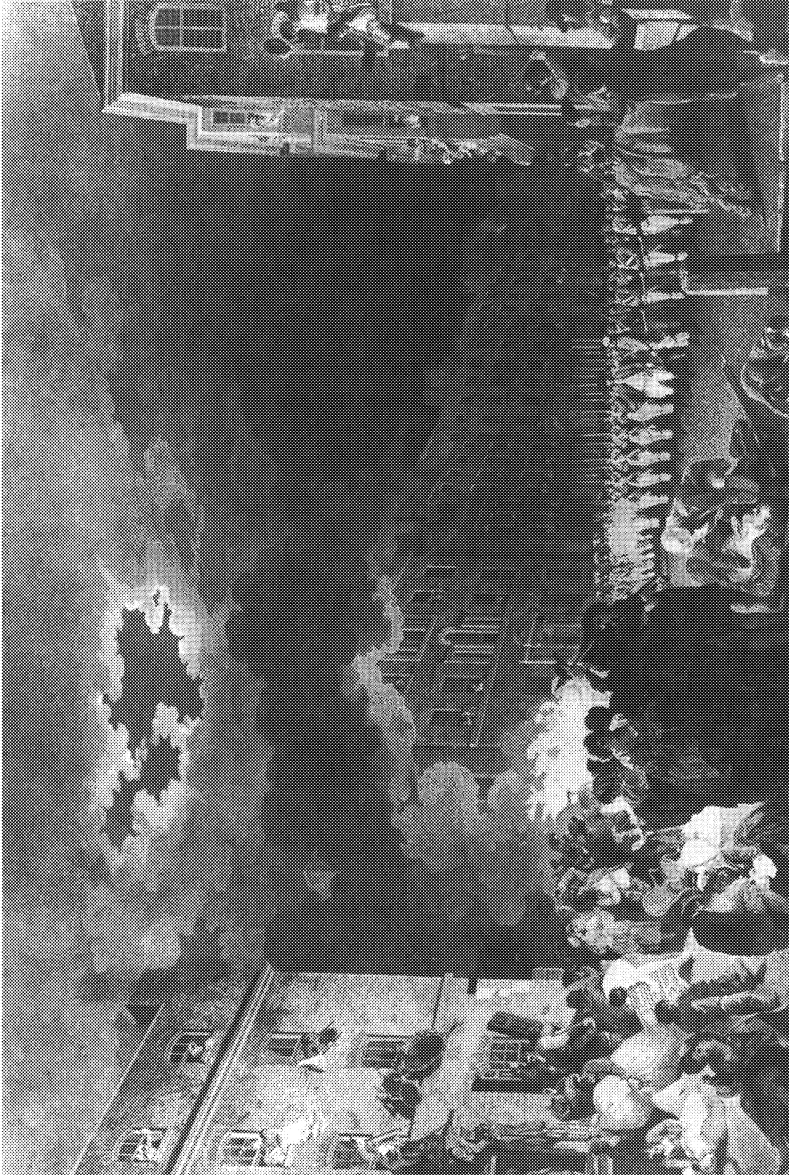


Figure IV-2. The Gordon Riots, Broad Street, 7 June 1780.
Copy of Engraving by James Heath, British Museum

In the case of the Gordon Riots, two aspects stand out. First, there was no question that Irish Catholics were the target, and second, the victims were gentlemen, publicans and Irish Catholics in the higher ranges of income. As Rude has said, "There was . . . a distinct class bias in the direction of the attack made by the rioters in the Roman Catholic community." (Rude 1974, p. 286)

There were charges that the leaders of the riots circulated lists of the houses to be attacked, and whether they did exist is of little moment, for the precision of the rioters was pinpoint. Of the seventeen houses destroyed or heavily damaged,⁵ thirteen were the homes of Irish Catholics. Of the forty-seven householders who were compensated by the government for their damages, forty-three were Irish Catholics.

The same type of precision also prevailed with respect to the neighborhoods of the Irish that were attacked. In the six parishes with the highest concentration of Irish Catholics, totaling 6,551, only fifteen houses were damaged. In the six parishes with the largest number of damaged houses, there were only 2,230 Irish Catholics. Thus, the rioters did not direct their attacks toward the Irish community as a whole, but at the homes of the well-to-do Irish.

The occupational composition of the rioters lends some credence to the argument that the disturbance assumed a class orientation. Altogether, some 450 participants were arrested, of whom 160 were brought to trial in Old Bailey.⁶ Of this number, the occupations of 110 were listed; thirty-four were small employers, shopkeepers, peddlers and independent craftsmen, while seventy-six (69 percent) were wage-earners. Of the two principal leaders of the daily riots, one was a journeyman wheelwright, the other a coach master.

On 7 June rioters turned toward the City, with the intention of burning the Bank of England and Royal Exchange, the great symbols of wealth and commercial power. By this late date George III had called out the military in the London area and, reinforced by the militia, the Bank and Exchange were saved. Some 10,000 troops stationed themselves on Broad Street, and altogether over two hundred died, with nearly as many wounded. The incident marked the first time in British history that government troops fired upon their own citizens. The obvious failure of the magistrates of London, Westminster and Southwark to put down the riots, because

⁵ The rioters did not torch houses, but removed the furnishings, clothing and whatever they could carry, and set them on fire in the street. This practice prevented the fires from spreading, and with one exception the procedure was effective. On the night of 6 June 1780 the house of a distiller, Thomas Langdale, containing 120,000 gallons of gin was attacked. The gin vats exploded and the fire spread to other buildings, some twenty odd in number. The gin that was not destroyed by fire was drunk by the rioters, who then freed the prisoners in Fleet Prison, and went on a drunken rage, looting and torching at random.

⁶ Of the 160 persons brought to trial, 25 were hanged, 49 sent to prison, and the rest discharged or found not guilty. Gordon was tried for high treason, but acquitted, as it was impossible to prove he encouraged the specific incidents of rioting and looting. Ironically, Gordon converted to Judaism, apparently believing he could convince the Jewish community not to finance the Napoleonic Wars. He was sent to Newgate Prison for libel, and lived there the last five years of his life, where he died in 1793. After conversion he was an orthodox Jew, with strict observance of the dietary laws. (*Dictionary of National Biography*, Vol. 22, pp. 197-198.)

of their sympathy for the anti-Irish orientation of the rioters, made the central government realize that control was essential.

The decision of the rioters to attempt to burn the Bank and the Royal Exchange proved detrimental to their cause. Since both were located at the end of Broad Street, where it ends at Cornhill, it was the widest street in the City, and easily could accommodate the thousands of troops which the Government called out. Entering the City from the north, the troops marched down Broad Street and turned the riot into a slaughter.

Two themes dominated British politics at the turn into the nineteenth century, a labor theme and a land theme. Both topics arose because of the new character of the English economy, as dynamic factors affected not only the conditions of the labor market, but also the status of the landed gentry. Of particular importance, in each instance, were the social and economic changes within the City and metropolis of London, as well as London's new role in English society.

The labor theme was associated with greater London, because it was there that immigration exercised the greatest impact upon the changing character of the labor market. For centuries, the craftsmen and guildsmen of the City had collectively governed the production and distribution of their product, and through the apprenticeship system they controlled access to the work force. By the middle of the century these dominions of power were slipping away. The very nature of the occupations and jobs in the City had changed, as the numbers in finance, insurance and banking far outstripped those of the traditional crafts and guilds. Furthermore, the guild controls never extended beyond the wall, and in the greater metropolis the immigrants were gaining access to the labor markets, the death knell of the apprenticeship system. English employers were employing the Irish in ever increasing numbers, at wage rates considerably below those paid to native working men.

The London workingmen reacted to these changes by lashing out at the immigrants, or at any attempt to alter the "foreign" stigma that worked to their advantage. It made no difference whether the change in status was naturalization or relaxation of religious restrictions. In 1753, when it was proposed that French Protestants be naturalized, the clamor was for "no wooden shoes," just as the Jewish Naturalization Bill had been met with cries of "No Jews." In 1780, opposition to the Irish had centered on the relaxation of religious sanctions, with "No Popery."

By the time of the Gordon riots, the opposition of English workingmen to the increasing number of immigrants had reached new proportions. For the first time, the "London Mob" attacked property, taking considerable economic reprisal. Initially the targets were only the Irishmen of property, the manufacturers, merchants and publicans, as the riots followed their anti-Irish orientation. The direction of the riots changed, however, and English capital in general was attacked, though not individual men of property, or the English employers who took on immigrants at lower wages. It was institutionalized English wealth that the rioters turned against: the Bank, the Royal Exchange, and the toll booths of Blackfriars Bridge.

The recurring outbreaks of the "London Mob" had a common thread, the protection of English workingmen from any encroachment upon their "rights and liberties." Such threats came from several sources: the substitution of Irish workers at lower wages (1736), proposed naturalization of the Huguenots (1753), George III's endeavor to dictate London's representatives to the House of Commons (1768), and the relaxation of religious sanctions against the Irish (1780). Each was viewed as a threat to the integrity and authority of the time-honored independence of the City of London.

In addition, the "Mob" was peculiar to the London labor market since similar organized opposition was not found in the new manufacturing towns of the midlands. The reason was that these new centers had no history of control being exercised by craftsmen and guildsmen, since these centers had emerged in the rural areas. The English rural unemployed of the eighteenth century, displaced by enclosures, floated to the new manufacturing towns and not to London. Having never exercised control over the labor markets of the rural areas, these laborers did not strike out at changing market conditions, as did the "London Mob."

The land theme of the last decades of the century centered upon England's agricultural economy and the inability to meet the increasing demand for its product, at prices competitive with the continent. As England experienced both economic growth and development, the exercise of political power by the landed gentry had grown more and more out of step with the new needs of commercial and industrial enterprise. Similar to the English workingman's control of London, the English gentry was nurtured by a protectionist system. It was not just a system of tariff walls against foreign competition in grain, though it was that, but also a protection that extended to the unreformed Parliament and all which that entailed. The *nouveau riche*, the commercial, financial and industrial heirs to England's economic progress, were demanding an increasing role in the determination of policy, through the exercise of political and economic control.

The preeminence of the English gentry was placed in jeopardy by London's increasing importance and transformation. No longer only a trading capital, it had become the locus of a central government that had usurped the historical control exercised by the villages, the countryside and the shires. The economic basis of power had shifted, but so long as political control remained with the gentry, the land theme would remain an important aspect of English life.

In the course of the Napoleonic Wars, liquid wealth assumed new dimensions, as the holders of money instruments grew in importance, becoming almost as significant as the holders of wealth in land. The growth in money markets, accompanied by the increase in the public and private debt, constituted finance capital as a new power domain. Money now mattered, as the landed gentry became increasingly dependent upon finance capital as a means of preserving the character of the Augustan and Georgian age. The locus of England's financial capital was "within the wall," the home of the monied interests, characterized by Chatham as the "miserable jobbers of Change Alley", and "the lofty Asiatic plunderers of Leadenhall Street."

For the members of the ancient regime, the monied interests were the threat, and the symbols of that threat were the Jews. To the craftsmen and guildsmen of the City of London the immigrants were the threat, and symbols of that threat were the Irish. The two groups were integral to London, but just as they were threats to separate classes, they were also apart. One without the wall, the other within; the metropolis and the City.

The Parental Family

Abigail and Abraham Ricardo had a family of seventeen children, six daughters and eleven sons; two sons died in infancy (See Table III-4, p. 110). The first four children were born at 36 Broad Street, near the intersection with Winchester Street, an area inhabited by "merchants and persons of repute" (Maitland 1775, p. 839). In 1774, the family moved to 1 Bury Street, the center of the Sephardic community. Bury Street was

very handsome and cleanly kept, with good uniform buildings on both sides, well inhabited, mostly by *Jews*, who dwell privately, without shops.

(Maitland 1775, p. 777, italics in original)

Abigail's family, the Delvalles, had lived on the street for decades, a factor which may have been influential in the selection of the new residence. But in addition, Bury Street intersected with Bevis Marks Street,⁷ close to the synagogue and, with Abraham's duties with the Congregation, the new location was also more convenient for him.

For eighteen years the Ricardos lived on Bury Street, before finally moving to Old Ford, Middlesex. Over the first stretch of time, Abigail gave birth to eleven children, while in Middlesex two more children were born. By the time the family moved out of the City in 1792, Abraham was sixty years old, and although still active in business, the move was symbolic of a slowing pace, particularly with the Synagogue. Moreover, David was by then twenty, and was very heavily involved in his father's business, as well as being a stockjobber in his own right (*Works*, Vol. X, p. 67).

Given the elder Ricardo's success as a stockjobber, and his considerable influence, it is not surprising that many of his sons possessed a strong penchant in the same direction. Of the nine surviving sons, six became stockjobbers, most of the time as partners with one another. David was the first to join his father as a stockjobber.

At the age of fourteen his father began to employ him in the Stock Exchange, where he placed great confidence in him, and gave him

⁷ The name, Bevis Marks, was a corruption of the original, Bury's Marks. (Maitland 1775, p. 777.)

such power as is rarely granted to persons considerably older than himself.

(*Works*, Vol. X, p. 4)

For a little over six years David worked for his father, as had Abraham. When David's business career commenced, stockjobbing was taking place in the Stock Exchange Coffee House, at the corner of Threadneedle Street (Three Needle Street) and Sweeting's Alley. Although David never actually jobbed in Change Alley, the atmosphere in Sweeting's Alley was similar, and he was truly a Change Alley man. As a stockjobber he quickly became accomplished in the mechanics of "puts and calls," for he

possessed an extraordinary quickness in perceiving in the turns of the market any accidental difference which might arise between the relative price of different stocks, and to have availed himself of this advantage . . .

(Political Economy Club 1921, pp. 205-206;
Mallet's Diary entry for 1823)

After he and his father had their fateful falling-out in 1793, because of David's marriage, it was almost a decade before Abraham took on another son as a clerk. Finally, in 1802, Jacob (Jack) assumed the role, by which time the elder Ricardo was almost seventy. But unlike the fourteen-year-old David, Jacob was a man of twenty-two when he went to work for his father. He continued in this capacity until 1807, when he became a jobber in his own right.

Jacob's Stock Exchange application was submitted to the membership committee by his brother David, who also helped finance his business, and loaned him money to buy a home. His father appears to have played no role in Jacob's venture. Jacob's indebtedness to his brother distressed him, and he wrote what he himself described as a "whining" letter.

I have wished for some time past to have a conversation with you but as I cannot summon resolution sufficient to speak to you I will endeavor to put in writing what I wish to say.—Oh David if you knew my sensations if you could read my heart every time I saw you, you would pity me, I feel so contemptible so abject in your presence that I can scarcely endure it with any degree of manly fortitude. . . . I fancy you treat me with determined and premeditated coolness and contempt, perhaps I deserve that you should behave so to me, but speak to me, pray speak to me, tell me so, but do not treat me with contempt, advise me, or command me. . . . You know that I always had a particular respect for your advice or opinion, but since last July that has amounted to veneration. . . . when I think of the situation I might then have been in but for your noble and generous interference my gratitude

is unbounded, you saved my credit, you saved my life, for I never could have survived a public exposure . . . I did hope . . . to repay you part of the money before now, but nothing that I undertake will prosper, if I gain a few pounds one week I lose them and more to it the next.

(*Works*, Vol. X, pp. 129-130; Jacob Ricardo to David Ricardo; year uncertain)⁸

David was astonished.

Your letter my dear Jack has given me a great deal of pain. I am sorry to see in it so many proofs of an unhappy and despairing mind. You talk of the services which I had it in my power to render you in terms which both astonish and grieve me. . . .

This is a degree of pride amongst brothers which should be for ever banished, it is a foe to all affection and sympathy, and the only return which I claim from you is confidence and the absence of all restraint in our intercourse. You speak to me as if I were a creditor whose demands you were under some obligation to consider and against which you were under extreme anxiety to provide, but this is a species of ingratitude; I never wish to receive a guinea from you till fortune shall again take you by the hand, and till your success in business shall have become clear and unequivocal. . . . Whatever I may think of your errors I have never ceased thinking of you with respect. . . . That you have not always chosen the path which was most likely to reward you with happiness, has to me often appeared too certain,—and that you have erred again and again in spite of experience and friendly advice has caused me some regret . . . I view these things precisely the same as if you owed me nothing. To sum up then my dear Jack, I beg you to believe that I feel the greatest interest in your happiness and welfare; that though I may question the wisdom and sometimes the propriety of your conduct that it is impossible contempt should mix itself with such feelings.

(*Works*, Vol. X, pp. 131-132; David Ricardo to Jacob Ricardo, undated)⁹

With his response, David returned a draft, which Jacob had included as a partial payment on his debt, begged him to put it "in the fire," and "to bury in oblivion every uneasy sensation respecting your debt to me." (*Works*, Vol. X, p. 132) He also urged Jacob to abandon any idea of disposing of his house, because of the debt.

⁸ From a watermark of 1807 on Jacob's letter, Sraffa concluded it was written after that date. The letter was undated, except for 16 April.

⁹ Sraffa noted that the handwriting resembled that of around 1810.

The substance and tone of the two letters, and the fact that each brother took refuge in writing, though in daily business contact, indicates they were not intimate. In later years they were always on opposite sides of political and economic affairs, but they remained in personal contact. Both became executors of their father's will, and they must have felt some rapport. Furthermore, in business affairs a strong bond existed not only amongst the brothers but also between Abraham and his sons.

In the same year that Jacob went to work for his father, David employed the first of two brothers to serve him as clerk. Between 1802 and 1807, Daniel (Frances) was his clerk, and between 1807 and 1810 Raphael (Ralph) served in the same capacity. Francis became a member of the Stock Exchange in 1810, Ralph in 1811. They were, moreover, always on the list of subscribers to various government loans, during the period that David was the principal Loan Contractor. In 1819 they entered into a partnership with David, but were the unsuccessful bidders for a new loan. The contract was awarded to Nathan Rothschild, and marked the beginning of his successes, and David's last bid as a Loan Contractor. In 1820, Francis and Ralph again were the unsuccessful bidders for a new Government Loan, their last attempt in such matters.

Of the six brothers who were members of the Stock Exchange, Francis and Ralph had the longest careers, forty-seven and sixty-three years, respectively. Jacob, meanwhile, became a partner with his youngest brother, Samson, who had become a member of the Stock Exchange in 1821. The sixth brother, Benjamin, became a member in 1817. He did not participate in any business liaison with his brothers, and was a member of the Stock Exchange for a relatively short time. He retired as a broker in 1834, went to Cape Town, and died there in 1841.

Of the six brothers, David certainly was the most financially successful, and enjoyed the same type of reputation as his father, a man "of the strictest honour and integrity" (*Works*, Vol. X, p. 3). David also was unique because of his success at such a young age, for his brothers were all in their twenties when they joined the Exchange. Whether their comparatively late entry was attributable to the pursuit of other careers, there is no evidence. Jacob became Chairman of the Stock Exchange in 1820, indicative of the fact that he was respected, despite his early difficulties with his career, and his differences with David.

In addition to the six stockjobbers, there were the three other brothers, Joseph, Abraham, and Moses. The eldest in the family was Joseph, who had a somewhat checkered career. Early in life he migrated to Philadelphia, and in 1795 was listed as a merchant at North 3rd Street (Hogan 1795, p. 36), in partnership with Henry Capper. Joseph returned to London in 1807, heavily in debt not only to his father but also to David. In 1802, when the elder Ricardo drew his will, he relinquished all claims to the money which his son owed him, as well as any claim on Joseph's partner, Henry Capper (*Works*, Vol. X, p. 55). When David drew his will, in 1820, he also stipulated that the £1,060 debt, which Joseph "has owed me for some time," should not be called. Whether the debt was ever repaid, was a matter for Joseph's "own free will and opinion." (*Works*, Vol. X, p. 55)

Upon returning to London, Joseph became a hatter, with a shop on Finch Lane, between Cornhill and Threadneedle Streets, a particularly apt location given

the nature of his business. Significantly, Abraham added a codicil to his will, and Joseph became one of four executors. The three original executors had been Jacob; Abraham's son-in-law, David Samuda; and a friend, Raphael Brandon. In 1807, Joseph was substituted for Brandon, and David added as a fourth executor. Despite Abraham's specific reference to Joseph's indebtedness, he made him one of his executors, just as David was added as an executor, despite their differences over religious questions. The explanation for Abraham's behavior may be that he deferred to his eldest son, but on the other hand, Joseph may have had other qualities. Some indication of this is suggested by something David did. At the time he published his *Proposals for an Economical and Secure Currency* (1816), he sent his publisher a list of persons to whom he wanted copies distributed. Among the twenty-one names on the list were but four of his brothers: Joseph, Francis, Ralph and Moses (*Works*, Vol. VII, pp. 14-15; of the twenty-one names, thirteen were stockbrokers or stockjobbers). David's closest brothers were the latter three, but he must have had an affection for Joseph to have included him. Conspicuously absent from the list was Jacob.

The elder Ricardo's will is the only source of information of his namesake. Abraham's will treated all fifteen surviving children equally, each receiving about £4800, with two exceptions. The first exception was David, for whom he left only £50, as he "does not need more." The second exception was Abraham, for whom the money was left in trust, with David and Jacob as trustees. Sraffa notes there were "instructions to pay him an annual income and powers to prevent his selling, assigning or otherwise alienating that income" (*Works*, Vol. X, p. 55).¹⁰

Because of the special conditions attached to Abraham's legacy, Sraffa concludes that "he was not quite normal." (*Works*, Vol. X, p. 55). Additional evidence occurs in David's will, where Abraham was the only sibling not granted £100, an amount he also left to his friends George Basevi, James Mill, and Thomas Malthus (*Works*, Vol. X, p. 104). Moreover, only seven brothers attended David's funeral, and Sraffa assumes Abraham was the absentee.

There is one additional bit of evidence regarding Abraham's apparent affliction, which Sraffa does not mention, namely the location of his grave. Abraham was the only surviving sibling to be buried in the Sephardic cemetery on Mile End. Accepting that Abraham "was not quite normal," meaning he was somehow retarded, it would have been reasonable for his parents to prematurely decide his burial place. Given their religious predilections, Abraham was buried in Beth Haim. He died in his sixty-eighth year, and even may have spent the last years in Beth Holim, the home for the indigent.

Moses was the third brother, not a stockbroker, a surgeon by profession. Of all his brothers, Moses was closest to David, reinforced by their marrying sisters, Priscilla and Fanny Wilkinson. Moses was sixteen when his father moved to Bow, and he continued to live and practice medicine in the area until around 1818. Of all the brothers, Moses probably had the most formal training and education, given the

¹⁰ For the children who might not be of age at the time of his death, their funds also were to be held in trust, but paid when majority attained.

nature of his profession. Medical schools did not become the source of entry to the profession until the late nineteenth century, and in Moses's time one served an apprenticeship to a practicing physician. The profession did require anatomy, physiology, and medicine, and these subjects were pursued under the supervision of the practicing physician. As to the length of his apprenticeship, or with whom he served, nothing is known, but it is significant that Moses's father-in-law, Edward Wilkinson, was also a surgeon, and had practiced in Bow for many years. Moses was the only member of the Ricardo family, covering six generations, to become a professional. Everyone else was either a stockbroker or a merchant.

For most of his life Moses was the victim of poor health, and he was forced to retire early. Retirement, however, gave him time for other pursuits, and he had some success. In 1821, he became director of an oil-gas company in Bow, contributing several articles to a volume on the pros and cons of oil-gas heating (*Works*, Vol. X, p. 56, n.2). He was, no doubt, the author of David's obituary (*Works*, Vol. X, pp. 14-15) and, as indicated earlier, had plans to write his biography. Moses posthumously published David's *Plan for the Establishment of a National Bank* (1824) (*Works*, Vol. IV, pp. 272-297), and in the same year became a member of the Political Economy Club, where his brother's views were already under attack. He remained a member for sixteen years but, living in Brighton, he probably was not very active. His name appears once in the list of members proposing topics for discussion, in 1832, when he raised the question of his brother's *Plan for a National Bank* (Political Economy Club 1921, Questions Discussed, 1824-1840, p. 39). Despite the history of poor health, Moses outlived all of his siblings except Ralph, who also died in his ninetieth year.

Of the five brothers who followed him into the Stock Exchange, David was the catalyst in getting positions for three of them: Jacob, Francis and Ralph. The other two, Benjamin and Samson, entered in 1817 and 1821, after their illustrious brother had retired, although his influence obviously was still strong. Although their father had been the initial influence, it was David who became the leader of the Ricardo family as stockjobbers. His brothers not only followed him into the Stock Exchange, but continued to be influenced by his activities. His youngest brother, Samson, became a member of the Political Economy Club in 1840, and M.P. from New Windsor, Berkshire, from 1855 to 1857. Samson was an active pamphleteer and a supporter of his brother's *Plan for a National Bank*. A brother-in-law, William Wilkinson, who was married to two of David's sisters, was also a member of the Political Economy Club, 1857-1865, and M.P. from Lambeth, 1852-1857.¹¹

But in addition to being the first brother to become a successful stockjobber, a pamphleteer, a parliamentarian, and a person of influence, Moses claimed that David's greatest influence over his siblings was his independence of thought.

¹¹ William Arthur Wilkinson, David's nephew by marriage, was also his clerk in the Stock Exchange from 1811 to 1816; he was fifteen years old at the time. In 1818, at twenty-two years of age, he married David's sister Esther, who was twenty-nine. Esther died in childbirth, in 1823, and in 1826 Wilkinson married her older sister, Rachel.

His father was a man of good intellect, but uncultivated. His prejudices were exceedingly strong; and they induced him to take the opinions of his forefathers in points of religion, politics, education &c., upon faith, and without investigation. Not only did he adopt this rule for himself, but he insisted on its being followed by his children; his son [David], however, never yielded his assent on any important subject, until after he had thoroughly investigated it. It was perhaps in opposing these strong prejudices, that he was first led to that freedom and independence of thought for which he was so remarkable, and which has indeed extended itself to the other branches of his family.

(Works, Vol. X, p. 5)

The independence of thought, of which Moses spoke, led David to leave the Jewish religion, and to marry a Quaker. Moses did the same thing, followed by the two Ricardo sisters who married William Wilkinson. Another sister, Sarah, was married to George Richardson Porter, and Francis married Lucy Alexander, the sixth member of the family to marry outside the faith. Five of the Ricardos married the descendants of old Sephardic and Ashkenazi families, but it is questionable whether these marriages were indicative of an adherence to orthodoxy.

The eldest sister, Hannah, was married to David Samuda, member of one of the oldest Sephardic families in London. Ralph married Charlotte Lobb, a daughter of another old Sephardic family. Benjamin was married twice, first to Anne Barnes, and then to Miriam Lindo. The second marriage occurred in the Bevis Marks Synagogue, since members of the Lindo family had served on the Mahamad for many years, and the Lindos were probably as orthodox as Abraham Ricardo. Rebecca and Jacob Ricardo married descendants of the Ashkenazi community, Rebecca being wed to Isaac Keyser, and Jacob to Harriet Levy. The Keyser and Levy families were some of the earliest Ashkenazim in London (Hyamson 1951, p. 71), originally being members of Bevis Marks. At the time the Ashkenazim opened their own synagogue, the two families became members of the new congregation. In 1800 Isaac Keyser held one of the twelve memberships reserved for Jews on the London Stock Exchange. The Levy family also was associated with the Exchange.

Four Ricardo siblings never married: Joseph, Abraham, Abigail and Samson. They lived with their father in Old Ford, until his death in 1812, the household maintained by Abigail. Her mother had died in 1801, when she was nineteen, leaving seven younger brothers and sisters, for whom Abigail apparently kept house.

The burial sites of the Ricardo children are indicative of the degree to which they broke with the religious traditions of their parents. Of the fifteen children, eleven died somewhere in the London metropolis. Only Abraham was buried in the Sephardic burial ground, the others in public cemeteries—eight in Nunhead and one in Kensal Green.

Public cemeteries, in contrast to parish burial sites, came into prominence in the late 1830s and early 1840s, following the cholera epidemic of 1831. Nunhead

cemetery was an area southeast of the City, Kensal Green to the northeast and Highgate in the northwest. Each cemetery contained large areas of consecrated ground for the members of the Anglican church, with appropriate chapels. Dissenters could be buried in sections reserved for them, where anyone could be buried. There were no plots for orthodox Jews, as the burial grounds on Mile End were still available.

Hannah Ricardo's husband, David Samuda, was buried at Mile End, but she was buried in Nunhead, although some years later. Her sister, Rebecca Keyser, was buried in Kensal Green, and it is likely that these sites were a matter of choice. Sarah Richardson Porter, who married outside the faith, died in 1862, but her obituary (*Gentleman's Magazine*, Vol. II, 1862, p. 509) does not indicate the location of her grave. She was the eleventh Ricardo to die in London, at West-hills, Wandsworth. The other three sisters, Abigail, Rachel and Esther, were buried in Nunhead Cemetery.

Four Ricardos died outside of London; David was buried in Hardenbush, and Moses in Brighton. Jacob and Benjamin died abroad, in Paris and Cape Town, respectively. Both Jacob and Benjamin married women who came from very orthodox families, as they themselves did, but there is no evidence they remained orthodox. Some credence should be given to the fact that neither Jacob nor Benjamin were very close to either David or Moses.

In retrospect, it seems unlikely that David was the only source of the independent spirit which moved so many of his brothers and sisters away from the orthodox religion, even though Moses implies that this was the case. The success which so many experienced brought the Ricardos into the wider English culture, where they were quickly assimilated. The age-old prejudice against the Jews continued unabated in the nineteenth century, to be sure, but it was mostly directed at the Ashkenazim, because of their poorer economic status. The advantages which the Ricardos enjoyed stemmed in large measure from their Sephardic heritage, and that in turn grew out of the traditions of those Jews who had moved out of Babylon, across the southern Mediterranean. Steeped in financial institutions, the Sephardic Jews of England were associated with the ever-increasing influence of finance capital. And while this permitted the Ricardos to gain access to the wider culture, they then began to participate actively in the new culture, just as their father had participated actively in the old culture. In other words, the Ricardos were activists, no matter in which culture they functioned. They had a strong propensity for what James Mill referred to as David's belief in the "cause of mankind" (*Works*, Vol. IX, p. 390; James Mill to John McCulloch, 19 September 1823), or a concern for the public interest. He had learned that sense of purpose from his father, even though they held radically different conceptions of how to exercise the cause. As events moved forward, David's brothers and sisters followed his inclinations, and not their father's.

Ten of Abigail and Abraham's children were themselves parents, with a total of forty-nine grandchildren. Forty-five survived infancy, twenty-four daughters and twenty-one sons. Four of the sons became members of Parliament, and while none

of them ever achieved anything like David's reputation as a leader, they did serve something called the public interest.

David's Education

There was some controversy as to the quality of David's education. He himself contributed to the confusion through his repeated references to the inadequacy of his writing and oral skills. At one point, he even said, "I am often inclined to throw my writing aside as a task much beyond my powers to accomplish" (*Works*, Vol. VII, p. 53; David Ricardo to James Mill; 8 August 1816). He attributed the problem to the "(Y)ears of neglect at the most essential period of life," a deficiency which could not be rectified "by weeks or months of application" (*Works*, Vol. VII, p. 305; David Ricardo to James Mill; 29 September 1818). As for his public speaking, especially in the Commons, he claimed his exposition was too compressed, as he never acquired the skill of explaining topics with sufficient detail and illustration. He was "too apt to crowd a great deal of difficult matter into so short a space as to be incomprehensible" (*Works*, Vol. VI, p. 335; David Ricardo to Robert Malthus, 24 December 1815). He summed up his problems as the product of a "neglected education" (*Works*, Vol. VII, p. 190; David Ricardo to James Mill).

As David became involved with political economy, both writing and in Parliament, he was in contact with many individuals whose educational backgrounds were quite different than his own, and much more extensive. Malthus, for example, was a graduate of Jesus College, Cambridge, and even ninth wrangler. There was, in addition, the widely held view that persons of a commercial origin were deprived the benefits of a classical education, a deficiency that plagued them when they turned to intellectual pursuits. Although none of his contemporaries ever referred to David's educational deficiencies, such opinions were expressed after he died. The best example was the obituary written by Mill.

Mill wrote in the *Morning Chronicle* that Ricardo was a great example for emulation by those whose backgrounds were deprived.

The history of Mr. Ricardo holds out a bright and inspiring example. Mr. Ricardo had everything to do for himself and he did everything. Let not the generous youth whose aspirations are higher than his circumstances despair of attaining either the highest intellectual excellence, or the highest influence on the welfare of his species, when he recollects in what circumstances Mr. Ricardo opened, and in what he closed, his memorable life. . . he had his mind to form, he had even his education to commence and to conduct . . . he cultivated and he acquired habits of intense, and patient, and comprehensive thinking, such as have been rarely equalled and never excelled.

(Quoted in Bain 1882, p. 212)

Mallet claimed that Ricardo's

education had been of a very commonplace kind, and he had to educate himself and to acquire that stock of knowledge which is indispensable for a man who lives in good society, and more particularly in the society of well informed persons.

(Mallet, in *Political Economy Club* 1921, p. 206)

Moses Ricardo had a quite different view of his brother's education.

It is not true . . . as has been insinuated, that Mr. Ricardo was of a very low origin, and that he had been wholly denied the advantages of education; a reflection upon his father which he by no means deserved. The latter was always in affluent circumstances; most respectably connected, and both able and willing to afford his children all the advantages which the line of life for which they were destined appeared to require.

(*Works*, Vol. X, p. 4)

Moses's *Memoir* was published some time after Mill's obituary, and his denial of David's "low origin" and educational deficiency obviously was directed at people like Mill. The claim that his brother was deprived of an education was degrading to his father, Abraham, and while Moses and David may have disagreed with their father about religion, they nonetheless respected and honored him. When he left the Stock Exchange, David moved in new circles, and his peers knew little of his family background. In part this was because David probably did not dwell upon his background and youth, even though he was strongly attached to his parental family. Moreover, in the new circles in which he moved, some persons expressed an obvious prejudicial overtone against the type of environment in which he had been reared, and the "peculiarities of the Mosaic ritual" of his father (*Sunday Times*, 14 September 1823, p. 1).

The author of the obituary in the *Sunday Times* must have known Ricardo extremely well, being especially familiar and sympathetic with his political activities. But there were errors in the obituary with regard to his background, the author alleging that David was the eldest son, and that he was an active Christian, for which there is scant evidence. But more important, the author of the obituary was particularly derogatory with reference to David's father. In discussing their breach, the obituary claims that Abraham objected to David's marriage because Priscilla was "not of the seed of Jacob, and perhaps had not the inheritance of Rachel" (*Sunday Times*, 14 September 1823, p. 1). The latter remark undoubtedly was in reference to the first Rachel, who kept her father's sheep, and brought them with her when she married Jacob (Genesis, 29. 9-20). The author continued:

Renounced and disinherited, Ricardo was not without friends. . . . This support and his own talents were quite enough

for Ricardo, he immediately began business and in the course of a very few years was a richer man than the father. Finding his son prospering, preferring a rich Christian to a poor Jew, or perhaps rather from the *storge* of nature, the father was the first to seek a reconciliation, and we have never heard that Ricardo harboured the least resentment for the harsh measure which had been dealt him.

(*Sunday Times*, 14 September 1823, p. 1;
italics in original)

Reflected in this passage was the same "self made man" notion, which James Mill had stressed. But, in addition, the writer in the *Times* depicted Abraham as unprincipled, a father who reconciled with his disinherited son because he became rich—a Shylock, no less. David, on the other hand, was depicted as highly honorable, since he held no untoward feelings toward his father. A converted Christian, who turned the other cheek, perhaps? Certainly, David Ricardo was of such a character that he did not hold grudges, but it is highly significant that Abraham also reconciled with his son Joseph, and he was far from rich, being in debt to both Abraham and David. The "*storge* of nature," the instinctual parental affection for offspring, was mentioned in the *Times* obituary, but couched within a context which offered this explanation as a secondary preference.

In Moses Ricardo's *Memoir* the "*storge*" explanation is paramount. He said his father was "both able and willing to afford his children all the advantages." Furthermore, Moses claimed that his brother's opportunity to enter into business on his own was in no small measure connected with the fact that he was a son of Abraham Ricardo.

His father's name stood as high as possible for honour and integrity, qualities of the first recommendation in a field where transactions of the utmost magnitude rest upon them as their only security. Sharing this character with his father, and possessing talents and other excellent qualities which had endeared him to all, he embarked with the fairest prospect of success. This success answered his most sanguine expectations; and in a few years, certainly not wholly without some anxiety at first, he had secured to himself a handsome independence.

(*Works*, Vol. X, pp. 5-6)

Moses mentioned his father's "honour and integrity" not once, but twice in his brother's *Memoir*. As to David's opportunity for education:

At his intervals of leisure he was allowed any masters for private instruction whom he chose to have: but he had not the benefit of what is called a classical education . . .

(*Works*, Vol. X, pp. 3-4)

Mill's depiction of David as deprived and unaided in his early education undoubtedly was colored by what he conceived to be his own role in Ricardo's late awakening. According to this view, David pulled himself up by his bootstraps, urged and prodded by Mill. As discussed in later chapters, Mill certainly was a great stimulus to Ricardo, but he was not the only source of inspiration, nor was he alone responsible for David's economics or his philosophical outlook.

Following Ricardo's death, Mill fostered the belief that he and Bentham were responsible for David's success as an intellectual, a view carried forward by Mill's son, John Stuart. There is no question that David valued Mill's opinion, and consistently solicited his views on political and economic questions, but Mill overemphasized his role, for David was not the *tabula rasa* which Mill and others supposed. Moses attempted to set the record straight. David was reared in a rich and sophisticated environment, and received an excellent education for the times. He was not a self-made man, as Mill suggested, but a member of a family with a great heritage and culture, and large economic influence in eighteenth-century England.

David was not drilled in the traditional classics of Western culture, Greek and Latin—what Moses meant about his brother's not having a "classical education." But his education was of a classical nature, in the language of Hebrew, and the scriptures of the Torah and the Talmud. Hebrew is a language with no inflection, unlike Greek or Latin, but as learned by Jewish young people, it is prefatory to their instruction and training, taught as a living language for every day religious usage. For those trained in the classical languages of the English public schools, Greek and Latin were almost dead languages, and students ended "up being able to do little better than crawl through a text, line by agonized line" (Kirk 1976, p. 539).¹²

In his youth, James Mill was drilled in Greek and Latin¹³ and with no less rigidity and discipline than he exerted over his son, John Stuart. By the time John was five, he could read Greek, though its heuristic value was probably minimal. If there are educational advantages derived from crawling through Homer's *Iliad*, because it hones immature minds, Hebrew is a surrogate. Accordingly, David did not have a "commonplace education" since he also "crawled" through ancient texts.

Reared in an orthodox home, David's earliest experiences would have been the daily ritual of his father putting on the tiffion and prayer shawl for morning prayers at Bevis Marks. The Sabbath was observed, with his mother lighting the candles to welcome the Lord's day, and his father reciting the Kiddush to reconfirm that the Jews were God's chosen people and that they have a responsibility for their covenant. Time stood still from sundown on Friday to sundown on Saturday, with no worldly activity: no burial, no marriage or brit milah, no work of business or the home, and no conviviality. Abraham adhered to "the opinions of his forefathers in

¹² Professor of Greek at Trinity, College, Cambridge, Kirk argues that the classics have traditionally overemphasized the linguistic aspect of Greek and Latin, to the detriment of the philosophy, morals, and tradition of ancient cultures. Even after four or five years of language training, students still crawl through texts.

¹³ James's drill instructor was his mother, Isabel Penton Mill. (Bain 1882, pp.3-6)

points of religion," and "not only did he adopt this rule for himself, but he insisted on its being followed by his children." (*Works*, Vol. X, p. 5)

In the tradition of orthodoxy, the Ricardos kept the holy days, with *Pesach* (Passover) the most momentous. On the eve of *Pesach*, at *Seder*, the youngest son would recite to his father the ancient question: "Mali nish ta moh?" ("Why is this night different from all others?"), the introduction to four additional questions: "Why do we eat matzoh, taste bitter herbs, dip twice in salt water, and eat reclining?" They all knew the answer, namely that "On this night we remember that we were slaves in Egypt, and that Moses led us to the promised land, through the hardships and hazards of the Exodus."

On *Rosh Hashanah* the seven days were reserved for reflection upon one's life, with a dedication inscribed for the new year, and sealed by making peace with the Lord on *Yom Kippur*, the most holy of all days.

You shall afflict yourselves, and shall do no work, either the native or the stranger who sojourns among you: for on this day shall atonement be made for you, to cleanse you; from all your sins you shall be clean before the Lord. It is a sabbath of solemn rest to you, and you shall afflict yourselves; it is a statute forever.

(Leviticus, 16:29-31)

The Jews observed some dozen or more religious holidays, not all with the same degree of solemnity, so that a child reared in an orthodox family is constantly aware of his religious heritage. It was in such a traditional setting that David Ricardo was nurtured by his parents, Abigail and Abraham.

Besides his education in the Jewish religion, David received what his brother referred to as a "common-school education." At the time, the vast majority of the children of the greater London area attended and received their education in a parish school, or in one of the three thousand private schools which Maitland counted (Maitland 1775, pp. 1277-1278). The parish schools were church-related, with religious instruction as well as reading and writing, and while Bevis Marks had schools for both boys and girls, these were charity schools, undoubtedly for the children of the Congregation whose parents could not afford one of the private schools. Given the relative affluence of the Sephardic community, it is not surprising that their charity schools provided spaces for only twelve boys and twenty girls (Maitland 1775, pp. 1277-1278). Maitland's records show that in 1775 a total of 128 charity schools existed in greater London, with spaces for 3,458 boys and 1,901 girls. The size of the private schools varied, but in general they were small, limited to what a single tutor might accommodate.

But David's education in London was interrupted, for, as he related, "from the age of 11 to 13 I resided in Amsterdam" (*Works*, Vol. X, pp. 206-207). Upon his return to London he continued his education until such time as he went to work for his father. Thereafter, he was supervised by tutors as he wished, one of which was probably a mathematician, another a geologist.

The Years in Amsterdam

Abraham sent David to Amsterdam for two reasons. As Moses explained, his father wished that his son would

follow the same business in which he was engaged, and whose transactions lay chiefly in that country, [and] sent him thither not only with a view to his becoming acquainted with it, but also that he might be placed at a school of which he entertained a very high opinion.

(*Works*, Vol. X, p. 3)

Abraham had been living in London for twenty-three years when he sent David to Amsterdam. Apparently, the elder Ricardo was still handling investments in British funds for his brothers and other Dutchmen. By 1783 the London Stock Exchange had long since outstripped the Amsterdam Bourse, and, as Adam Smith had pointed out, British funds were very attractive, yielding much higher returns. There was still a large surplus of Dutch funds available, and Abraham must have believed that this situation would continue, hence his view that his son had best become familiar with the Amsterdam sources. David could also learn Dutch, which he did, and some thirty-seven years later he could still speak the language (*Works*, Vol. X, pp. 194, 209).¹⁴ That one of the prime purposes was to learn Dutch was attested to by David himself. He related to Maria Edgeworth that his father sent him

to Amsterdam to learn Dutch, French [and] Spanish but I was so unhappy at being separated from my brothers and sisters and family that I learned nothing in two years but Dutch which I could not help learning.

(Maria Edgeworth, 1971, p. 266)

Abraham also probably believed that David should learn something of the skills of the speculator. "Puts" and "calls" had been prohibited in London ever since the passage of Barnards Act in 1733. Amsterdam was the home of exchange speculation and the futures market. One could find no better place to learn the art of trading in futures, a skill which David later perfected to a high level, thereby greatly enhancing his financial position.

David had two uncles in Amsterdam, Moses and Samuel. Although both were stockbrokers, only Moses was listed in the Amsterdam Directory (*Works*, Vol. X, p. 30). There is no evidence as to which uncle David lived with, but Sraffa suggests there may have been a single household. Samuel was married to Rachel Periera (Heertje 1974, p. 78), and they had six children, four boys and two girls. Moses was

¹⁴ By the time David and his family had traveled as far as Cologne, he said his Dutch could not get him by, and he had to revert to French, which he did not speak as well. (*Works*, Vol. X, p. 214)

unmarried, and all of them may have lived in his home at the address listed in the Directory. Rebecca Ricardo would also have lived in the same household. She was the daughter of Abraham's third brother, David Hizkiau Israel Ricardo, who had died in 1778.

Among the members of this rather large household, David apparently was closest to his cousin Rebecca. He visited her whenever he returned to Amsterdam, the last time in 1822. Earlier that same year she had been widowed, her husband having been David Da Costa, whom David said was "a highly respectable man" who "left her in comfortable circumstances" (*Works*, Vol. X, p. 207). Rebecca Ricardo Da Costa was the only cousin of whom David spoke in detail in his letters, though he visited several others. Since he and Rebecca were both strangers in their uncle's home, it is understandable they became attached to one another.

Some confusion has existed as to the nature of the Amsterdam school which David attended. Some authors have alluded to a commercial type of school. Alcide Fonteyraud (1822-1849), for example, claimed that his father

put young David in a school in Holland for two years where the most reputable theories of exchange and the art of the perfect broker were taught to him.

(Fonteyraud 1847, p. xvii)[?]

McCulloch wrote that David received an education "usually given to young men intended for the mercantile profession" (McCulloch 1853, p. 469). David's brother-in-law, George Richardson Porter (1792-1852), claimed that David had received

good but plain commercial education. For this purpose he was sent . . . to a school in Holland, where he remained about two years.

(*Penny Cyclopedia* 1841, Vol. 19, p. 497)

The author of still another obituary wrote that because David was intended for the same profession as his father, he was sent to Holland for his education (Gorton 1828, p. 804).

The list of authors who alleged that David Ricardo attended a commercial school in Holland is impressive, to say the least: a famous disciple, a brother-in-law, a French translator of Ricardo's complete works, and a noted biographer. Nevertheless, they probably had no evidence other than hearsay. The other details of David's life that are recorded in various memorabilia do not relate any facts beyond what Moses Ricardo said in his *Memoir*, and he does not mention anything about a commercial school. In Amsterdam was a school his father held in very high esteem, but its curriculum is curiously ignored. If a hypothesis is warranted, it is that David's descendants did not want any of the details of the school discussed. This situation undoubtedly was another aspect of the family's desire to ignore David's Jewish heritage, the same reason Moses was dissuaded from writing his brother's biography. Moses's two statements, that David went to Amsterdam to

acquaint himself with the city's business environments and to attend a school carefully chosen by his father, easily slipped into the single conclusion that the second condition was a derivative of the first.

If Abraham knew of a commercial school which he held in such high esteem that he would send an eleven year old boy all the way to Amsterdam, some evidence should exist that such an institution in fact existed. Sraffa, in keeping with his usual superlative research, concludes that

No evidence . . . has been found of the existence of any commercial schools of this type in Amsterdam at the time.

(Works, Vol. X, p. 31, n.1)

If no commercial schools existed at the time, why the schooling in Amsterdam? Sraffa's conclusion is that,

if we consider the age at which he was sent there (eleven to thirteen) and the fact that his father was an orthodox Jew, there can be little doubt that the school in Amsterdam to which old Ricardo was so keen to send his son was the Talmud Tora, a school of great reputation which had been founded in 1616 and was attached to the Portuguese Synagogue there.

(Works, Vol. X, p. 31)

As indicated in previous chapters, the Sephardic Congregation of London had always looked to the Amsterdam Synagogue as the source of religious interpretation and dogma. Associated with the Amsterdam Synagogue were centers of learning, Talmud Tora and Ets Haim, a lower and an upper school. The Talmud Tora was for boys five to thirteen years old, those preparing for their bar mitzvah, while Ets Haim ("Tree of Life") was for advanced students training to be Talmudic scholars or members of the rabbinate. Manesseh Ben Israel had been one of the great teachers of Ets Haim, and Baruch de Spinoza (1632-1677) one of his great students. Something of the tenor of Ets Haim is suggested by Spinoza's biographer.

Spinoza . . . at the age of fifteen . . . had gone so far in the study of the Talmud as to be one of Rabbi Morteira's most promising pupils. In the advanced classes of the Amsterdam school he had the opportunity of mastering the philosophical writings of the golden age of modern Jewish learnings, the commentaries of Maimonides and Ibn Ezra.

(Pollock 1912, p. 10)

Spinoza was expelled from the Amsterdam Congregation because his studies led him to Descartes and the acceptance of the philosophical position that no proposition could be accepted as truth unless proven by reason, a serious problem for someone trained in a religion grounded upon the acceptance of revelation.

Despite his conflicts with the Sephardic Congregation, Spinoza has been recognized as one of the great scholars of Ets Haim. The institution's reputation was derived from the greatness of its Talmudic teachers. The lower school, the Talmud Tora, was likewise a well celebrated institution for the training of young men, and hence Abraham's "high opinion." (*Works*, Vol. X, p. 31)

Following Minsk-Pinsk logic, outlined in Chapter I, we have every reason to agree with Sraffa that there is "little doubt" that David went to Amsterdam to attend the Talmud Tora. But we find one problem about accepting such an interpretation. Professor Heertje searched the records of the Amsterdam Synagogue for the years 1783-1785, and could find no evidence that David Ricardo was ever enrolled in the Talmud Tora. Heertje concludes,

On balance it seems more likely that David Ricardo was educated at a private school, in Amsterdam as in London, like the young Isaac D'Israeli.

(Heertje 1974, p. 79)

Heertje obviously contradicts Sraffa's conjecture that David attended the Talmud Tora. Nevertheless, we find several reasons why Heertje could not find any evidence of David's enrollment at the school. First, traditional synagogues only record the dates of brit milahs, marriages and deaths. The passage from boyhood to manhood, the bar mitzvah, is not a matter of record since the event occurs automatically on the thirteenth birthday. The portion of the Torah read by the young boy on that occasion is determined by the date of his birth. Searching the records of an orthodox synagogue would not reveal information as to bar mitzvahs, and since the Talmud Tora was a school for preparing for this rite of passage, there would be no reason for a record of attendance, since it is a matter of religious obligation. Second, study in an orthodox institution, such as Ets Haim or Talmud Tora, occurs under the direction of a specific teacher or tutor. Spinoza, for example, took his training with Rabbi Morteirs and we find no evidence that he was registered in either the Talmud Tora, or Ets Haim, even though his biographer says that he studied in both schools (Pollock 1912, *passim*). Third, Abraham Ricardo was not a member of the Amsterdam Congregation, and there was no reason for his son to be listed on the Synagogue rolls. Therefore, the fact that David's name does not appear on the registry is not conclusive evidence that he was not studying with a teacher at the Talmud Tora.

Furthermore, the analogy which Heertje draws between David Ricardo and Isaac D'Israeli (1766-1848) is misplaced.¹⁵ They were sent to Amsterdam at different ages, and apparently for somewhat different reasons. Benjamin D'Israeli, Isaac's father, was the scion of a Sephardic family which had fled the Inquisition and settled in Italy in the area of Venice. Benjamin migrated to London in 1760, became a successful stockbroker but continued to use his Italian name, Benjamin of the Israels. The Ricardo family had also been Israels in Italy, a nomenclature that

¹⁵ The analogy between Ricardo and D'Israeli was first drawn by Jacob Hollander in 1910. See also, Weatherall 1976, p. 13.

was probably adopted quite widely, as Jews dropped their Spanish and Portuguese names to avoid detection as refugees from the Iberian peninsula living in Catholic Italy.

Benjamin D'Israeli hoped that his son would follow him into the commercial world, but Isaac's mother, Maria Basevi, urged him to pursue his literary instincts. The mother's influence won out, and at fourteen Isaac completed his first poem. At that time, Isaac was sent to Amsterdam to continue his literary studies. Since his mother's family had come from Holland, undoubtedly she, and not his father, was responsible for the selection of the site. The D'Israeli family was of an orthodox persuasion, and Isaac would have been bar mitzvahed before he went to Amsterdam, since he was already fourteen. David, on the other hand was eleven, and his father had a specific school in mind, the Talmud Tora. Upon his return to London, from Amsterdam and later Paris, Isaac D'Israeli was a member of Bevis Marks until 1817, when he severed his connection, had his children baptized and anglicized the name to Disraeli¹⁶ (Hyamson 1951, pp. 242-246)

Collaborative evidence that David was sent to Amsterdam in part for religious instruction is found in the fact that in 1788, when he was sixteen, he conveyed "two of his younger brothers" to Holland (*Works*, Vol. X, p. 4). They would have been Moses, about eleven, and Jacob, age eight. David returned to Amsterdam again in 1792 (*Works*, Vol. X, p. 207; David Ricardo to Osman Ricardo), when his brother Daniel was nine years old, and the trip probably was to take Daniel for his religious instruction.

David's recollections of his two years in Amsterdam were associated with the great loneliness he experienced from being separated from his brothers and sisters. It may have been to accommodate for this deficiency that Abraham arranged for his sons, thereafter, to live in pairs, first Moses and Jacob, and then Jacob and Daniel. As the Talmud Tora enrolled boys from five to thirteen years of age, the younger Ricardos could study and also provide companionship for older brothers. Whether Abraham sent his youngest sons, Raphael, Benjamin, and Samson to Amsterdam there is no evidence. As for David, Moses, Jacob and Daniel, they doubtless studied at the Talmud Tora, as Sraffa suggests. Amsterdam, after all, was the center of Sephardic culture, and it was there that Abraham Ricardo believed his sons could best learn of their heritage. According to Moses, his brother David was sent to Amsterdam to learn something of the City's business life, and to attend the special school. If the same dual purpose was intended for Moses and Jacob, it is unknown, but given the proclivity of Ricardos to be stockbrokers, the duality could well have persisted.

Of David's two years in Amsterdam very little is known, but when he revisited the city in 1822 he wrote,

¹⁶ Although he attended synagogue irregularly, Isaac D'Israeli was elected to the Mahamad in 1813 (5574). He refused to serve as *parnas*, and accordingly was fined by the Congregation. He continued to pay his annual account, but would not submit to the fine, eventually withdrawing from the Congregation. It was not unusual for Yahidim to refuse to serve on the Mahamad, but few went so far as Isaac in their resistance, as they paid the requisite fine. One of Isaac's five children was Benjamin Disraeli, Earl of Beaconsfield, celebrated leader of the Conservative Party in the late nineteenth century.

Altho' I had not been in this town for more than 30 years [1792] I had no difficulty in finding my way, alone, about those places which had formerly been familiar to me. Amsterdam is I think a handsome town.

(*Works*, Vol. X, p. 205; David Ricardo to Osman Ricardo)

During the time David lived in Amsterdam, the city was about a fourth the size of his native London. Both were famous port cities, and it was in such environments that David learned to enjoy "the sight of shipping, and the business which always accompanies it." Amsterdam was quite distinct, geographically. Built on piles, it was a mixture of canals, sluice dams and islands, sometimes referred to as the "Venice of the North." The heart of the city was on the waterfront, at the Amstel Dam, an area encompassing the Stock Exchange, fish market, Town Hall and Royal Palace. The Sephardic community was concentrated in the east end of the city, where David probably lived with his relatives on Rapenburger Street.¹⁷

A pejorative diary entry of an Englishman, who visited the city in 1784, described the Sephardic area of Amsterdam:

We went first to the Jewish Quarter, a number of streets inhabited solely by this people, who are confined to it. It is extremely populous, and full of odd faces and dresses. . . The Jews look sharp, designing, dark; the women frequently handsome, though brown, with black wanton eyes, and lively features. Among the old men were several excellent Shylock faces . . .

(Quoted in Weatherall 1976, p. 13)

Weatherall dismisses this obvious derogatory account on the ground that the diarist, John Aikin (1747-1822), was a Unitarian, and the members of that sect had "spiritual kinship with the Jews" (Weatherall 1976, p. 14). The Unitarians may indeed have been more tolerant of the Jews than the typical country squires and Anglican parsons, but Aikin's image was in complete empathy with the traditional view held by such as Lord Chatham, Charles Lamb, or William Cobbett.

David's own recollections of his first brush with Dutch culture was typically human, involving wooden shoes. In conversation with Maria Edgeworth, when she was visiting the Ricardos in 1822, David told of an event that occurred soon after his arrival in Amsterdam.

¹⁷ Of David's two uncles, Samuel and Moses, Sraffa found only Moses listed in the city directories. Until 1783 he was listed as living on Rapenburger Street, but in 1784 he moved to "op de Keizersgraft by Brands Hofje." A "Hofje" is a small house for retired or elderly single persons and Keizersgraft was one of the canals in the eastern portion of the city. It is estimated that Moses was in his late fifties or early sixties at the time, being some years older than his brother Abraham, who was fifty in 1783.

... he saw in a shop window a pair of shoes with an edging of fur to which he took a fancy and he entreated that they might be bought for him. It was represented to him that he did not see exactly what sort of shoes they were and that they would not suit him. He persisted and they were bought upon condition that he should wear them. He found that they had wooden soles and these made such a clatter upon the pavement that every body turned to look at him as he walked and instead of the fur shoes proving a gratification to his vanity they became a daily mortification. He would have given anything to have got rid of them but he had no others and he says none but himself can conceive the pains he took to slide in walking so as to prevent the noise of his wooden soles from making disgraceful clatter.

(Edgeworth 1971, p. 340; Maria Edgeworth to Margaret Huxton, 4 February 1822)

A Rite of Passage

Anthropologists refer to the public acknowledgment of a change in an individual's social status as a rite of passage. At particular stages in life the individual loses one identity in order to acquire a new role in his culture, or subculture. In neolithic societies, legal sanctions replaced the ancient ceremonies associated with rites of passage, with birth and marriage certificates institutionalized.

One special rite of passage which has been common to most societies is the transition to adulthood, at ages which vary from culture to culture. Moreover, different cultures utilize diverse techniques to recognize this particular transition. In primitive societies, for example, the event may be symbolized by a cutting or marking of the body, and both male and female circumcision is practiced, since adulthood in these instances is associated with the capacity for reproduction. Because female transition to adulthood occurs in the normal biological process, there is less need for ritual, with the result that in advanced cultures only the male rite is apt to be ceremonialized.

As an advanced and intellectualized participatory religion, Judaism marks the male passage to adulthood with the bar mitzvah, when the young man demonstrates he is capable of participating in the reading of the Torah and understands the laws of the Jews. Thereafter, he is "a man of good deeds;" as he is now an adult member the congregation of the synagogue, he becomes responsible for his behavior.

Ricardo's father and family were of the Jewish persuasion; blameless according to the Decalogue, and uncommonly strict in all the peculiarities of the Mosaic ritual. In the same faith he himself was initiated. . .

(*Sunday Times*, 14 September 1823, p. 1)

David's date of birth was the fifteenth day of Nisan, in the Hebrew year 5532. His initiation occurred thirteen years later, in 5545. In that year, the portion of the Torah read on the Sabbath closest to David's birthday was *Shemini* (Leviticus 9-11). *Shemini* is Hebrew for eighth, the first word of the ninth chapter in Leviticus; all books and chapters of the Bible are titled by the first Hebrew word in the passage, with *Chumash* the name given to the five books of Moses.

The portion of the Torah read on any Sabbath is divided amongst six members of the congregation, each in turn being called to the reading desk (*Tebah*). In addition to reading the Torah on each Sabbath someone reads the *havtorah*, a selection from one of the books of the Bible not included in the *Chumash*. The *havtorah* portion traditionally is read by a member of the congregation who is marking a rite of passage, such as his marriage, a wife giving birth, or a youth being bar mitzvahed. In the latter case, a boy knows from his date of birth the *havtorah* he will read at his bar mitzvah.

The *havtorah* for *Shemini* is II Samuel 6-7, a passage which describes how the biblical David brought the ark to Jerusalem, and through Nathan was told by the Lord that David's spring would build a house of cedar for the ark. The portion was read by David, son of Abraham Israel, in the Synagogue of Bevis Marks in 5545. Even though David attended the Talmud Tora in Amsterdam, he undoubtedly returned to London in time to be initiated into the Jewish religion in his father's Congregation.

In an orthodox congregation a bar mitzvah is a matter of tradition, strictly a religious event, and no celebration or special recognition would be accorded to the day. From that day forward, however, David Ricardo was an adult, and his family so treated him.

Chapter V

THE TAMING OF TRADITION

[E]ach youth must forge for himself some central perspective and direction, some working unity . . . he must detect some meaningful resemblance between what he has come to see in himself and what his sharpened awareness tells him others judge and expect him to be.

Erik H. Erikson (1958)[?]

David commenced his business career in 1786, the year after his return from Amsterdam. He was fourteen, employed by his father as a clerk and messenger. Stock trading and stockjobbing both took place in the Stock Exchange Coffee House on Threadneedle Street, but it was only one point for the several necessary financial transactions. Each transfer of a share of East India stock, for example, had to be registered at the Company's headquarters on the Thames, and South Sea stock was registered at that Company's home office. Then there was the transfer of monies at the Bank of England, where the vast majority of traders kept their deposits. On any given day, a messenger would be in and out of each of these centers of London's financial hub on several occasions. It was in this environment that David became famous, nurtured by Abraham as Abraham taught him the business of stockjobbing. The young Ricardo quickly became knowledgeable about the intricacies of legitimate stockjobbing, despite the nefarious cloud which constantly hovered over London's financial world. Like Abraham, David became well known as one of the most honest and respectable members of the community.

When David began working for his father, England was at peace, at least temporarily. The War of the American Independence finally had been brought to an inglorious end, and the Government even had reached an accord in its endeavor to control the widespread corruption of the East India Company. The Fifth

Parliament of George III had been elected in 1784 and, under the First Ministry of William Pitt the Younger, passed legislation which placed the Company under the jurisdiction of the British Government. The Company was free to continue to exercise its monopoly over trade with India, but must be supervised by the new Governor-General, Lord Cornwallis. In France, the first meeting of the Estates-General was some three years away, but the seeds of revolution were growing, watered by the writings of the philosophical radicals, in the tradition of Voltaire.

Although David was the third son of Abigail and Abraham, there is little doubt that already in his teens he was viewed as heir apparent to the family business and, perhaps more important, heir to the family tradition. The reason for David's strategic importance in the family was not alone his doing, despite his strength of personality and his early evidence of "solidity and steadiness of character" (*Works*, Vol. X, p. 4). His two older brothers were deficient, one in spirit, the other in mind.

As for the eldest, Joseph, there is no explanation for his move to Philadelphia, or at what age he made the change. Although he was always a merchant, both in England and America, apparently he never was a stockjobber or broker. Because so many of his sons followed old Abraham into the stock exchange, it seems odd the eldest did not pursue such a career, but, instead, moved to a new world. Perhaps some type of rift developed between Joseph and his parents, but some credence be given to the fact that Abraham loaned him money for his business in Philadelphia. If there was some type of break between Joseph and his mother and father, it probably was not a question of religion, since we find some evidence that Joseph subscribed to a Sephardic prayer book in Philadelphia.¹ Furthermore, when David broke with his parents over his religious preferences, he was put out on his own financially.

As for David's special role in the family, it is significant that it was he who shepherded his younger brothers to Amsterdam, when he was only sixteen, and made the same trip again when he was twenty. Joseph was two years older than David and one would normally expect the eldest son to assume such family responsibilities. As far as the second son was concerned, young Abraham obviously was not capable of such duties. Therefore, David was the son upon whom Abigail and Abraham depended, and "neither . . . felt the smallest anxiety for the charge which was confided in him" (*Works*, Vol. X, p. 4).

The dreams and hopes of Abigail and Abraham, that David would continue to assume the duties of an eldest son, were shattered, of course. He did remain the dominant personality in the very large family, but his influence was such that most

¹ David Levi (1740-1799) published his *Seder ha Tephilot* (prayer book for religious holidays) in 5533 (1773). It adhered to the Sephardic tradition. A list of twenty-seven subscribers included a Joseph Ricardo, Philadelphia. (Cf. Kohut 1897, pp.154-156.) Kohut suggests that the subscription list was for the year 1773, which would exclude the possibility of Abraham's son Joseph Ricardo, who was born in 1770.

An alternative interpretation is that the *Seder* was published in 1773, with the subscription list extending into the 1790's, when Joseph Ricardo did in fact reside in Philadelphia. The surname, being of Italian origin, was not common in Sephardic communities, in Amsterdam, London, or Philadelphia. Abraham's eldest son was the second Joseph in the lineage, the first being Abraham's father who died in 1767. There is no evidence that Joseph Ricardo was ever a member of the Mikeh Israel Congregation, the first Sephardic Synagogue of not only Philadelphia, but also the United States.

of his siblings followed him away from orthodox Judaism, a trend quite contrary to their parents' wishes.

Ironically the precipitous step that led to David's break with his parents was actually of their doing. In 1792 the family left the Sephardic community in the City and moved to the suburbs, where David fell in love with a daughter of one of the new neighbors, Priscilla Wilkinson. Within a year they were married, separated from both their families. It would be difficult to accept the view that such a break came about merely because of a new environment, no matter how strong his attachment to a neighbor's daughter. The adherence to orthodoxy is seldom severed quickly and sharply. Nor is such a radical disruption in one's life style typically the result of one personal relationship. For some years David had been questioning and probing at the beliefs and philosophy of orthodox Judaism. His inquisitive mind was at work on the taming of tradition. Moses Ricardo described his brother's progression:

When young, Mr. Ricardo showed a taste for abstract and general reasoning; and though he was without any inducement to its cultivation, or rather lay under positive discouragement, yet at the age of nineteen and twenty, works of that description which occasionally occupied his attention afforded him amusement and cause for reflection. Even at this time his mind disclosed a propensity to go to the bottom of the subjects by which it was attracted, and he showed the same manly and open adherence to the opinions which he deliberately formed, and the same openness to conviction which distinguished his maturer years.

(Works, Vol. X, pp. 4-5)

Principles of "abstract and general reasoning" are applicable to almost any branch of knowledge. But at the age when David was pursuing such works, it is almost certain that the volumes he was reading were of a philosophical character, rather than devoted to some specific branch of science. Western philosophy in the late eighteenth century was still caught up in the problem of substituting reason and logic for the ecclesiastical authority of the ancients, and this was precisely the personal conflict which David himself was confronting. David was not willing to accept upon faith the opinions of his forefathers, in matters of religion, as did his father Abraham.

Beginning with René Descartes (1596-1650), modern philosophy rejected the ecclesiastical authority of Christian theology that had been grounded in mystical scholasticism, by substituting the proposition that all knowledge of reality was a matter of logical necessity, summed up by the Cartesian proposition, "I think, therefore I am" (*Cogito, ergo sum*). Although Descartes always considered himself a Catholic, he was drawn more and more to science, through using reason and the application of a scientific methodology, as the means for arriving at an understanding and knowledge of the universe. Proof was grounded in deduction, the necessary corollary of the rationalist theory of knowledge.

The rationalist tradition was carried forward by Spinoza, the Sephardic scholar of Amsterdam. Like Descartes, he also always considered himself a follower of the religion in which he had been reared, and to which he devoted a lifetime of study. But Spinoza's formulation of Judaic theology was considered heretical, and accordingly he was excommunicated by the Amsterdam Congregation. In his world everything was determined by logical necessity, with no possibility or contingency for exogenous variables, excluding as he did all extra-logical considerations in his treatment of philosophical problems. Chance had no place in Spinoza's scheme of things, since reality was complete and perfect in accordance with logical necessity, a proposition obviously unacceptable to theologians grounded in the belief in an intervening supreme being.

In the development of modern science, the rationalist movement was transitional, a half-way house. Although Descartes and Spinoza were concerned with utilizing reason and logical necessity as a scientific approach to reality, they were nonetheless engaged in a fundamental way with the ancient problems of philosophy as those pertained to the existence of God. The last of the rationalists, Leibnitz (1646-1716), moved farther in the direction of science, by providing the basic groundwork of mathematical calculation, the calculus, but he also continued to be concerned with the role of God, in a nomad world of free will and fluxions. Meanwhile, the British Empiricists fashioned a new philosophy which completely ignored the old philosophical problem of God and the nature of reality. The empiricists believed no such thing as substance or being was universal or derivable simply through a principle of logical necessity. All reality was temporal and synthetic, never analytic. The empiricist consequence for science was the emergence of a compartmentalization of knowledge, carried out through the investigation of the ever-increasing spheres of reality. The Platonist unifying force of the logical necessity and interconnection of all propositions, the rationalist position in essence, gave way to the empiricist emphasis on the particulars of reality, the separation of knowledge into fields and a return to an Aristotelian view of nature.

David Ricardo's own resolution of his dissatisfaction with ecclesiastical authority was in the tradition of rationalism, as reason and logical necessity became hallmarks of his analytical thought. As to whether David actually read the works of Descartes and Spinoza, it is doubtful, since they wrote in Latin, a language which was unknown to him. On the other hand, the subject matter of their works was of such moment that secondary sources certainly must have been available. In Ricardo's library, in much later years, of course, there was only David Hume's two volumes of *Essays and Treatises* (1804 edition) which were of a philosophical character, and Hume was an empiricist, not a Cartesian. By the time he was twenty-five, in 1797, David Ricardo in his spare time was studying mathematics, chemistry, geology and mineralogy. He joined the Geological Society of London in 1808, and maintained a rock collection for most of his life. By 1799, however, he had discovered Adam Smith's *Wealth of Nations*, and that proved to be prophetic.

Bow and Old Ford

East of the City lay the two communities of Bow and Old Ford, on the bank of the Lea River. The route to the east was along Cornhill and Leadenhall Streets, through Aldgate to Whitechapel, and on to Mile End Road. It was a familiar route to most residents of the City, but particularly for those of the Jewish faith, because of the two burial grounds and Beth Holim, all on Mile End. Extending beyond Mile End was Bow Road, passing through the village, over the Bow Bridge into Stratford, Essexshire and the eastern seacoast (Hubert Llewellyn Smith 1939, pp. 186-188). It was a famous route traveled for centuries by the high and the mighty, the lowly and the disadvantaged.

The village of Bow, by 1792, probably housed about 1,500 people, with most of them gainfully engaged in the dye works located on the Lea River. The dyers were descendants of the Flemings, who had been encouraged to bring the art of dyeing to England during the reigns of Edward VI and Elizabeth. Until the sixteenth century, English cloth manufacturers had been dependent upon sending their wares to Flanders for dyeing, an expensive and dangerous practice because of the many pirating hordes roaming the coasts. Then, in the early eighteenth century, the Flemish dyers were joined by calico printers, and they were French Huguenots. In both instances, the craftsmen and their skills were resented and resisted by the London Guilds, who raised a clamor against the aliens with their cheap foreign labor who practiced their wares on the banks of the Lea River. The dyers and calico printers of Bow lived "beyond the bars," in suburbia beyond the extramural limits of the City's laws, and were outside the rules and protection afforded to craftsmen "within the walls."

In addition to the cloth manufacturers of Bow, there were the rural residents of the rolling countryside and the meadow lands, along the banks of the Lea. Bow and Old Ford together represented the last "barrier" to the City. Old Ford, as the name suggests, was the place where one could ford the Lea, in and out of the City. In the twelfth century, Queen Matilda, the Scottish wife of Henry I, grew tired of being doused by the waters of the Lea whenever she traveled to London from Normandy, and so ordered that a bridge be built over the river (Hubert Llewellyn Smith 1939, pp. 193-194).² The bridge was "arched like unto a bowe," and accordingly became the Bow Bridge. The bridge needed to be kept in repair, with the result that a royally subsidized administrative hierarchy emerged solely for that purpose, and Bow became more densely populated than Old Ford. In the short run, the Queen no longer got her royal person wet from the waters of the Lea, and in the long run, those who maintained the Bow Bridge were joined by the Flemish dyers, the French Huguenots, and finally the thousands upon thousands of Ashkenazim, refugees from the Polish and Russian ghettos.

² St. Mary-le-Bow church, in the middle of the village, is not the church from which one could hear the Bow Bells, dear to all Cockneys. St. Mary-le-Bow, of Bow Bells, is in the City, on the corner of Cheapside and Bow Lane. The church in Bow was more correctly known as St. Mary's, Stratford-le-Bow. Stratford-le-Bow was made famous by Geoffrey Chaucer, who in his *Canterbury Tales* told of young ladies learning pidgin French at the "scole of Stratford atte Bowe." Cf. *Canterbury Tales*, "Prologue," lines 124-126.

When Abraham Ricardo moved his family to Old Ford the area had not as yet become the great melting pot of the oppressed Ashkenazim, and was still a quiet country area, surrounded by meadows and farmland. A large quantity of vegetable growing was still going on in the countryside, upon which the City had become dependent. As shown on the map, Figure V-1 below, even in the early 1820s, the areas around Bow and Ford were not densely populated, and the open lands were vast and extensive.



Figure V-1. London's East End, Early Nineteenth Century

The exact location of the Ricardo family residence from 1792 to the turn of the century is not known, but in 1796 Abraham Ricardo subscribed £3,000 to the Liberty Loan, listing his address as Old Ford, Middlesex (*Works*, Vol. X, p. 25, n.1). Old Ford was where the Lea was joined by the Hackney Cut, approximately four miles from Garraway's Coffee House and the Stock Exchange. It was also, of course, the same distance from the Synagogue. Although Abraham Ricardo was not a *parnas* when he moved to Old Ford, he was re-elected to the *mahamad* in 1794, and again in 1800 and 1804. In other words, the move to the East End did not mean in any sense that Abraham Ricardo himself was removed from his religious convictions and associations.

Because the Ricardos had lived on Bury Street for nearly twenty years, in a location extremely well suited to both their business and private affairs, it may seem surprising that they would make such an abrupt change in their life style by moving to the rural area of Old Ford. On the other hand, it is not too difficult to find several reasons for the disruption.

In the first place the number of family members had increased over the years. When Abigail and Abraham first moved to Bury Street they had four children, the oldest having just turned five. By 1792 there were fourteen sons and daughters, and as usual, Abigail was with child. None of the children were married, and though Joseph was in America, and several others in school in Amsterdam, eleven were living in the parental homestead ranging in age from two to twenty-one. Besides the Ricardos themselves, the household included the family servants, Jacob de Joel and Mary Rundle,³ altogether a total of fifteen, in a house that initially housed but six. Whatever excess capacity might have existed in 1773 had long since been exhausted.

To find larger housing facilities in the City itself would have been difficult, since by the end of the eighteenth century the area had been completely taken over by financial and commercial enterprise. Only a few respectable residential pockets remained, one such area being Bury Street, of course. A few ghettoized sections still remained in the City, but these were confined to the economically and socially deprived. In the literal sense of the term, the Abraham Ricardos were forced out of the City by overpopulation. Perhaps it was because of this early family experience that David was at least sympathetic to his friend Malthus's favorite hypothesis.

A second factor contributing to the need for a new place of residence may have been Abraham's age, as he was by then sixty years old. Several changes associated with the new residence suggest that the move showed an alteration in the pace of his business life. Prior to 1792, Abraham Ricardo was listed in *Kent's Directory* as having his place of business at 1 Bury Street, and his occupation was that of stockbroker. After the move to Old Ford, Abraham listed himself as a merchant, with his business address as Garraway's Coffee House, in Exchange Alley.

³ In his 1802 will, Abraham provided life annuities for Jacob de Joel and Mary Rundle, suggesting that they must have been in service to the Ricardo family for many years. By an 1807 codicil, £5 was bequeathed to Abraham's coachman, William Primmer.

Obviously Old Ford was too distant from the center of the commercial and financial district to be convenient as a business headquarters. Moreover, Abraham Ricardo was sufficiently well known and established so that those who wanted to do business with him could easily find him at Garraway's. Other than files and account books, which he probably still kept at home, Abraham's "office" consisted of space at one of the many tables in the coffee house, which he would have shared with other brokers. The Stock Exchange proper was on Threadneedle Street, and since anyone could enter the exchange by paying the daily admission fee of sixpence, brokers who had no particular transactions to carry out on any given day assembled and remained in their favorite coffee house. For Abraham Ricardo the separation of his business address and residence probably was more symbolic than real, since he had been going to Garraway's since 1760, when he first went to London.

The change in the listing of Abraham's occupation was more than just symbolic, since he probably intended to become less active as a jobber. David was now twenty and had worked for him for over six years, having already given evidence of great business acumen. The father undoubtedly was conscious of David's business talent long before anyone else. He knew firsthand of the discernment and insight described by Moses Ricardo:

The talent for obtaining wealth is not held in much estimation, but perhaps in nothing did Mr. Ricardo more evince his extraordinary powers than he did in his business. His complete knowledge of all its intricacies; his surprising quickness at figures and calculation; his capability of getting through, without any apparent exertion, the immense transactions in which he was concerned; his coolness and judgment, combined certainly with (for him) a fortunate tissue of public events, enabled him to leave all his contemporaries at the Stock Exchange far behind, and to raise himself infinitely higher not only in fortune, but in general character and estimation, than any man had ever done before in that house.

(Works, Vol. X, p. 6)

With such a son to carry on the business, old Abraham could easily slow the pace of his own career, and it is surmised that that was his intention when he switched his occupational listing from that of stockbroker to merchant. David was the apparent residuary legatee of the Ricardo family tradition.

So long as he continued to live with his family in the City, the opportunities were slim for David to break away from the environmental pattern of his youth. Given his apparent detachment from religious orthodoxy, he must have had serious reservation about the possibility of marrying within the Sephardic community, especially with a woman with inclinations for preserving the tradition of the faith. Such a step would not be taken by a male seeking a new identity by rejecting

parental religious beliefs. The seclusion of the Sephardic enclave created an atmosphere which was not conducive to deviation from custom and tradition.

The spokes on the wheel of life of the members in the community did not extend beyond five or six blocks, from Bury Street to Threadneedle, to Cornhill, Poultry and Broad Streets, into Change Alley. The points on the compass which set the direction of the work and life of David could be traversed in about fifteen minutes. And hovering over this world was the shadow of the Synagogue, the reminder of tradition, conformity and purpose. One might reject the metaphysical and supernatural precepts of the faith, but living under the shadow of the Synagogue made it difficult for him to escape its influence over his daily existence, especially when that same influence extended into the parental home.

Although life in the City was hardly conducive to breaking with tradition, life in Old Ford required it. Not far from the new Ricardo residence was the house occupied by the family of Edward Wilkinson, a well-known and eminent surgeon and apothecary, a long-time resident of the Hackney Cut. The Wilkinsons were Quakers, the Ricardos Jews, and quickly the children of the two families began the friendships which eventually wed them to one another. The vastness of the countryside, the unfenced meadows, and the mutual respect which Jews and Quakers extended to one another, contributed to the cementing of bonds. And, of course, there was the chemistry, the diverse elements which merged into the dialectic compound of interest, affection and finally love.

Priscilla Ann Wilkinson was born in Old Ford on 5 November 1768. When David first met her, she was referred to as being "beautiful, accomplished and amiable" (*Sunday Times*, 14 September 1823). Coming from a well-to-do family, she enjoyed expensive clothes, the good life, and the numerous comforts which wealth could accommodate. David would prove capable of supplying all the happiness she ever dreamed of: love, respect, wealth, security and a large family. As a member of the Quaker sect, to marry a Jew was prohibited, just as it was for a Jew to marry a Christian. Priscilla Wilkinson's breach of faith was not grounded in any religious ontological notions, but a break promulgated upon more pragmatic grounds. She fell in love with a young man born a Jew who had been raised in an orthodox tradition, in a family attached to the belief that sons and daughters would never marry Christians. After her marriage to David, Priscilla continued to attend the Quaker meeting in which she had been reared, and each of the David Ricardo children was registered with the Quaker meeting. David, on the other hand, relinquished all ties with the Jewish religion, and probably had stopped participating in the Synagogue some years before his marriage. If not an atheist, an agnostic be, the direction which probably best describes David Ricardo's eventual resolution of the religious issue. In later years, he attended the lectures of Thomas Belsham (1750-1829), Unitarian minister of the Essex Street Chapel of Bow, as well as those of Robert Aspland (1782-1845), Unitarian minister of the New Gravel Pit Chapel in Hackney. As Sraffa notes,

The Unitarians at this time formed the most liberal section of that 'Wide Dissent', as it was called, which was accused of 'paving

the way to irreligion pure and simple;' and during the French Revolution they came to be regarded as a centre of rationalism and republicanism.

(*Works*, Vol. X, p. 39)

McCulloch initially claimed that Ricardo converted to Christianity (*Edinburgh Annual Register*, 1824), but later he rephrased this passage to read that he seceded "from the Hebrew faith" (McCulloch 1853, p. 470). The change, as Sraffa suggests, probably was because McCulloch came to learn that Ricardo never went any further than attending Unitarian lectures, and that certainly would not have required any type of formal conversion. By the turn of the nineteenth century, baptism no longer had any role among Dissenters, especially Unitarians. Consequently, although Priscilla remained a Quaker, David ceased being a Jew.

The physical attraction between Priscilla and David was catching, spreading to other members of the two families. In 1806, Moses married Fanny Wilkinson; in 1818, Priscilla's nephew, William Wilkinson, married Esther Ricardo; when Esther died in 1823, William then married her older sister, Rachel. As indicated earlier, four unions transpired between members of the two families.

As to the general frequency of marriage between Jews and Quakers, we do not find a great deal of evidence because of the relative isolation of the two sects from predominantly Anglican England. For centuries religious bigotry had been endemic to English social and political life, as discussed in earlier chapters, a situation which still prevailed at the time David and Priscilla were contemplating marriage. Each was a native of London's East End, and, technically, each was a Cockney, since each was born within the sound of the Bow Bells. But legally, both David and Priscilla were outside the pale, due to their respective religious backgrounds, a situation that pertained not only to them as individuals, but to all Jews and Quakers.

The hegemony of Anglicanism over English society was institutionalized through the provisions of the Test Act, and Lord Hardwicke's Marriage Act. The Test Act, promulgated in 1661, specified that to hold public office in England, one had to be a communicant in the Anglican Church. Obviously passed in order to exclude Roman Catholics, the Act had the effect of shutting out everyone except Anglicans, a type of "English Inquisition." For David Ricardo, the Test Act would later represent something of an obstacle to his own political career, although not insurmountable. But in 1793, the Act had the effect of excluding him from English society, since he was not about to embrace a new religious orthodoxy, after having recently rejected an older one.

So far as the Quakers were concerned the Test Act was repugnant to their most fundamental beliefs. Although they certainly considered themselves Christians, Quakers rejected all symbolic rituals, especially practices which might suggest some type of sacramental image. One became a member of a meeting, never a communicant. The denial of ceremony or ritual extended to such things as the normal designation of the days of the week, as they became first day (Sunday), second day (Monday), and the like. Lack of deference to ceremony and ritual was extended even to civil magistrates, before whom Quakers would never remove their

head coverings. The sacramental requirement of the Test Act, not abolished until 1828, excluded Quakers from participation in government of any form, just as the interdependence of squires and church excluded Quakers from the rural sector. To be a landholder was to be an Anglican, and accordingly Quakers became merchants and financiers, like the Jews. Also, members of a Quaker meeting usually had considerable education and learning. This set them apart. The designation, Quaker, is a derisive description of members of a sect "trembling in the presence of God," a very fundamentalist quirk. But the emergence of a sect which denied all ritual, the sacraments, and a clerical hierarchy, meant that the Quakers quickly became one of the most intellectualized groups within the protesting religious movement. Similar tendencies among the Jews were found to be a part of what became the Sephardic tradition, especially following the exodus from the Babylonian captivity.

Thus, both Quakers and Jews were denied access to the two largest sectors of English economic life: government service and agriculture. Members of the two sects were limited to finance, trade, and banking as arenas for employment. Their isolation from the main currents of eighteenth-century England was given added emphasis by their being excluded from the provision of Hardwicke's Marriage Law. The exclusion of the Jews and Quakers did not work any particular hardship, and, if anything made things easier, but nonetheless it was symbolic of their status.

The Marriage Act of 1753 was an extension of the philosophy behind the Test Act, requiring the three readings of marriage banns, in the parish church of the bride-to-be. It further stipulated that all English marriages had to take place in an Anglican church. As already discussed, Jews and Quakers, as well as the royal family (Hanoverian), were excluded because it was unlikely that members of these two sects would be parties to clandestine marriages, the practice which the Marriage Act was designed to prevent. The members of the two sects could be married according to their own rituals, and in their own congregations, and neither sect would permit a mixed marriage, of course. Nor would the Ricardo or Wilkinson families condone such marriages.

Priscilla Wilkinson and David Ricardo were married by "license" in the parish church of St. Mary Lambeth on 20 December 1793. To marry by "license" meant one of the parties had to reside in the parish of license for at least fifteen days prior to the marriage, and David Ricardo was listed in the St. Mary Lambeth registry as being "of this Parish."

It is not known who officiated at the ceremony, but undoubtedly it was a member of the Anglican clergy. Nor is it known who attended the wedding; undoubtedly numerous siblings, but no parents. David first moved to Lambeth at the time he left the family residence in Old Ford, probably some time after his twenty-first birthday, on the 18th of April. He and Priscilla continued to live in Lambeth until 1802, at which time they returned to the East End, with a residence on Mile End Road.

David and Priscilla were married in defiance of the wishes of their respective parents, against the faith of their fathers, and contrary to the spirit of prejudiced and intolerant English society. They were within the letter of the law, but not within its

spirit. The fact that they lived in Lambeth, a good distance away from their respective parents, was significant.

The Identity Conflict

Amongst the several writers who have described the intensity of the breach between David and his father, perhaps Jacob Hollander has shown the greatest insight.

The father *raged*, for to the Sephardic Jew a son marrying outside the faith was as one whose name passed out of the family circle *and for whom the memorial prayer for the dead was recited.*

(Hollander 1895, pp. 33-34; italics added)

As an orthodox Sephardic himself, Hollander only too well appreciated the real significance and impact of David marrying a Christian. Moreover, it is understandable that initially Abraham would have raged, and then after the marriage, faced the realization that from a religious standpoint his son might just as well have died. As is traditional in an orthodox congregation, the mother and father would have been consoled by their family and friends, as they gathered to sit *shivah* (a seven-day period of formal mourning observed after the funeral of a close relative), to recite the *kiddush* for the deceased.

The only other Sephardic writer to describe the break between David and Abraham was Moses, but he was under some family pressure to play down his brother's Jewish roots, and we find no suggestion in his *Memoir* of anything as dramatic as a *shivah*. During Ricardo's lifetime, it indeed was known that his family mourned his departure. Thomas Moore (1779-1852),⁴ an Irish poet and popular figure in the circle of liberal Whig politicians, was quoted as having remarked that,

In talking of Ricardo, at breakfast, someone mentioned that he had been buried,—which is the ceremony among the Jews towards anyone who quits their faith. The friends of the convert, too, go into mourning for him.

(Moore 1853-1856, Vol. IV, p. 40)

The remark of which Moore spoke, undoubtedly was made by the Marquis of Landsdowne, when he and Moore were at breakfast together. Landsdowne (1780-1863) was one of Ricardo's several political allies, and as former Chancellor of the Exchequer (1806-1807), very supportive of the economist's monetary reforms. Ricardo and Landsdowne first became acquainted around 1809, and their friendship

⁴ Moore's *Memoirs* were edited by Lord John Russell (1792-1878), the famous British statesman in the liberal cause, and twice prime minister (1846-1852 and 1865-1866).

continued until Ricardo's death in 1823. Accordingly, Landsdowne's knowledge was undoubtedly firsthand, because of his long relationship with David Ricardo. Whether Hollander was aware of Landsdowne's reference to the prayers for the dead, we discover no evidence.

Besides the father's rage was the mother's distress, and Abigail's reaction appears to have been even more extreme than Abraham's. In the only biographical sketch of Ricardo published while he still was alive, and he probably knew of the piece before it appeared, it was stated that his decision to marry

a Christian lady . . . gave so much offence to his mother, *that she compelled the father to drive him from his home.*

(Public Characters of All Nations, p. 243; italics added) [?]

Given the woman's role in the Jewish religion, a son marrying a non-Jew was of much greater importance than a daughter marrying outside the faith. Any children born to the daughter would still be Jews, while children of the son's marriage would be non-Jews. David's strategic role in the Ricardo family, being in fact the "first son," made his break with tradition that much more important, so the issue was compounded. He was in spirit, if not in fact, publicly denouncing his mother's heritage, and for that behavior she could never forgive him. Abigail punished her favorite son by having her husband put him out of the house, at the time he announced his intention to marry Priscilla. It was at this point that he must have taken up residence in Lambeth.

The seriousness of David's behavior was symbolized not only by his being driven out of the parental home, but also by his being put out of his father's business, and the loss of his share of any inheritance. Moreover, he was disinherited not only by his father but by his godfather as well. George Capodoco wrote in his diary:

On the 11th November this same year [1793] I made my testament and bequeathed to my godson David Ricardo, son of my good friend Abraham Ricardo, one hundred pounds, but as he has disobliged my good friend Abraham Ricardo I annul the said legacy, and leave him nothing . . .

(Quoted in Weatherall 1976, p. 28)

Recorded history is full of instances where children have defied their parents, what Erikson describes as the clash between the child's desires and the parents', a crisis of identity:

it occurs in that period of the life cycle when each youth must forge for himself some central perspective and direction, some working unity, out of the effective remnants of his childhood and the hopes of his anticipated adulthood; he must detect some meaningful resemblance between what he has come to see in

himself and what his sharpened awareness tells him others judge and expect him to be. This sounds dangerously like common sense; like all health, however, it is a matter of course only to those who possess it, and appears as a most complex achievement to those who have tasted its absence. Only in ill health does one realize the intricacy of the body; and only in a crisis, individual or historical, does it become obvious what a sensitive combination of interrelated factors the human personality is—a combination of capacities created in the distant past and of opportunities divined in the present; a combination of totally unconscious preconditions developed in individual growth and of social conditions created and recreated in the precarious interplay of generations. In some young people, in some classes, at some periods in history, this crisis will be minimal; in other people, classes, and periods, the crisis will be clearly marked off as a critical period, a kind of "second birth," apt to be aggravated either by widespread neuroticisms or by pervasive ideological unrest. Some young individuals will succumb to this crisis in all manners of neurotic, psychotic, or delinquent behavior; others will resolve it through participation in ideological movements passionately concerned with religion or politics, nature or art. Still others, although suffering and deviating dangerously through what appears to be a prolonged adolescence, eventually come to contribute an original bit to an emerging style of life: the very danger which they have sensed has forced them to mobilize capacities to see and say, to dream and plan, to design and construct, in new ways.

(Erikson 1962, p. 222) [?]

Conceptually, the notion of an identity crisis is of probative value in understanding the personality and life of David Ricardo. That he personally experienced such a conflict we cannot doubt, just as it is clear that he resolved the differences between his own objectives and those of his father by mobilizing new social capacities, as he quickly moved into the wider arena of the social and political pattern of contemporary England. Ricardo's resolution of the first crisis of adulthood, and those of his later life, fit neatly into the framework of Erikson's life-cycle hypothesis. Some details of that hypothesis are essential for a better appreciation of the complexities of David Ricardo's life, and the way it unfolded.

The "identity crisis" is one of the eight stages of psycho-social adjustment through which an individual passes en route from birth to death. The first crisis of young manhood is preceded by the several crises of infancy and childhood, followed by the adjustments of adulthood and maturity. At each stage in the life cycle come a series of attaching and separating relations with others, as the individual goes through a constantly recurring rhythm of conflict and resolution. How an individual handles a particular crisis, at a given age, is in part a reflection of the technique of survival learned during earlier stages of personality development. For

some individuals the resolutions are damaging, while for others there develops a highly complex personality structure built upon the stability and the strength of the ego.

Psychoanalytical theory continues to recognize the importance of the infancy crises initially identified by Freud (oral, anal, and genital), while at the same time giving increasing emphasis to the several crises of adulthood. Accordingly, the "identity crisis" of the late teens and early twenties, the "generativity crisis" of adulthood, or the "ego identity" of maturity contribute to the development of the personality. How any particular ego evolves in the process of passing through the series of life crises is a matter of the pathology of psychoanalysis, and beyond the concerns of this biography. Interesting here, however, is the fact that David's differences with his parents over the question of religion led to a new lifestyle and independence. In the new environment he came into contact with new ideas and new personalities, and out of this complex configuration emerged Ricardo, the political economist. The dominant new personal relations were with James Mill and Robert Malthus. Ricardo entered a social environment in which Malthus was recognized as the leading theorist of political economy. Malthus was six years older than Ricardo. More important, he had made his reputation as early as 1798, while it was 1815 before Ricardo received his recognition as a political economist. Ricardo acquired his reputation because of his role as a protagonist of Malthus, the supreme authority. In somewhat crass Freudian-Eriksonian terms, Malthus became something of a father substitute to Ricardo. The successful resolution of the identity crisis became a prelude to the successful resolution of the crises of intimacy and generativity.

The most provocative model of the life cycle hypothesis is Erikson's analysis of Martin Luther's identity crisis. The father wanted the son to become a merchant, while the son opted for a monastic life. The father thwarted and taunted the son by asserting that he lacked the fortitude to survive and succeed in a monastery. When the time came for the son to celebrate his first mass, the rite of priesthood, he experienced a "fit in the choir," a classical psychological breakdown, the beginning of the doubt which eventually led to his rejection of the existing structure of Roman Catholic theology. The Church was the father substitute for Luther, and as he failed to resolve the "identity crisis," so he failed the generativity crisis. The latter is manifest evidence of the periodic struggle of the individual with a fundamental re-evaluation of the self and an adoption of new career roles and cultural identifications. Erikson discusses this:

In discussing the identity crisis, we have . . . presented some of the attributes of any psycho-social crisis. At a given age, a human being, by dint of his physical, intellectual and emotional growth, becomes ready and eager to face a new life task, that is, a set of choices and tests which are in some traditional way prescribed and prepared for him by his society's structure. A new life task presents a *crisis* whose outcome can be a successful graduation, or alternatively, an impairment of the life cycle which

will aggravate future crises. Each crisis prepares the next, as one step leads to another; and each crisis also lays one more cornerstone for the adult personality.

(Erikson 1962, p. 254; italics in original)

In Ricardo's case his outcome was a quick successful graduation, while in Luther's instance he suffered a prolonged crisis which resulted in a stagnation of personality development, manifest in an extreme manic-depressive structure. In the first instance, the personality reflected a mood of contentment and control over the environment, while the latter became self-destructive.

Although Erikson recognizes the importance of the social configuration of adolescence and later life environments, the cornerstones are put in place in infancy. As the foundation rests, so rests the personality structure which arises from it. Erikson, like most biographers, is somewhat of a pauper when it comes to information on Luther's childhood. But given the pathology of Luther's struggles, the biographer draws inferences with respect to the oral, anal and genital stages of development. Out of the second crises of infancy, the anal stage

develops the infantile sources of what later becomes a human being's will, in its variations of willpower and wilfulness. The resolution of this crisis will determine whether an individual is apt to be dominated by a sense of autonomy, or by a sense of shame and doubt. The social limitations imposed on intensified wilfulness inevitably create doubt about the justice governing the relations of grown and growing people. The way this doubt is met by the grown-ups determines much of a man's future ability to combine an unimpaired will with ready self-discipline, rebellion with responsibility.

(Erikson 1962, p. 255)

Credence is thus given to the psychoanalytical proposition that the social figuration of the infant is responsible for the grown adult. The reaction of the parents during the anal stage is of lasting influence, affecting later life fixations upon such matters as money and time (Fenichel, 1945, pp. 278-284). Luther's tendency was to suffer fits, long periods of self-doubt and depression, manic behavior and rage—each evidence of a tormented and oppressive childhood.

The interpretation is plausible that Martin was driven early out of the trust stage, out from "under his mother's skirts," by a jealously ambitious father who tried to make him precociously independent of women, and sober and reliable in his work. Hans succeeded, but not without storing in the boy violent doubts of the father's justification and sincerity; a life long shame over the persisting gap between his own precocious conscience and his actual inner state; and a deep nostalgia for a situation of infantile

trust. His theological solution—spiritual return to a faith which is there before all doubt, combined with a political submission to those who by necessity must wield the sword of secular law—seems to fit perfectly his personal need for compromise. While this analysis does not explain either the ideological power or the theological consistency of his solution, it does illustrate that ontogenetic experience is an indispensable link and transformer between one stage of history and the next. This link is a psychological one, and the energy transformed and the process of transformation are both charted by the psychoanalytic method.

(Erikson 1962, pp. 255-256)

The father-son conflict, that Erikson and others (Mazlish 1975) perceive as the key to historical change, explains the Lutheran aspect of the Reformation, at least in part, as the final solution to Martin's conflict with the authority of his paternal rearing. The Church, the ultimate Father, became the substitute for Hans Luder.

Luther's father became a model citizen, but at home he seems to have indulged in a fateful two-facedness. He showed the greatest temper in his attempts to drive temper out of his children. Here, I think, is the origin of Martin's doubt that the father, when he punishes you, is really guided by love and justice rather than by arbitrariness and malice.

(Erikson 1962, pp. 57-58)

God, *the father*, became a viable substitute for the earthly father.

There remains one motive which God and Martin shared at this time [the identity crisis]: the need for God to match Hans, within Martin, so that Martin would be able to destroy Hans and shift the whole matter of obedience and disavowal to a higher, and historically significant, plane. It was necessary that an experience occur which would convincingly qualify as being both exterior and superior, so that either Hans would feel compelled to let his son go . . . or that the son would be able to forswear the father and fatherhood. For the final vow [ordination into the priesthood] would imply both that Martin was another Father's servant, and that he would never become the father of Hans' grandsons.

(Erikson 1962, pp. 94-95)

Young men who do not accept the objectives of their parents frequently choose substitutes which are at an opposite pole. In revolt, they stretch the rejection theme to its ultimate, and in doing so may find that their choice is a fate worse than the one from which they are flying. In Luther's case, he rejected outright a business career, and instead of marrying and raising a large family, he went as far away from the parental goal as possible. Not only did he take a vow of celibacy but a vow of

silence as well. The generational conflict was a manifestation of the all-encompassing Oedipal conflict. The conflict was prophetic, in the Freudian framework, not grounded in the particular ontological nature of the *dramatis personae*. Martin rejected the career and marital objectives his father desired for him, not because of any particular intellectual or moral predilections as to the nature of the commercial world, or the world of a normal sex life, but Martin rejected them all primarily because he rejected his father.

The identity which Hans Luder had intended for his son Martin was not the identity which the latter perceived he should follow. Martin's identity crisis led in his case to an attempted resolution which initially failed, for in accepting the God perceived by his monastic order, he found the father substitute wanting, in the same way his earthly father had failed him. The God perceived by the established Church was no better as a father than the real father.

All of which led to his final totalism, the establishment of God in the role of the dreaded and untrustworthy father. With this the circle closes and the repressed returns in full force; for here God's position corresponds closely to the one occupied by Martin's father at the time when Martin attempted to escape to theology. . . . Meaningfully enough, when he heard Christ's name or when he suddenly perceived the countenance of the Savior on the cross, he felt as if lightning had struck him. During his first Mass, he had only felt empty and void of all mediation; now he began to hate the sacrificial efforts of God's son. This is what clinicians call a confession compulsion, an acknowledgement that something had been wrong . . . just as his father had suspected. And so, as Martin put it, the praising ended and the blaspheming began. In the face of such contempt and wilful mistrust, God could only appear in horrible and accusatory wrath, with man prostrate in His sight. . . . Martin was further away than ever from meeting God face to face, from recognizing Him as he would be recognized and from learning to speak to Him directly.

(Erikson 1962, pp. 164-165)

The pathology of Luther's struggle to displace the Roman Church from a position where it could identify his objectives was as violent as his initial struggle to displace his father's dictated objectives. Luther refused the Church, by refusing the conception of God which the Church perpetuated. Luther found the God of the established Church to be as tyrannical, unforgiving and cruel as Hans Luder had ever been on his most oppressive days. Luther fashioned a new God, a forgiving father, to whom access was gained through faith, not works. No institutional structure stood between individual and God; there was no need for intermediaries, since faith alone was the necessary ingredient for eternal peace. Luther had

. . . the ingenious enthusiasm of the anarchist, who hungers for a society in which order and fraternity will reign without "the tedious, stale, forbidding ways of custom, law and statute," because they well up in all their native purity from the heart.

(Tawney 1926, pp. 90-91)

The Freudian-Eriksonian model, incorporating a projection of successive psycho-social crises as an individual passes from infancy to old age, is applicable to all individuals, not just those who may experience some type of personality disorder. Psychotherapists, of course, are mainly concerned with personality trauma, since such persons are the ones in need of some type of therapy.

The life-cycle model, on the other hand, may be utilized to gain insight into any number of diverse patterns of behavior, stretching along a wide continuum of personality adjustment. At any given point in this continuum there may be an individual personality who may provide high-quality grist for the biographer's mill. One possibility is the individual for whom a particular life-cycle conflict remains unresolved. For example, the search for identity, or ego realization, may never be completed, resulting in the arrested development of the individual's personality, as the case of Luther. In such an instance, the individual appears to be incapable of dealing with the consequences of elevating the conflict to a crisis level, leading to a prolonged continuation of the unresolved conflict.

An unresolved personality conflict, however, may develop because the world with which the individual is interacting is changing in some dramatic manner. The problem may not rest *within* the individual, but in the dialectic nature of the external world to which the individual is attempting to relate. Always some interpenetration occurs between the individual and his or her external world, and if the latter suddenly changes, then the person may be set adrift. The character of this relation between individual and world has been described by Daniel Levinson:

To be truly engaged with his world, a man must invest important parts of his self in it and, equally, he must take the world into his self and be enriched, depleted and corrupted by it. In countless ways he puts himself into the world and takes the world into himself. Adult development is the study of the evolving process of mutual interpenetration. If we are to understand it we must learn how, in [Arthur] Miller's vivid imagery, the fish is in the water and the water is in the fish.

(Levinson 1978, pp. 48-49)

The point here is that the fish may not always be swimming in the same water, and it is as important for the individual to know the characteristics of the external world as it is to understand the self. Psychology, and its handmaiden, psychiatry, lay stress upon knowing the self, with the focus being within the person, but disillusionment may also occur because of illusions about the nature of the external world, or more likely because such a world has undergone some dramatic transformation. The famous dictum of Gottfried Leibnitz (1646-1716) that nature

never takes a leap (*Natura non facit saltum*), subsequently adopted by the economist, Alfred Marshall, leads to the questionable conclusion that the temperature of the water undergoes only marginal changes. Being able to recognize that the world may experience dramatic changes is as much a prerequisite for the development of the personality as the knowledge of one's inner self.

The individual changes over the course of a lifetime, and "it is a long, long while from May to December." The changes are at least biological, emotional and professional in character. In addition, in the course of the journey new confrontations occur, new experiences to be learned about the constant interpenetration between the self and the external world. Out of this reoccurring pattern there emerges the personality, the individual. In this instance, David Ricardo.

In each of Erikson's four stages of adult development there is a polarity, within the extremes of which the self comes to a resolution of its own interconnectedness with the external world. In the late teens and early twenties the polarity is between identity and identity confusion, as the self attempts to set its own course in opposition to what the parental environment dictates. The second stage, intimacy versus aloneness, begins in the early twenties and extends to the early thirties. It is during this period that marriage typically occurs, signaling the first step in intimacy development, followed by attachments with new peers and the building of relations independent of parental authority. Obviously some age overlap exists between the stages of identity-identity confusion and intimacy-aloneness. The character of the resolution between the self and the world during the first stage has importance for the type of resolution during the second. To the degree to which there is identity confusion there will tend to be a pull in the direction of aloneness, and a failure to make meaningful new peer relations.

The passage toward the formation of a mature adult male personality commences in the period of intimacy, in the development of meaningful peer relations with both men and women. The relation with women typically culminates in marriage, an event which may occur any time, but especially from the early twenties to the mid-thirties. If a man marries early in life, as Ricardo did, the event usually overlaps the separation from parents, and its success is dependent not only upon the mutual acceptance of the responsibilities of marriage, but also upon environmental factors. These influences may be culture, extended family, religion and/or mutual aspirations. David's union with Priscilla Wilkinson was very successful and happy, lasting some thirty years, terminated only by his premature death. It was somewhat prophetic that he would marry immediately after the break with his parents because he was so firmly attached to a strong family environment. He showed great love and affection for his parental family, despite the differences over religious orthodoxy, and his life structure was not really altered in any appreciable fashion by marriage. His career, for example, remained the same, and he continued to build upon his extended family environment, both career and family being important to him at the time.

While it would have been difficult for Ricardo, in his early twenties, to choose a career other than stockjobbing, it is significant that he continued in the occupation

which his father had chosen for him at fourteen. The large number of children which David and Priscilla raised, though half that of his own parents, was indicative of a need to duplicate the happy childhood environment created by living with many siblings. Moreover, throughout his life David maintained close relations with the majority of his brothers and sisters. Besides the intimate affection which he showered upon his own children, he showed the same type of attachment for his wife's siblings. His marriage, therefore, reinforced the large family environment and extended it to even include in-laws. In no sense of the term was Ricardo drawn to the polarity of aloneness, and he thrived upon his intimate relations with his family. The warmth and closeness with parents and siblings was easily extended to wife, children and in-laws.

In addition to this very deep attachment for the members of his extended family, Ricardo also developed lasting relations with his adult peers. The first of these were his fellow stockbrokers, and despite changing his career objectives, he retained a close contact with them throughout his life.

When he was about twenty-five, in his spare time, Ricardo began to read in several areas of science, especially mathematics, geology, and chemistry. He obviously was groping for some type of activity outside the stock exchange, as apparently the day-to-day affairs of the exchange did not provide sufficient stimulation and outlet for his mental energies. His continuing success in business was affirmation that he had conquered his first career objective, and he was on the prowl for new goals.

Supposedly by chance, while browsing in a bookshop in his late twenties, Ricardo purchased a copy of Adam Smith's *Wealth of Nations*. Over the next decade he was a novice in political economy, but a master in the intricacies of the stock exchange. With a fellow broker, Hutches Trower (1777-1833), he discussed his new-found interest, and years later he described the origins of his new career.

I remember well the pleasure I felt, when I first discovered that you, as well as myself, was a great admirer of the work of Adam Smith, and of the early articles on Political Economy which had appeared in the Edinburgh Review. Meeting as we did every day, these afforded us often an agreeable subject for half an hour's chat, when business did not engage us.

(Ricardo to Trower, 26 January 1818,
Works, Vol. VII, p. 246)

By 1809, in his 37th year, Ricardo no longer was a novice in political economy, for he published his first articles. As a result of his publications he formed new friendships with James Mill and Robert Malthus, and these liaisons quickly achieved the intimacy characteristic of his interpersonal relationships. Mill assumed the role of Ricardo's mentor in political economy, as Malthus became the protagonist. Each had benefited from a classical education, Mill at Edinburgh and Malthus at Cambridge. At that time they were undoubtedly the two leading political economists in England, but within a decade Ricardo had eclipsed them both.

In his twenties and thirties Ricardo demonstrated the same resiliency in conquering the intricacies of the intimacy stage of the life cycle, which he had demonstrated earlier. First, there was the successful liaison with Priscilla and their children, followed by a close bond with his fellow stock-brokers such as Trower and George Basevi (1771-1851). As Ricardo groped for a new career goal he felt the need for relations with political economists, men whose education and training were considerably varied from his own. The bond which tied him to Mill and Malthus was not cemented by education, however, but by the intimacy, affection and respect which one individual perceives in another's personality. A communion and unity of the self occurred between Ricardo and Mill, Ricardo and Malthus, rare unities in the course of the development of interpersonal relations. Mill and Malthus were contrasts in interests, instincts and inclinations but in Ricardo they found a common bond. Evidence of the close link is provided by each of them.

Malthus said "he loved Ricardo more than anyone outside his own family" (James 1979, p. 249). As for Mill, when Ricardo died, a contemporary observed,

The heart of him was touched, and his nature revealed more tenderness on this occasion than I had believed to reside within his philosophic frame. I am woman enough to feel greater admiration for him than before, on this account.

(Bain 1882, p. 211; quoted from correspondence of Harriet Levin, wife of George Grote)

In his studies of the life cycle, Erikson emphasizes the identity-identity confusion stage of psychosocial development, exemplified in his study of *Young Man Luther*. Failure to resolve the conflict between the self and the world is prophetic, and Erikson considers childhood as the crucial stage for the development of a mature adult personality. Levinson and his collaborators, in contrast, are more concerned with the early twenties and the late thirties, a period corresponding to Erikson's intimacy-aloneness polarity. Levinson identifies three sub-periods: entering the adult world (22-28), the age-30 transition, and settling down (36-40).

In entering the adult world a man begins to center upon his own lifestyle, rejecting that of his childhood. He makes an initial choice of occupations and begins to enter into peer relations with men and women. Ricardo chooses an occupation, marries and establishes a distinct life-style. In contrast a man may grope for an occupation and hold back from the establishment of a particular lifestyle. In the age 30 transition,

A voice within the self says: "If I am to change my life—if there are things in it I want to modify or exclude, or things missing I want to add—I must now make a start, for soon it will be too late."

(Levinson 1978, p. 58)

It was during the "age 30 transition" that Ricardo discovered political economy, groping for an activity external to the world of the stock exchange. At

this point he probably had no clear-cut intention of leaving the world of finance, but he obviously was willing to make a new start, for something was missing in his life, primarily a mental activity to satisfy his engaging mind and to stretch his horizons beyond those of mere private capital accumulation. It was the beginning of his novice period as a political economist, finally culminating in his first publications at age thirty-seven. He discovered Adam Smith when he was twenty-seven, and from that point forward he was adding to the character of his life.

Until the early thirties, the young man has been a 'novice' adult. He has been forming an adult life and working toward a more established place in society. His task in the Settling Down period is to become a full-fledged adult within his own world. He defines a *personal enterprise*, a direction in which to strive, a sense of the future, "a project" as Jean Paul Sartre has termed it. The enterprise may be precisely defined from the start or it may take shape only gradually over the course of the period.

(Levinson 1978, p. 59; italics in original)

In the settling-down period appears two environmental forces, one having to do with stability, the other change. The major force for change concerns one's occupation, while stability centers around the family structure. For some men the desire to change the occupational goal may mean a disruption in the stability of family life, as the latter may prove to be incompatible with the new occupational objective. For Ricardo, however, this was no problem, because he was so financially successful in his initial career that he could walk away from it and pursue his new goal, with no disruption in the stability of his family structure. Not all men are so successful, as the life of the artist Paul Gauguin (1848-1903) is a dramatic illustration, a rejection of the stability of the family to reach for the dynamics of a new occupational form. Gauguin, like Ricardo, initially was a stockbroker.

For Ricardo, the "settling down" period stretched from age thirty-seven to forty-three. He gave up the initial career in order to become a full-time economist. The latter decision was not clearly delineated by any means. By the time the Napoleonic Wars had come to an end he was immensely wealthy, worth some £575,000 and he could have retired to the countryside, to enjoy the benefits of his accumulation. This was the decision of his friend Trower, who retired to Godalming, Surrey.

The polarity of the third stage of the adult cycle is between generativity and stagnation, the period of middle adulthood, or "individuation," which is

a development process through which a person becomes more uniquely individual. Acquiring a clearer and fuller identity of his own, he becomes better able to utilize his inner resources and

pursue his own aims. He generates new levels of awareness, meaning and understanding.

(Levinson 1978, p. 33)

In the middle forties,

A man has had his allotted time for reappraising, exploring, testing choices and creating the basis for a new life. The opportunity to question and search is present throughout middle adulthood and beyond, but at this point new tasks predominate.

(Levinson 1978, p. 61)

For David Ricardo the generativity-stagnation conflict began in 1815, at age forty-three. He retired from the exchange, bought an estate in Gloucestershire, and set his course for studying political economy, the series of events that changed the direction of his life. The drastic nature of the changes were as sharp as those experienced during his identity and intimacy periods. There was no confusion, no aloneness and certainly no stagnation, as in all three instances he understood the interconnectedness between the self and the world.

The life structure that emerges in the middle forties varies greatly in its satisfactoriness, that is, its suitability for the self and the workability in the world. Some men have suffered irreparable defeats in childhood or early adulthood, and have been so little able to work on the tasks of their Mid-life Transition, that they lack the inner and outer resources for creating a minimally adequate structure. They face a middle adulthood of constriction and decline. Other men form a life structure that is reasonably viable in the world but poorly connected to the self. Although they do their bit for themselves and others, their lives are lacking in inner excitement and meaning. Still other men have started a middle adulthood that will have its own special satisfactions and fulfillments. For these men middle adulthood is often the fullest and most creative season in the life cycle. They are less tyrannized by the ambitions, passions and illusions of youth. They can be more deeply attached to others and yet more separate, more centered in the self. For them, the season passes in its best and most satisfying rhythm.

(Levinson 1978, pp. 61-62)

Of the latter, Ricardo was such a man, beyond question.

"Osman" and "Jesse"

The compelling tide of the Enlightenment washed upon the shores of England and France. In each country came a softening and gradual deterioration of the granite of the strident medieval Church and the societies fashioned after its image. In France, the Church continued its domination over matters religious well into the eighteenth century, even though the arena of that influence narrowed as each succeeding decade passed in review. Alternative religious forms did not emerge in France, but the influence of libertinism quickened. The French nobility and landed gentry fashioned a great vent for unrestrained morality and convention, and religion exercised less and less influence over the population at large. Although France continued to consider itself a Catholic country, religion increasingly became a matter of *c'est la vie*.

In England, meanwhile, religion of one form or sect continued its dominant role as late as the nineteenth century. The religions were myriad, and when Voltaire went to London in 1776, he characterized the country as having "a hundred religions, but only one sauce," an apt description of England's cuisine, as well as its canonical orientation.

Religious diversity was the pattern in England, as against the French position that religion was not so important in everyday life. What particularly impressed Voltaire was that religious dissent in England was constitutionally protected. The Anglican Church and its handmaiden, the gentry, were securely in command, but variations of Methodist, Baptist, Puritan, Congregationalist, Quaker, and even Shaker were not only allowed, but recognized as legitimate.

English religion was . . . a free and healthy function of that old-world life, nicely guiding itself between superstition and fanaticism on the one side and material barbarism on the other.

(Trevelyn 1942, p. 329)

Although religious variation was more characteristic of England than France, it was in the latter that deism, agnosticism, and atheism had the greatest hold on the minds of men. Some Englishmen accepted the deist position of a noninterventionist deity, the Newtonian conceptualization of a great clockmaker. As Burt has noted, however,

Newton . . . takes for granted a postulate of extreme importance; he assumes, with so many others who bring an aesthetic interest into science, that the incomparable order, beauty, and harmony which characterizes the celestial realm in the large, is too externally preserved. It will not be preserved by space, time, mass and ether alone; its preservation requires the continued exertion of that divine will which freely chose this order and harmony as the ends of his first creative toil. From the Protoplast of the whole, God has now descended to become a category among

other categories; the facts of continued order, system, and uniformity as observed in the world, are inexplicable apart from him.

(Burt 1954, pp. 296-297)

The assault upon religion in England followed more rationalist themes than it did in France. In France the route was more romantic, more involved with the spirit than the mind. There is a similarity between the diverse roots of Marx's "scientific socialism" and those of deism, agnosticism, and atheism. The scientific aspects of Marx's socialism were grounded in English classical political economy, a political economy grounded in the material conditions of English society in the eighteenth century. When he fled to England, he found ready-made an economic engine of thought that was lacking in his native Germany. But British classical economic thought was nonetheless devoid of the spirit, romanticism, and charismatic ingredient upon which socialist views were inexorably dependent. Marx found that particular spirit of the mind in French socialism, a socialism of the spirit and heart. Upon the French spirit rested the origins of the libertarian ideals of the Enlightenment, and upon the same sources rested Marx's perception of a better future life for man.

Numerous and conflicting motives liberated the individual spirit, and it was the French who provided the great inspirational writers and the guiding principles. The cries of "*laissez faire, laissez passer*" were not just the campaign pleas of profit-grubbing business adventurers, seeking the unfettered right of property or the unrestrained right to flout the public welfare, but the pleas of the trapped and the exploited, struggling against the bonds of a cruel and restrictive social system. Individualism was not in any sense limited to the economic arena. An eighteenth century citizen of France or England would be shocked to learn that his pleas for freedom of thought have been subsequently interpreted so that it appears he was only interested in making money.

For anyone such as David Ricardo, who in the closing years of the eighteenth century was caught up in the Enlightenment movement, and who himself was developing that "independence of mind" and motive which marks what Erikson called the new identity, it was the literary works of the great masters of the Enlightenment who provided the *sine qua non* of that involvement. The great inspiration for the French Enlightenment was, of course, Voltaire, who more than any writer championed the cause of free thought and the loosing of restrictive social controls. He fished in the waters of both the English and French Enlightenment. As a native Frenchman he championed the right of dissent and free thought. The impact of the Great Charter and the Bill of Rights were inspirations to Voltaire, instruments for liberating the individual spirit that his native country lacked. Voltaire was the personification of the Enlightenment; as a young man David Ricardo read his works and liked what he read according to his friend, Maria Edgeworth.

Of Ricardo's dependency upon the ideas of Voltaire, Maria Edgeworth is alone a source. As a respected author and authority on education in the 1820's she was

welcomed into the Whig circle of acquaintances and friends of her late father, Richard Lovell Edgeworth.⁵ The latter was a friend of Watt, and Wedgewood, and when his oldest daughter visited England, she was able to visit with both established gentry and emerging industrial leaders. On one visit in December of 1820, she met David Ricardo at the home of the Thomas Smiths, Easton Grey, Gloucestershire. A year later, November 1821, she was the house guest of the Ricardos, the beginning of close friendship.

As a novelist, Edgeworth was primarily interested in people, their genealogy, connections and status. Only occasionally did she discuss any ideas in her correspondence, a reflection upon the intellectual deficiencies of the addressees, rather than the author. The author was bright, privately educated by her father, and she knew the rudiments of science, politics and gossip. Unlike many correspondents she wrote for private consumption (Maria Edgeworth 1971, pp. xxix-xxxii), with no idea that her letters would be published posthumously. Because she believed in the privacy of her letters, Edgeworth discussed issues which most proper Britishers would have considered private, the discreet topics of conversation.

Maria Edgeworth's letters contain more information about the family of David and Priscilla Ricardo than any other source. One did not write letters about the private family affairs of someone in whose home one was a guest. But Edgeworth did, and so something is known of the romance between David and Priscilla.

Obviously, Edgeworth was intrigued with the name of the Ricardos' oldest son, Osman. It was not of Biblical origin, either in the Judaic or Christian interpretations, and it was unlike any names of the Ricardos or Wilkinsons. Edgeworth learned the source for the name, Osman. By 14 November 1821, she had been a guest at Gatcomb Park for eight days (Edgeworth 1971, pp. 256, 263; calendar for years 1821-1823 in *Works*, Vol. IX, p. x), and apparently had learned a good deal of the family history.

I mentioned Mrs. *Osborne* Ricardo the son's wife—for Osborne read - *Osman*—not Osmond—I am quite right this time depend upon it. When Mr. Ricardo Senr. was paying his court to Mrs. Ricardo some of their friends not approving of their attachment they corresponded for some time under ye feigned names of Osman and Jesse and they afterwards agreed that they would call their eldest son *Osman*. Would you have guessed Honora [step-sister to Maria] that this slow political Economy-man was so romantic?

(Edgeworth 1971, p. 264; letter from Maria Edgeworth to Lucy Edgeworth, 14 November 1821; italics in original.)

⁵ Richard Lovell Edgeworth was married four times. Each of his first three wives died young. Maria Edgeworth was the daughter of the first wife, Anna Maria Elers, while Lucy Edgeworth was the fourth daughter of the fourth wife, Francis Anne Beaufort. In all, Richard Lovell Edgeworth was the father to twenty-two children. Edgeworth 1971, pp. xxxii-xl.

The foregoing was penned some thirty years after the romance, so for the "some time" one should read about a year, and it was not "friends" who objected to the "attachment," but family. Nevertheless, despite these lapses, Edgeworth's interpretation of the courtship should be accepted as authoritative. The editor of her letters, Christina Colvin, has claimed that the name Osman was inspired by the hero of Voltaire's *Zaïre*, the reason for the earlier discussion of Voltaire, and his role in the Enlightenment.

The hero of Voltaire's *Zaïre* was Orosmane, a Sultan in Jerusalem around 1249 A.D. He was in love with Zaïre, but she would not become his wife unless he renounced his harem, which also meant renouncing his religion, Eastern mores and customs. To have Zaïre as his sole wife, Orosmane was willing to give up his kingdom, his wives, and, most important, his religion. The play (1732), Voltaire's first success after his return to France in 1728, was extremely popular not only in France but in England as well, symbolizing the triumph of love over religious heritage, a victory of a rational approach to romance, as against the tradition-bound opinion of one's forefathers.⁶

Voltaire's character of *Orosmane* apparently became anglicized into *Osman*, with the translation of *Zaïre* for English audiences. Osman, on the other hand, is the Anglicization of Othman (1259-1326), founder of the Ottoman Empire, and ruler from 1290-1326. As indicated, Voltaire's *Zaïre* is plotted in Jerusalem in 1249, and he may have been borrowing the same historical figure.

While the reason for the love letter *nom de plume* of Ricardo is fairly well authenticated, as related by Edgeworth, her explanation for Priscilla choosing *Jesse* is lacking. According to the editor of her English letters, Christina Colvin, *Jesse* presumably was taken after *Jessica*, the daughter of Shakespeare's wily and clever Shylock (*The Merchant of Venice*). There is good reason to believe such an interpretation.

JESSICA. I am sorry thou wilt leave my father so:
 Our house is hell, and thou, a merry devil,
 Didst rob it of some taste of tediousness.
 But fare thee well; there is a ducat for thee:
 And, Launcelot, soon at supper shalt thou see
 Lorenzo, who is thy new master's guest:

⁶ The play itself turns from love triumphant over religion, to tragedy triumphant over religion, in Greek theatrical tradition. *Zaïre* was born in France, and though raised a Mohammedan should have been Christian. She agrees, after pleas from her brother, Nérestan, to be baptized, since he has come to Jerusalem as a Crusader to rescue Zaïre and ten Knights of the Crusades held prisoner by Orosmane. All of the dealings between Zaïre and her brother, Nérestan, take place in secret, and when Orosmane learns of their clandestine activities, he suspects romantic intrigue, not brother-sister relations. In an attempt to seize Nérestan, Orosmane mistakenly kills Zaïre with a dagger. When he learns the facts, he kills himself as the curtain drops.

In a sense, one can read *Zaïre* as the message that fate, tragedy, the gods, will not permit love to triumph over religion and tradition, hence the Greek overtones tragically triumph over the warm rationalism of the Enlightenment. Voltaire's *Zaïre* appealed to the romantic audiences for which it was written, for it is better to have loved and lost, than never to have loved at all—words of the Greek tragedy at its best.

Give him this letter; do it secretly;
and so farewell: I would not have my father
See me in talk with thee.

LAUNCELOT. Adieu! tears exhibit my tongue. Most beautiful
pagan, most sweet Jew! If a Christian did not play the knave and
get thee, I am much deceived. But, adieu! these foolish drops do
somewhat drown my manly spirit: adieu!

JESSICA. Farewell, good Launcelot.
Alack, what heinous sin is it in me
To be asham'd to be my father's child!
But though I am a daughter to his blood,
I am not to his manners. O Lorenzo!
If thou keep promise, I shall end this strife,
Become a Christian, and thy loving wife.

(The Merchant of Venice, Act II, Scene III)

Nothing of the correspondence that passed between "Osman" and "Jesse" exists. The exchange could not have lasted very long, however, because they were married within a year of their first meeting. Furthermore, since they were close neighbors, the two initially could have met openly, and it would have been only after they became serious about marriage that the families placed obstacles in their path. We have good reasons to believe that Priscilla's father was the one who behaved most violently, and who was the chief obstructionist. David had established an independent residence in Lambeth before the marriage, probably sometime after his twenty-first birthday, and that eliminated any reason on his part for a clandestine correspondence. Being a woman, Priscilla was not so fortunate and she continued to live in her father's house.

Evidence that Edward Wilkinson was a severe and revengeful father is found in an 1803 letter from Ricardo to his father-in-law. The occasion was the latest in the continuing saga of the acrimony between Wilkinson and his children. Written when David was thirty-one and Wilkinson seventy-five, the letter is revealing of the personality of the addressee, as well as the addresser.⁷

As a spectator of the scene now before me, and as a friend to all parties, allow me, without disguise, to offer my sentiments to you; and if in the course of so doing, you should observe anything bordering on severity, attribute it to a sincere desire on my part of producing harmony and peace to a divided family. Let me begin, by laying before you a history of the system which you have

⁷ The letter was precipitated by Fanny Wilkinson's decision to move out of her father's home and to live with her brother, Josiah Wilkinson. The "Old Doctor," as the elder Wilkinson was called, obviously became angry with his second daughter's decision to leave her parental home, and Ricardo "as a spectator to the scene" was offering his "sentiments." In 1806, Fanny Wilkinson married David's brother, Moses.

followed, and to which may be attributed the unfortunate result which you now experience.

From the earliest infancy of y^r children you have exacted from them the most painful obedience; you have taught them to consider you as their master, rather than their friend, and affectionate father. You have never encouraged them to confide their cares to you as to a sympathizing friend. How could they consider you in that light, when your will was made the absolute rule for their conduct? You wishd to be considerd as the fountain of power: no enjoyments, no comforts, no pleasures were to be obtained by the highest or the lowest in y^r family unless they emanated from you. Y^r system was that of an eastern monarch ruling over abject slaves. . . . This system was too fatally encouraged by that good woman your wife, who, instead of resisting these imperious claims, was the foremost in submission, and by her example, led your children, one and all, to acquiesce in your authority. But, as they were growing to manhood, it might easily have been foreseen that this extravagant power could not be much longer unquestioned. . . .

Josiah, at length, under the most discouraging circumstances broke from his chains . . . Priscilla left you without a pang of regret; her only painful feeling was commiseration at leaving her sister under the rod of a man who knew so little how to appreciate the good qualities of those about him, doomed to live with a parent who contrived to destroy all sympathy, and to banish all affection from the breasts of his children.

. . . Too long, Sir, have you tried what authority on one side and humility on the other will produce; What has been the result? Without fortune or any flattering prospect of obtaining any, your children have shaken off your yoke as too heavy and oppressive. Such a uniformity of conduct can proceed only from a similarity of causes. . . . Your system has not been attended with happiness to yourself, and to others it has been productive of misery. You still insist on every reliance being placed on your affection. . . . Think no more of unconditional subjection,—the very sound is repulsive to a liberal mind. No father should exact it,—No child arrived at years of discretion can be expected to submit to it. Try the opposite course, trust everything to affection and exact nothing. Come among us as a friend and a father and confide in our willingness to sooth your cares and contribute to your happiness.

(*Works*, Vol. X, pp. 119-122; David Ricardo to Edward Wilkinson, 12 September 1803)

As a family conciliator, Ricardo was a failure, as the Wilkinson children and their father remained at odds. In 1809, the old man died. To his son, Josiah, he left his surgical instruments and medical books as an inheritance. To his two daughters, Priscilla Ricardo and Fanny Ricardo, he left £1,100 each. Immediately, upon returning from her father's funeral, Priscilla gave her share to her brother's children, since she probably did not wish to deny her father's disinheritance of her brother. Giving her share to her brother's children was a way out of a difficult and painful ordeal. That same day, she wrote her brother to explain her action.

I do not know my dear H[enry] if this plan will meet with yours and Sally's approbation, but it appears to David and me as the best which has offer'd to our minds, of making it easy to all our feelings.

(*Works*, Vol. X, p. 118; Priscilla Ricardo to Josiah Henry Wilkinson, 12 November 1809)

And so, Priscilla could agree with Jessica,

But though I am a daughter to his blood,
I am not to his manners . . .
I shall end this strife [and]
Become . . . thy loving wife.

(*The Merchant of Venice*, Act II, end of Scene III)

Shakespeare's anti-Semitism notwithstanding—"a maid so fair, the daughter of a Jew could not be"—Jessica's rejection of her parental home is classic, and easily could have been the example Priscilla borrowed for her clandestine correspondence with Osman.⁸

The Lifestyle of David and Priscilla

As indicated in David's long letter to his father-in-law, Priscilla had grown up in an unhappy home, and had enjoyed little of the comforts of life or the happy environment of family life. David, in contrast, was reared in the pleasant surroundings of a well-to-do family, and while he later rejected the religious character of that life, he nonetheless respected his father and loved his parents as he did his brothers and sisters. He lacked few of the comforts of life and he provided his wife and children with a similar lifestyle.

In November 1821, Maria Edgeworth wrote about Priscilla Ricardo:

a large fat woman with brilliant black eyes and benevolent countenance—rather vulgar in voice and manner but not nearly so much as I had expected. She is *manieré* but only as if it were a

⁸ Weatherall hypothesizes the name Jesse was for "Jessie", a song in Robert Burns's *Select Collections of Scottish Airs for the Voice*, published in 1793, the year of David and Priscilla's courtship. Weatherall links the romance with the Scottish version of the Enlightenment, and ignores Colvin's suggestion of the link to Shakespeare's Jessica. (Weatherall 1976, pp. 24-25) There seems to be no reason for accepting Weatherall's suggestion instead of Colvin's, though it is, of course, a possibility.

manner learnt—no pretension—no affectation no thought about self. She has such cordial open hearted benevolence that I should feel not only *mean* but treacherous if I ridiculed or criticised her.

(Edgeworth 1971, p. 256; italics in original.)

The airs which Edgeworth so quickly detected, while not pretentious in character, were nonetheless a part of Priscilla's personality. Another contemporary, Elizabeth Allen, who was also a Quaker, told her daughter that

Priscilla Ricardo was a handsome, but very proud woman. I have heard my Mother say that for many years she continued to attend Friends' Meeting at Ratcliff, and how she was admired as she swept grandly and proudly up the meeting, followed by her five elegant daughters.

(Quoted in *Works*, Vol. X, pp. 45-46)

As young women, Priscilla and Fanny Wilkinson were referred to as the "pretty Quakers" (Weatherall 1976, p. 23) born and raised in Old Ford. Their father had sufficient income and status to afford them the opportunity of some education in manners and sophistication, befitting the daughters of a somewhat successful professional. But in her marriage Priscilla was able to acquire the *manieré* of the *nouveau riche*. Throughout her married life she carried her inclinations to their heights, as she spent her husband's money with complete and confident composure. After a week at Gatcomb Park, Edgeworth again wrote her stepmother

Mrs. Ricardo has still the remains of beauty and is good nature itself. She is an excellent mistress of house and servants—keeping all tight and right and building and planting and trudging about—now to the new conservatory and now to her gold and silver pheasants who feed sumptuously every day upon all the eggs (chopped) that are not eaten at breakfast. The pheasants inhabit grey-painted pens or houses all down the steep slope that goes from the front windows of the house to the water . . . Mrs. Ricardo was a *quaker* and is now remarkably fond of Coquelicot color and red flowers and gaudy floss silk and chenille borders worked on black for she wears nothing but black—and splendid white blonde.⁹

(Edgeworth 1971, pp. 266-267)

Lavish dinner parties lasting until 2:00 and 3:00 A.M. were not uncommon in the Ricardo residence in Gloucestershire, as several instances reported by the

⁹ The Quaker emphasis upon simplicity, the absence of ostentation and repudiation of materialism meant they used no color in their clothing. The men traditionally wore black, while the women wore "Quaker grey" or white garments. Priscilla Ricardo apparently continued to stress black and white blonde, but by 1821 she was adding a dash of color to her dress.

economist bear evidence. Life in the country was luxurious, and whatever proclivities the family showed for the good life were as much a result of David's wishes as they were of Priscilla's. David Ricardo enjoyed entertaining, good wine and good conversation, even if the latter usually was dominated by talk about "rent, or profit, or currency, or some such *dry* subject" (*Works*, Vol. X, p. 165; David Ricardo to Miss Mary Ann, 20 April 1822). Economists and politicians were frequent guests, as Malthus, Mill and Joseph Hume visited on frequent occasions, but most of the Ricardo's circle of friends was drawn from the surrounding country estates. It was in this circle that Maria Edgeworth moved, as she observed the family when it was removed from London, where the pace of living was somewhat more formal. No matter where the Ricardos lived, or at what period in their lives, Priscilla was aware of her status and wealth. It was her wish to live on Upper Brook Street, in Grosvenor Square. As Ricardo described the move,

Mrs. Ricardo has lately . . . expressed a wish to go to town:—this wish every hour acquired new force and in a short time became absolutely irresistible. Search was made after a house, and as ill-fortune would have it, one was found . . . the very thing to suit us,—brimful of every convenience, and containing precisely the number of rooms which our large family required. There was however one obstacle to its purchase, and that a most serious one, the price was enormous, and I would not listen to it. Difficulties however only stimulate the brave and when familiarly contemplated, at every view, appear less formidable. I soon found that my opposition abated in the same ratio as the wishes of those about me increased, and in a few days I was completely vanquished. In short the house is 'mine.'

(*Works*, Vol. VI, pp. 52-53; David Ricardo to James Mill, 26 September 1811)

The annual rent was £480.

Given the wealth that Ricardo was able to accumulate while still relatively young, it was not surprising that his wife spent as she wished, acquiring gold and silver pheasants to go along with the acacia and weeping willows that an earlier *nouveau riche* had planted in the Gloucestershire countryside. But David, as well as Priscilla, enjoyed the lifestyle. He occasionally complained of his wife's proclivities to spend money, but he always acceded to her wishes and his own desire to consume. He contrasted himself with others, such as Nathan Rothschild, who acquired wealth in order to acquire more wealth, by saying that he acquired wealth in order to enjoy it (*Works*, Vol. X, p. 90). It was perhaps because of his own propensity to consume, aided and abetted by his family's tendencies in the same direction, that led him to reject so forcefully the Malthusian notion that there were psychological barriers to an unlimited desire for goods.

There is evidence of the spending habits of the Ricardos when they were young. They had been married a little less than two years when, accompanied by

their three-month-old son, they went on a holiday to fashionable Brighton. David wrote to his brother-in-law, Josiah Wilkinson that

we have a charming view of the sea and a better house than ours at Kennington, we have five bedrooms and two parlors for which we pay the extravagant price of 4 guineas p^r. week, but when I determined to come here I made up my mind to spend a great deal of money and I am now convinced I shall not be disappointed.

(Works, Vol. X, p. 110; David Ricardo to Josiah Henry Wilkinson, 10 September 1795)

Something of the social circles in which they moved at Brighton is gained from a subsequent letter to Josiah.

This place is fuller than ever,—The Prince¹⁰ is returned but we have not yet seen him.—There are about six families here with whom we are intimate and who are so sociable, that our time passes very agreeably. We were at the play last Wednesday when J. Bannister and Mrs. Bland perform^d for Sedgwick's benefit.¹¹ . . . We see the Princess¹² every day, she is very fond of children and in passing our house looked up and took particular notice of our boy, which Priscilla is so proud of that I fear she will become a violent aristocrat.

We have been sailing three times on the sea—the last time the wind blew very *fresh* and the dancing of the waves had so great an effect on Priscilla's stomach that she vomited almost the whole time we were out, she says she will content herself with the amusements on shore and will not again trust herself on an element which so ill agrees with her.

(Works, Vol. X, pp. 111-112; David Ricardo to Josiah Henry Wilkinson, 20 September 1795)

From the luxurious stay at Brighton in 1795, to Priscilla's gold and silver pheasants in 1821, there is a consistent thread: a thread of wealth and a desire on all sides to enjoy its benefits. This undoubtedly was part of the bond which early on grew between David and Priscilla. In temperament they were contrasts. David was modest and unpretentious; did not strut, did not cajole, did not lean heavily upon his

¹⁰ The Prince of Wales, the future George IV.

¹¹ John Bannister (1760-1836) and Maria Theresa Romanzini Bland (1769-1838), two of the outstanding performers of the day and in their prime. John Bannister was a comedian, frequently seen in Drury Lane and Vauxhall, specializing in Voltaire and Moliere. He also played Shakespeare, especially the comedies. Maria Theresa Romanzini was born an Italian Jew, undoubtedly Sephardic; a mezzo-soprano, she played opposite Bannister in Drury Lane, Vauxhall, and Brighton. She was referred to as "Mrs. Bland" after her marriage in 1790, so Ricardo's reference does not suggest a personal knowledge.

¹² The future Queen Caroline, tried for adultery in 1820.

reputation, wealth and/or mental capabilities. Again, to his brother-in-law, he wrote:

Fortune has persecuted you from your infancy,—you are a signal instance of its injustice; perhaps I am so too, for she has been as unjustly bountiful to me as she has been cruelly neglectful of you . . .

(Works, Vol. X, p. 113)

And four years later,

Remember, my good fellow, that it was but the other day we started together,—I mean that my prospects were no better if so good as yours,—we compared notes, and we made calculations of the probable amount of my expenses.¹³ In our course what different success has attended to us? and now forgetting the spot from whence we took our departure, you are overwhelmed because I dispense one atom of my success to my friend whom I esteem.

(Works, Vol. X, p. 115; David Ricardo to Josiah Henry Wilkinson, 29 November 1802)

Ricardo was thirty; Wilkinson about thirty-six, maybe older. The "one atom of my success" (*Works, Vol. X, p. 115; David Ricardo to Josiah Henry Wilkinson, 1 December 1802*) amounted to £500, a gift which Wilkinson refused to accept, with some indication of having been insulted. Ricardo and Wilkinson had known one another for at least seven years, and while Ricardo was in the habit of giving a "little annual assistance" (*Works, Vol. X, p. 113; David Ricardo to Josiah Henry Wilkinson, 29 November 1802*) to his less fortunate brother-in-law, the idea of such a large sum apparently was repugnant to the young doctor. From the viewpoint of the donee of such a gratuitous sum, the act could easily be interpreted as if the donor was trying to lord it over his older brother-in-law, and insulting him in some sense.

Actually, this was but the first instance of any number of occasions when David Ricardo would bestow gifts of money upon members of his family and certain special friends, such as Malthus. In terms of psychoanalytical theory, it can be alleged that Ricardo showed strong evidence of what the first-generation Freudians depicted as a "repetition compulsion" (Fenichel 1945, p. 542). The compulsion in Ricardo's case manifested itself in a propensity to give money to his relatives and friends, a largesse repeated many times over during his life. The reaction of the donee in many instances was not unlike that of Wilkinson. On one occasion, two younger sisters wrote their brother, David that

¹³ In 1793, when Ricardo was disowned and struck out on his own business career.

It is a most unpleasant task to be obliged to refuse those favors which arise from the most delicate attention but as we feel we cannot accept them with that kindness with which they proffered we think it right to decline them. Then do not be offended but indeed we cannot accept the present . . . you have offered us—We have a feeling which we call an independent spirit,— you perhaps insufferable pride, which renders the idea of pecuniary obligations most repugnant to us.

(*Works*, Vol. X, pp. 133-134; Esther and Sarah Ricardo to David Ricardo, undated)¹⁴

At the conscious level there can be no denial that Ricardo's motives were those of generosity, love and affection for those to whom he gave money. He believed sincerely in the principle of equality. As he told John Cam Hobhouse, "to raise one man degraded others" (Lord Broughton, 1821, Vol. 3, p. 159; diary entry of 15 October 1821), an apt rephrasing of the Sephardic principle that the distribution of seats in the synagogue were "to be made with equity . . . as death makes no distinction of persons." The evidence is that Ricardo was a kind and generous person, virtues inherited from the cultural tradition of the Sephardic enclave. He did not learn his equalitarian and philosophical radicalism from Mill or Bentham, but he inherited it, and it was this heritage which motivated him to be generous and free with his money.

But there also lurks subconscious behavior, and these motives may be diverse from those of the conscious. There is the same result, giving generously, but different explanations are possible. Ricardo had been giving money to his brother-in-law, Wilkinson, for several years, as he noted in 1802. This would mean that not long after he had been put out of his father's business, he was financially able to help others, and to take expensive vacations at Brighton. David differed with his father only on religious and philosophical grounds, and not in outlook on other issues. To prove one's self, that righteousness is the path, to prove to others that one is right, and to make it crystal clear that one is right, one way is to be successful. Success is a many-splendored image, and how does one measure success? To Abraham Israel Ricardo, there was success with one's God, keeping the commandments and laws, and there was success in the business world. His son, David, rejected the possibility of success in the first instance, but in the second realm, in the arena of business, the son far outshone and outdistanced the father. What mattered was that David proved himself capable of succeeding in his father's profession, and then used the symbol of that success by giving it away. And he gave money away all his life, a compulsion repeated many times over.

¹⁴ Sarah was unmarried at the time. Esther was seventeen years younger than David, Sarah twenty years his junior.

Chapter VI

THE GESTATION OF AN ECONOMIST: EARLY FINANCIAL CAREER

The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniencies of life which it annually consumes, and which consist always either in the immediate produce of that labour, or in what is purchased with that produce from other nations.

According therefore, as this produce, or what is purchased with it, bears a greater or smaller proportion to the number of those who are to consume it, the nation will be better or worse supplied with all the necessaries and conveniencies for which it has occasion.

Adam Smith (1776)

Having made the decision to marry, David Ricardo and Priscilla Wilkinson had to look to greater London for a place to settle and raise a family. So long as they remained in the East End, the hostility from their respective parents would have been too omnipresent and uncomfortable. They could have remained in Middlesex, but the most likely location would have been some distance north of the City, beyond the regions of the depressed Irish immigrants, and the many acres of vegetable nursery gardens ever expanding to meet the needs of a growing London market. To move west, to Westminster, would have been to live a great distance from the commercial center of the City and the Stock Exchange. To be sure, there were many expanding and beautiful suburbs in Westminster, "London beyond the Bars," where the restrictions and covenants of the City were inoperative. But the

fashionable West End would have to wait until David was better able to afford the luxury and high rents. In the meantime there was peaceful Lambeth, within an easy distance of the City, and at the same time a growing region for the near well-to-do.

Most famous because of Lambeth Palace, the 700-year-old London residence of the Archbishop of Canterbury, the suburb was bordered on the north and west by the Thames, and on the east by the rough and ready region of Southwark, with its docks the center for overseas shipping, and its slums the home of many of the most wretched of London's poor.

In 1793, the Lambeth area was still primarily a rural section, the landscape covered with a bounty of hawthorne hedges, rolling mossy banks, and acres and acres of green lawns. The peaceful atmosphere was best suggested by the formal Vauxhall Gardens, where royalty had long enjoyed the beauty of the lower Thames as it wound by the southern tip of Surrey. Lambeth itself was dominated by open fields, flowering gardens, and wooden areas where pleasure-seeking Londoners traveled whenever they desired to communicate with nature, listen to the call of the meadowlark, and watch the quiet grace of the swans as they moved in elegance upon the ponds. The legends of Lambeth Palace stretched far into English history. It was there that Beckett was murdered, and Thomas More spent his last days for defying still another monarch. It had also been the residence of the more fortunate John Pecham, Thomas Arundel, and William Laud, as each in turn guided the destinies of the Church of England. Only the Thames separated Lambeth Palace from Westminster Abbey and the Parliament Buildings; the archbishop in residence could oversee the center of England's secular government, and on quiet evenings could even hear the sound of the Bow Bells.

David and Priscilla Ricardo lived in Lambeth for ten years, initially at 2 Brooks Place, on the east side of the western extension of Kennington Road (see Figure VI-1). Kennington Road in those days ended at Kennington Common. Years later the Common was the debating arena for candidates to the reformed Parliament, but in earlier times the site of public executions as well as holiday celebrating. When David and Priscilla lived there, Kennington Common was a rolling landscape for picnicking, walking and playing at games.

The annual rent of 2 Brooks Place was £18 (*Works*, Vol. X, p. 46, n.2), and they lived there from December 1793 to May 1795, when they moved a short distance to 7 New Buildings, Kennington Place, shown on the map, Figure VI-1, as terraced between Kennington Green and Kennington Row. Number 7 was on the west side of Kennington Place, and it was here that Osman Ricardo was born, 25 May 1795.

The move from Brooks Place to Kennington Place was undoubtedly occasioned by Osman's approaching birth; a move to a larger house, where the annual rent was £32 (*Works*, Vol. X, p. 46, n.2). Weatherall says a year later they were living at 5 Kennington Place (Weatherall 1976, p. 31), but the change could have been an error of the ratebook keeper. There does not appear to have been any appreciable difference between numbers 7 and 5 Kennington Place, as they were in the same tenant block. Weatherall says the move was because Priscilla was not "quite

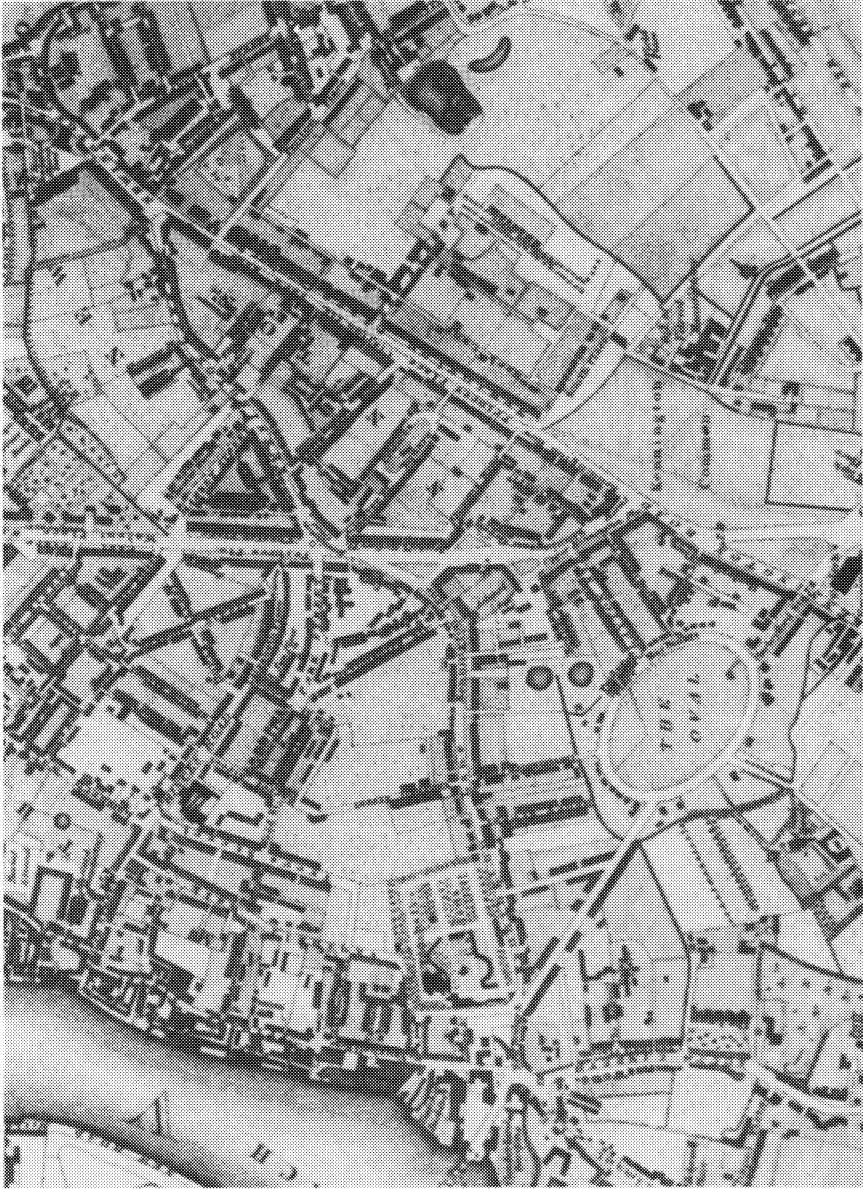


Figure VI-1. The Suburb of Lambeth, Early Eighteenth Century

satisfied" with number 7, Kennington Place; the fastidious Sraffa does not distinguish between the two residences in Kennington Place. One can speculate about the possibility of a better view of a courtyard, or a better garden behind the residence; whatever the difference, it must have been marginal but it would not be the last time Priscilla got what she wanted.

While living in Kennington Place, Priscilla gave birth to four children, Osman in 1795, Henrietta on 10 May 1796, Priscilla on 4 October 1797, and Fanny on 6 October 1800 (*Works*, Vol. X, pp. 61-62); a fifth child was stillborn in 1799 (Weatherall 1976, p. 38). With the exception of the sorrow associated with the stillborn baby in 1799, the ten years in Lambeth do not appear to have been marked by any outstanding events, and like any young married couple, the David Ricardos undoubtedly experienced the usual events of nursing their children through the normal childhood illnesses, and the typical trials and tribulations of parents to a growing family. To help in the task of raising their family there was undoubtedly a small retinue of servants; in 1795, while at Brighton, David wrote to his brother-in-law, Henry Wilkinson:

We have already hired a cook at $\frac{1}{2}$ a guinea pr. week but find we cannot do without another servant,—therefore, will be obliged to you to send to our house at Kennington for Thomas and put him in the way how to come to us in the cheapest way,—which I think will be by the *slap-bang*, or on the top of a Brighton coach.

(*Works*, Vol. X, p. 110; italics in original)

The move to Lambeth probably represented some improvement in the conveniences of Ricardo. The distance to the Stock Exchange was much shorter than it had been in the East End. From Kennington Common to the corner of Threadneedle and Broad Streets was approximately two and one-half miles; along the western extension of Kennington Road, past Lambeth Place, over the Great Surrey Road, and across the Blackfriars Bridge into the City. The road from Lambeth to the City was as well maintained as the route along Mile End Road to Bow, but the distance was much shorter, and one easily could have walked. Mallet claimed that Ricardo had £800 when he got married, an amount which afforded his wife and children the opportunity to reside in a convenient and somewhat fashionable suburb.

The Ricardos returned to the East End sometime in the late months of 1802, to the area called New Grove, on the north side of Mile End Road. New Grove would be a short distance west of the area shown in Figure VI-1. The house was at the intersection of Mile End and Grove Road, the latter being the route to Old Ford. The new residence was in a more rural area than the Kennington residence in Lambeth, as New Grove was surrounded by nursery gardens, even though within an easy walking distance of the City.

Priscilla gave birth to her fifth child, David, on 18 May 1803, and this may explain the need to relocate. Most of the Ricardo and Wilkinson children were still located in the East End, and it was to this area that David and Priscilla were

attracted. There were also some factors which now made the East End more hospitable. Abigail Ricardo, David's mother, died on 21 October 1801,¹ and Edward Wilkinson, Priscilla's father, was by then seventy-four years old. As they were the two parents who were most vociferous in their opposition to the marriage, presumably the atmosphere in the East End had become less hostile than in 1793. Moreover, the reconciliation between David and his father had begun to emerge, and while it is not known which one took the initiative, the first evidence is Abraham's will.

Abraham drew up his will 11 February 1802, some three months after his wife's death. He included his son David as one of his heirs. The size of David's inheritance was minimal, some £50, as his father observed "he is well established and does not need more" (*Works*, Vol. X, p. 38). The father obviously recognized the great gap between David's wealth and that of his siblings. The will also allotted David his share of an Irish Tontine, to which Abraham had subscribed in 1775, for his four eldest children. Each share came to £100 (*Works*, Vol. X, p. 26). Further evidence of the reconciliation was the codicil which Abraham added in 1807, when David was made one of four executors, along with his brothers Joseph and Jacob, and a brother-in-law, David Sumada. Joseph undoubtedly was an executor since he was the eldest son and David the most successful and respected. Jacob was an executor because he was the only son who remained a Sephardic Jew, was a stockbroker, and former clerk to his father in the Stock Exchange. David Sumada was married to Abraham's eldest daughter, Hannah, and a scion of an orthodox and respected Sephardic family.

The David Ricardos lived in New Grove for ten years, when they moved to Grosvenor Square in 1812. Besides her son David, Priscilla gave birth to three other children while the family lived in the East End. Mary was born on 6 April 1805, Mortimer on 10 August 1807, and Birtha on 15 September 1810.

Ricardo was always very devoted to his family: parents, siblings, and his own wife and children. While he lived in Lambeth, he seems to have concentrated upon earning a living for his growing family. After the move to New Grove, however, his business activities were accelerated as he became a Loan Contractor.

The Water and the Fish

The twenty-two years that Britain carried on during the French Revolution and Napoleonic Wars, 1793-1815, coincided with the period of Ricardo's life when he was a stockjobber and loan contractor. The character of the wars, the political climate, and the financial and monetary policies of the government changed dramatically during the several decades. Accordingly, the nature of Ricardo's

¹ Abigail Ricardo was buried in the Sephardic cemetery on Mile End Road, 22 October 1801. (*Works*, Vol. X, p. 25, n.3) In keeping with orthodox Jewish tradition, the burial would have been within twenty-four hours of death.

business also changed; there was an interweaving and interaction between the events of state and his life, the water and the fish.

The long period of the French Revolution and Napoleonic Wars was fractured into several distinct stages, as the reasons and purposes of the campaign fluctuated. The first stage, 1793-1799, was dominated by Britain's attempts to put an end to the repercussions of the French Revolution, and to restore the Bourbon monarchy. More important, probably, was the need to also secure Britain's domination over commerce on the European continent. In November 1799 the French cast of characters changed when Napoleon Bonaparte became first consul under the new constitution of the Consulate, marking the beginning of his ascendancy as European dictator. This transition marked the beginning of the second stage of the War of the French Revolution, 1799-1802.

In his capacity as first consul, Napoleon needed time to solidify his domestic stronghold, and to modify the directions of the Revolution. At the same time, domestic issues had become more urgent in Britain, particularly the Irish question, so both belligerents needed a reprieve. Preliminary peace negotiations commenced in October of 1801, with a treaty signed at Amiens, 25 March 1802.

The Peace of Amiens gave Napoleon the opportunity to carry out the reforms of the new constitution, one which made no mention of "liberty, equality and fraternity." The Revolution had already entered into a rapprochement with the Papacy (1796), and Napoleon meanwhile permitted the Church to return to France, though he retained the right to appoint bishops. A new criminal code was adopted, with a strengthening of the police establishment and the justices being appointed by the first consul, rather than elected as under the Directory (1795-1799). In May 1802 Napoleon was elected consul for life, with the right to designate his successor.

From his new position of strength Napoleon moved to extend his power over Europe, beginning with his opening of the Scheldt River valley, a move designed to extend French trade influence to Antwerp and Belgium. English trade in the Netherlands was now seriously threatened, and in May of 1803 Britain declared war on France.

The War of the French Revolution became the war against Napoleon in 1804, when the French Senate designated Napoleon I, Emperor of France, with hereditary succession to his heirs. The first Napoleonic War stretched from 1804 to 1814, at the conclusion of which Napoleon was forced to abdicate as Emperor, and was assigned to the island of Elba, where he was to reign.

The Peace of Amiens lasted some thirteen months, but Napoleon stayed on Elba only nine months. He landed on the French Riviera, at the Gulf of Juan, 1 March 1815, crossed the Alps and by the twentieth was in Paris, as "the eagle flew from steeple to steeple until it reached the towers of Notre Dame" [?]. The second Napoleonic War lasted one hundred days, until 18 June 1815 with the decisive Battle of Waterloo.

Politics and military campaigns aside, the most important British problem of the Revolution and Napoleonic Wars was financial, as the combined National Debt of Britain and Ireland just about quadrupled, increasing from £234,035,716 in 1793, to £834,262,726 in 1815 (Hargreaves 1930, pp. 108, 291). The Debt was

financed by an increase in the money supply, after the Banks of England and Ireland converted to a paper currency in 1797. Inflation and serious disruptions in foreign exchange rates were the obvious consequences. The conversion to a paper currency led to the famous bullion controversy, discussed in detail in Section 5 of this Chapter. The dispute ranged over the course of many years, but in 1809 Ricardo emerged for the first time as an active participant, and he quickly became the leading champion of a return to a bullion currency. The Peace of Amiens and the imposition of an income tax were followed by a fall in the price index in 1802, but by 1809 prices were higher than in 1801, and the controversy resumed.

The first stages of the wartime inflation were fed by the increase in the Debt contracted by the Government through the major banking houses, including the Banks of England and Ireland. After 1806, however, members of the London Stock Exchange became contractors for the rising Debt, and Ricardo became one of the principle leaders.

Several characteristics of the British National Debt made it unique as a matter of public finance. First, the Debt was issued in perpetuity, an annuity with no maturity, the famous British Consols. Redemption of any portion of the Debt could be initiated only by the Chancellor of the Exchequer, but with the government constantly in need of new funds, that issue was moot. Second, all Consols were issued with a fixed nominal rate of interest of three percent. The coupon for a £60 Consol, for example, yielded £1 16s as an annuity. Third, because of the constant rate of interest, Consols typically sold at a discount, sometimes by as much as fifty percent. As the price of Consols fell, the real rate of return rose, of course, and vice versa. Although the nominal rate permitted the government to hold down the cost of servicing the Debt, it was necessary to issue a larger number of Consols to raise a given sum, and this contributed to a further rise in the Debt. Between 1793 and 1815, for example, the Debt Charge fell from 3.9 percent to 3.7 percent, while the Debt was quadrupling. The price of Consols was bearish whenever the government was preparing for new loans, and bullish after they were fully subscribed. The price of Consols changed as the ownership of the Debt fluctuated, as with the whims of a gambling casino. The biggest gamblers were the stockjobbers of the Stock Exchange.

Between 1793 and 1806 Ricardo was a stockjobber, primarily trading in the government market in his own right. Jobbers offered to buy or sell government stock, on a day-to-day basis, each offer being made with both a low and a high price. The margin between the two prices covered the jobber's own expectations as to the future activity of a particular issue of Consols, the degree of competitive bidding by other jobbers, and future price changes in Consols. Trading in futures was highly speculative as the exigencies of the wars and political-economic events changed daily, and jobbers revised their puts and calls.

In addition to trading in the existing Debt, stockjobbers could subscribe for new loans if they were included on the list of subscribers submitted by the Loan Contractors. Until 1806, the Loan Contractors were always bankers, and they had a tendency to exclude members of the Stock Exchange, preferring to monopolize the subscription lists. For the Loan of 28 March 1806, a bid was made by three

stockbrokers, John Barnes, James Steers and David Ricardo, on behalf of themselves and other members of the Exchange. The Loan was awarded, as typical, to three banking houses: Goldsmid, Robarts and Baring.

Although his name was last on the list, Ricardo was in fact the chief negotiator for the Stock Exchange, as he compiled the list of potential subscribers. The next year, 3 March 1807, Barnes-Steers-Ricardo were the successful bidders for a Loan of £14,200,000, marking the first time the Stock Exchange members were successful in competing with the bankers. The bids were always sealed, and the Chancellor of the Exchequer awarded the loans to the lowest bidder. Barnes-Steers-Ricardo were unsuccessful in their bids for the loans of 1808, 1809, and 1810, but in 1811 they were one of the low bidders along with the banking house of Robarts, Curtis and Co. During the next four years, Barnes-Steers-Ricardo always were successful Loan Contractors, sharing the Loans in each instance with other Contractors, either banking houses or Exchange members. Ricardo was one of the Contractors for a total of £157,700,000, or 26 percent of the net increase in the National Debt between 1793 and 1815. The largest single Loan of the war years was for £36,000,000, awarded 14 June 1815, four days before the Battle of Waterloo. It was with this Loan that Ricardo make his greatest killing, as the Loan went off at a considerable discount, since Napoleon appeared invincible. In Ricardo's obituary in the *Sunday Times*, it was noted that upon "this single occasion . . . he is said to have netted upwards of a million sterling" (*Sunday Times*, 14 September 1823, p. 1).²

It was during his years as a Loan Contractor that Ricardo also became an active political economist, and it is not surprising that his initial contributions centered on public finance and banking. Being personally involved in the financing of the National Debt, the experience gave him the opportunity to acquire the necessary knowledge of the day-to-day activities of the Bank of England and of the consequences of the wartime inflation, as the latter was fed by the increases in an unregulated money supply. While initially Ricardo was just another stockjobber, he in time became one of the leading financiers of Britain's wars with the French. At the same time, he became aware of the necessity for changes in many of the basic economic and social institutions of the country, and as the war ended he was no longer just another stockjobber, but one of the leading analysts of the British economy. As with all of Ricardo's economics, his monetary formulations were grounded in the practical affairs of state.

"Romer's Rule"

In describing the adjustment of vertebrates to new environmental conditions, paleontologists differentiate between preadaptation³ and the actual emergence of new forms of life. The new form which the vertebrate acquires is favorable in the

² John Barnes died in early 1815, so the list for the Loan of that year was headed by Steers and Ricardo.

³ The concept of preadaptation was formulated by Romer (Romer 1959).

sense it survives the evolutionary process. The biological pattern of a vertebrate's preadaptation has been labeled "Romer's rule," according to which

The initial survival of a favorable innovation is conservative, in that it renders possible the maintenance of a traditional way of life in the face of changed circumstances.

(Hockett and Asher 1964, p. 72 italics in original)

The organism initially adjusts just enough to survive in the new environment, but in time it must change radically under the force of the dialectic. The preadaptation allows the organism to maintain the status quo while it absorbs the shock of the new condition.

Over the course of the last two decades of the eighteenth century and the first decade of the nineteenth, Britain experienced the preadaptation of the adjustment to industrial capitalism as it emerged from commercial capitalism. English society behaved in conformity with "Romer's rule," as there was enough adjustment in the institutional structure to allow for the survival of the traditional way of life. There was some parliamentary reform, some attempt to ease the disgrace of the Irish question, the end of the slave trade and some adjustment for the new financial and monetary systems. But the ancient regime still prevailed, with the monarchy, the squires and the parsons in control. George III managed to maintain the old system by choosing the right man to lead his government, William Pitt "the younger" (1759-1806). It was Pitt who brought about the necessary preadaptations for British survival, and rallied the nation against the French. It was the period of the new Toryism.

Among the cast of characters in the British drama of the war years, Pitt was the grand strategist. The second son of the first Earl of Chatham, he was personally educated by his father, and at fourteen entered the University of Cambridge. He received his degree in 1776, not by passing the Tripos, but awarded it because he was the son of a nobleman. Having to earn a living, Pitt tried his hand at the law, and then when he was only twenty-four years old was chosen by George III to be Prime Minister. Pitt formed his first cabinet in 1784, following a general election when he was returned as one of the two Cambridge University members to the House of Commons.

Like his father before him, Pitt was the champion of the royal prerogative to choose the cabinet and to determine policy; his greatest loyalty was to the monarchy and the political system which encompassed it. Like George III, his sponsor, Pitt was of another era, a misplacement which was not only his great tragedy, but also his great success. Pitt's loyalty to the King was not peculiar in any sense, for there were many who shared his view of the monarchy. As the wars with France dragged on there was even some increase in support of the crown. As Cobbett, the romantic and monarchist, put it:

The crown is the guardian of the people, but more especially is its guardianship necessary to those who are destitute of rank and of

wealth. The King gives the weakest and poorest of us some degree of consequence . . . in his justice, his magnanimity, his piety, in the wisdom of his councils, in the splendour of his throne, in the glory of his arms, in all his virtues, and in all his honours, we share, not according to rank or to riches, but in proportion to the attachment that we bear to the land which gave us birth, and to the sovereign whom God commanded us to honour and obey.

(Political Register, 30 June 1802, p. 796)

In opposition to George III and Pitt were the fractionalized Whigs, with Charles James Fox (1749-1806) their most effective spokesman. The third son of Lord Holland, Fox was a member of the social and political class which maintained control over the unreformed parliament. He opposed the members from the rotten boroughs on the issue of reform, the slave trade and Catholic emancipation, but socially he was one of them, in the gambling clubs and in addiction to port wine, and he welcomed their companionship. He had few supporters among the placemen, but in their social life he was extremely popular, and herein lay his influence. Like Pitt, Fox was a great orator, and many an evening they waged oratorical contests in the House of Commons, to the enthusiasm and enjoyment of the back benchers.

While Fox's social proclivities assisted him in maintaining his Parliamentary influence, they were also responsible for George III's animosity. The King believed that Fox was personally responsible for the wayward ways of his son, the Prince of Wales. The future George IV was Pitt's sponsor, as he stood in the wings waiting for his father to die, or be declared demented. It was Fox's expectation that when the Prince of Wales became King, he would be chosen Prime Minister, but by the time the Regency was instituted in 1811, Fox was dead.

Besides Fox and his followers, there were the remains of the old Rockingham Whig faction, the Chathamite Whigs, and the Anglican evangelical Clapham sect, led by William Wilberforce (1759-1833). The latter had for its major cause the end of the slave trade, not only on moral grounds but because it disturbed the status and domicile of West Africans, and their policy advocated the return of blacks to what eventually became Sierra Leone.

Perhaps the greatest cause of dissension in the Whig opposition was the great disillusionment over the French Revolution. In the beginning there was great support from the Whigs for the principles of the Revolution, just as there was for the American Revolution, but with the rise of the oppressive period of the Robespierre regime, there was a questioning of liberal causes. Because he had once been a reformer himself, the views of Edmund Burke (1729-1797) were particularly persuasive (Burke 1790). Reform could lead to revolution, and there were too many social consequences from a violent overturn of a constitutional system of monarchy, especially when the principal change agents were the lower classes in society. British aristocrats had, of course, always detested the aims of "liberty, equality and

fraternity", and with the reformers becoming aware of the error of their ways and frightening manifestations, there was a growing conservatism in the country.

Fox had toasted the fall of the Bastille, and while his support of the Revolution meant that Burke and others deserted him, Fox continued in opposition to the British war against the French Revolution.

It was a policy difficult for men of influence to understand and harder for them to follow. More and more Pitt seemed the sounder man, the true guardian of political tradition. The way he quietly dropped reform, the steadiness of his distrust of the French revolutionaries, his stern attitude to homespun radicals, compelled their admiration. More than ever did the appellations Whig and Tory seem outworn symbols of a dead political fanaticism; for men of property it was enough to be a Pittite and an Englishman.

(Plumb, 1950, p. 193)

At no time in his long career was Pitt ever able to personally command more than two score of the 685 members of Parliament, but he was nonetheless able to generate enthusiasm for his policies. Prior to 1793, he brought about several solutions to the problems of commercial capitalism. Some resolution was made of the controversy over the East India Company and its practices abroad, as discussed in an earlier chapter. The effect was that after 1784 the British establishment and the Company exercised dual control over India, the former supervising the government, the latter the trade and commerce. It was a compromise of a difficult problem, but the excesses of the company's exploitation of the native population were brought under control.

Pitt's solution for the need for parliamentary reform was to double the number of peerages, as he packed the House of Lords with members of the *nouveau riche*, men who had accumulated great wealth in the course of Britain's colonial expansion. Most of the new peers were connected to the City, and they became supporters, not only of Pitt, but of the King as well. With this new power base he reduced the opposition of the old Whig aristocracy in Parliament. Pitt also attempted a resolution of the Irish question, but in this instance he came into conflict with George III. For the King, the idea of Catholic emancipation was an anathema and a denial of the basic principle of the Glorious Revolution. He knew that support for Pitt's plan for emancipation was lukewarm in the House of Commons, if not non-existent in the Lords. In February 1801 Pitt was forced to resign, and he assumed the duties of the Warden of the Cinque Ports.

So far as Pitt was concerned, the Irish question was intimately associated with Britain's war with Napoleon. So long as Ireland was denied participation in the affairs of Britain, the country was a seething ground for Napoleon's agitation, the gateway to the possible invasion of Britain. Should that occur the whole European strategy to contain France would fall by the wayside, and Napoleon would be successful in extending his empire.

Pitt's strategy for containing the Revolution and defeating Napoleon had four major aspects. One, to form coalitions with continental allies and use their armies to encircle the enemy; two, to use the British navy to control the Baltic and Mediterranean Seas, as well as the Channel and the Atlantic; three, to rely upon the militia and volunteers to defend against invasion, rather than raise a standing army; and four, to finance the wars by increasing the national debt, rather than raise taxes by an amount sufficient support the various campaigns. All four strategies had associated problems.

Coalitions between Britain and the various continental powers were negotiated on four different occasions: 1793, 1798, 1804 and 1812. The first three were the work of Pitt, while the last was made after his death in 1806. The first coalition was with Holland and Spain, whereby Britain entered the war against Revolutionary France in order to protect Sardinia. It was of little use, as the French army quickly crushed the opposition of Holland and Spain, in no small measure because of continental sympathy for the causes of the Revolution.

By the time of the second coalition, 1798, the character of the war had changed. Napoleon had become first consul, and was moving to advance his control over eastern Europe as well as the lowlands of Holland and the Iberian peninsula. Accordingly, Britain was able to form an alliance with Russia, Austria, Naples, Portugal, and the Ottoman Empire (Watson 1960, Chapter XV). As devised by Pitt, the Austrians were to drive Napoleon out of Italy, the Russians would converge from the east, the British fleet was in control of the Mediterranean and Baltic seas, and in Egypt Napoleon's ambitions would be frustrated by the Turks. On the chess board each piece was strategically placed, and in December 1799, Napoleon made peace overtures.

It was the peace overture which caused the second coalition to collapse, as Britain refused to negotiate. So far as Pitt was concerned, peace could only be negotiated if the Bourbons were returned to the throne, and on this point he had the support of George III, and a majority in Parliament. To negotiate with Napoleon would represent *de facto* recognition of the Revolution, and that was not tenable. The war continued, although unpopular in Scotland and England, not to mention Ireland.

Napoleon easily defeated the Austrians in Italy, with a decisive victory at Marengo. The Austrians were no match for the French, in part because the British fleet was not quick enough with supplies and naval support. The British fleet engaged in a series of futile diversionary attacks at Belle Ile, Brest, Minorea, and Ferrol; in 1801 Austria signed a treaty with France, and the first chess piece was removed from the board.

In the Baltic, the British reserved the right of search of all ships for contraband, thereby raising the fears of the Russians, Danes and Swedes. Accordingly, a League of Northern Powers was organized, as Tsar Paul believed that Napoleon was a vehicle for limiting British domination in the Baltic. The League of Northern Powers retaliated against the British search for contraband, placed an embargo on all British shipping in the Baltic, and cut off the crucial supplies of pitch, hemp, and pine.

Then Prussia entered this northern league and invaded Hanover to force that state to abandon the cause of its elector, the King of England. The Danes occupied Hamburg the more effectively to prevent England from trading with north Germany. To this, at least, a stern reply was made. . . . Lord Nelson, on 2 April 1801 took twelve ships of the line and all the smaller vessels into Copenhagen . . . [and] persevered until he had sunk, burnt, or taken all seventeen of the Danish first line ships cooped within their own harbour. The carnage, Nelson admitted, was the most dreadful he had ever witnessed.

(Watson 1960, pp. 386-387)

With the destruction of the Danish fleet, the Swedes, Prussians and Russians withdrew from the League of Northern Powers, ending the strategy to limit Britain's domination of the Baltic. Tsar Paul was murdered in 1801, and Napoleon lost his principal supporter among the crown heads of Europe. In 1801 France signed the treaty with the Papacy, and after Pitt resigned came the Peace of Amiens. The situation was untenable, as many recognized:

In 1798 Ireland was in revolt. The French were massed to invade, the navy was mutinous and unreliable, and there was nothing but half-trained, half-armed volunteers to match against the finest general and greatest army Europe had seen. In 1801, that general and that army were still unconquered. Europe was his, and it seemed to many that it always would be so. Perhaps, so long as we maintained the freedom of the seas and our wealth of colonies, it might be possible to live in amity with the French. The Treaty of Amiens was signed in 1802, and Englishmen swarmed across the Channel; but the time for sight-seeing was short.

(Plumb. 1950, p.204)

The stalemate meant that Britain controlled the seas, while the continent was at the mercy of Napoleon's whims. Although Pitt's coalition strategy had not proven successful in defeating the French on the continent, his strategy of relying upon the British navy had succeeded in keeping Napoleon on the mainland, as his Egyptian and Indian naval activities had been totally frustrated. Nevertheless, the naval strategy was costly, as was the financing of the various allies and their armies. For both Britain and France the central issue was the same, namely that complete victory depended upon inflicting losses upon the enemy's domestic economy, either through conquest or isolation. Napoleon tried both policies, first through threatened invasions and second by the imposition of the Continental System.

Napoleon knew that Britain was able to carry on the war because of her industrial wealth and superior navy. As his military successes revealed, there was no European country which he could not conquer or contain, but so long as Britain

was untouched his ultimate victory was in jeopardy. In 1797 he prepared to invade England by establishing a base in Ireland, where the Catholic populace would be sympathetic to the aims of the Revolution. There he would be able to rely upon the Irish discontent with their oppressed status within the British empire.

With the threat of invasion, Pitt called for the formation of Volunteer Associations in every parish of England and Scotland, since the regular army and navy were in disarray and there was mutiny. Britain could only be protected by volunteers who would reveal their patriotism and support for the war. In addition, volunteers would not be as subject to corruption as the armed forces:

The condition of both the army and the navy was appalling; the floggings and the brutality horrified even eighteenth-century Prussians. Death by beating for quite trivial offences, such as drunkenness, caused scarcely a stir of conscience; food was always rotten, pay overdue and scanty living conditions were unbearable. Promotion rarely went by merit, commissions were hawked for purchase; the financial resources of the armed forces were the object of deliberate and calculated plunder.

(Plumb, 1950, p. 200)

The Loyal Lambeth Volunteers had three companies of infantry and one of cavalry, each with three score of private soldiers. On 10 July 1798, David Ricardo was commissioned a First Lieutenant in the Lambeth Volunteers. On 22 September 1798 the corps received its colors. Weatherall has vividly described the occasion:

It was certainly a long day. It began at nine o'clock with their appearance in full uniform—helmet, red feather with white tip, red jacket with black collar, cuffs and lapels, yellow breastplate inscribed with the monogram LLV, white cross-belts and breeches, half-gaiters—and fully armed, the officers with swords—at a muster in their field of exercise near Vauxhall. From there they marched to the Parish Church of St. Mary's, entering it on the stroke of noon, where the colours were consecrated by Dr. Vyse, the Rector of Lambeth and Chaplain to the Association. Divine service followed, and a sermon. The corps then marched back to the field of exercise; the colours were presented by the wives of the Commanding Officer and Second-in-Command; speeches, composed by the ladies, and read by the Secretary, were delivered; exercises were performed before a large crowd; and the day ended, at ten o'clock, after "a most ample and elegant cold collation."

(Weatherall 1976, pp. 37-38; also *Works*, Vol. X, pp. 46-47; reported in the newspapers for 24 September 1798).

There was no invasion in 1797 or 1798, even though Napoleon's troops made two very small landings in Ireland. The attempts to invade Britain were thwarted primarily because of the necessity for France to deal with the military stress created by Pitt's second coalition. But with the resumption of the wars in 1802, Napoleon once again was prepared to invade Britain, and the Grand Army was sent to Pas de Calais, as close to Dover as Napoleon could reach. The British government again called upon volunteers, and some 600,000 responded in 1803. By this time Ricardo had moved to New Grove, and on 17 August 1803 he was commissioned a Captain in the Bromley and St. Leonards Corps of the Tower Hamlets Volunteers (*Works*, Vol. X, pp. 46-47). Ricardo's brother, Moses, served as Surgeon in the Bromley Corps. A volunteer in the West End of London was James Mill, and in January 1804 he wrote to his friend John Barclay in Edinburgh:

I have been a volunteer these six months, and I am now a complete soldier. It has cost me a shocking sum of money, however, not less I am sure than one-and-twenty or two-and-twenty guineas; and I have been one of the least expensive in the Corps. We are still talking about the coming of Bonaparte. Whether he will come or not, God knows; but we are well disposed to receive him. We are 30,000 volunteers in London, and made a very fine figure when we were reviewed by the King in Hyde Park. Our regiment is altogether formed of Scotsmen, and was taken particular notice of by the King. When riding along the lines, he stopped opposite of us and spoke several minutes to our colonel. I was very near, and heard him say "A very pretty corps, a very pretty corps indeed—all Scotsmen, my Lord, all Scotsmen?"

(Bain 1882, p. 49)

In 1810 the Bromley and St. Leonards Volunteers were disbanded and Captain Ricardo wrote his superior officer that it had been an "honour to command" the Corps (*Works*, Vol. X, p. ix; David Ricardo to S. Beckett, 21 June 1810). His military career was at an end.

Had Napoleon been capable of moving any sizable portion of his Grand Army across the English Channel, the volunteer detachments would not have constituted a formidable obstacle. Many of the volunteers were without muskets of any type, and had been drilled but once a week. The volunteer scheme was one more example of the applicability of "Romer's rule," as Britain attempted to meet new exigencies with as little adjustment as possible. What made the 1803 invasion threat more frantic was that immediately following the Peace of Amiens, Britain had reduced the standing army from 130,000 to 70,000 men, and had set up procedures to cut the number to 30,000 by the middle of the year. The militia and the volunteers were viewed as an adequate home defense, requiring only a small standing army. The cost of the uniforms and their rations were borne by the volunteers themselves, rather than the taxpayers, as James Mill pointed out, and that was cheaper.

The one area where Pitt was considered an expert was the field of public finance. But it was this aspect of Pitt's strategy which created the greatest controversies, issues of policy which are today still debated. Strange as it seems, there has never been a definitive study of Britain's fiscal policy over the course of the twenty-three years of the wars, even though reams have been written on various aspects of the problem. Table VI-1 was compiled from the several sources cited in the accompanying notes. The schedules combine the statistical series for revenue and loans, as well as absolute figures for the funded and unfunded debt for each year of the wars. The funded debt was permanent, being issued in perpetuity, and rose consistently, as shown in Column 5. Because the Debt was permanent, the securities issued as ownership were called "stock," and not bonds, which carry a maturity date. Stock in the government debt was similar to the permanent stock of the limited companies, as the Bank of England or the East India Company.

The unfunded or "floating" debt, Column 6, rose and fell as the several departments of the Navy, Ordnance and Exchequer issued terminal bills in accordance with short run financial needs. During the War of the French Revolution, the unfunded debt was increased very little, some eleven percent, while the funded debt rose 123 percent. But during the Napoleonic Wars the unfunded debt more than doubled, while the funded debt increased only 56 percent. The major reason for the growth in the unfunded debt during this latter period was the need for paymasters attached to Wellington's army to resort to short run bills, rather than the more time consuming process of increasing the permanent debt. Despite the doubling of the floating debt in these later years, it never was more than 6 percent of the funded debt, except temporarily in 1814. Keeping the floating debt low was a deliberate policy, since it avoided the need for refinancing, and as long as the debt charge could be kept to a minimum there was not much concern about the significant increase in the overall size of the funded debt. The latter policy was successful, since the debt charge was only 3.9 percent in 1793, and 4.1 percent in 1815; the absolute debt charge was £9,710,216 in 1793, against £32,645,617 in 1815.

The most controversial aspect of Pitt's financial policy was his administration of the National Debt, as the enormous loans exerted a powerful influence on the economic conditions of the country, not only during the war but carrying over to the post-war period as well. Initially, Pitt did not raise taxes to any appreciable degree, and in 1796 they were only £900,000 higher than they had been in 1793 (Column 1), as loans accounted for an ever-increasing percentage of expenditures (Column 4). On the one hand, the policy led to the rapid depletion of the bullion reserves of the Banks of England and Ireland, the abandonment of the gold standard and the conversion to paper money, the beginnings of the bullion controversy. On the other hand, Pitt finally had to raise taxes and so he resorted to an income tax in 1799, with a 5 percent levy on income in excess of £150, which he raised to 10 percent in 1801. By 1810 the income tax accounted for 10 percent of public revenues, excise taxes 49 percent and the balance from customs and duties. By 1815, income taxes accounted for 18 percent of total revenue, and excise taxes had declined to 39 percent, as the tax burden was shifted progressively.

**Table VI-1. British Public Finance,
1792-1815**

Year	Income ¹ (£1,000,000)		Percentage ³		Funded Debt ⁴	Unfunded Debt ⁴
	Revenue ²	Loans	Revenue	Loans		
	(1)	(2)	(3)	(4)		
1792	£18.9	£ 8.5	69.0	31.0	£229,614,443	£10,918,276
1793	18.5	12.4	59.9	40.1	234,034,716	13,839,714
1794	19.3	23.0	45.6	54.4	247,877,235	15,445,420
1795	19.1	32.5	37.0	63.0	301,861,364	19,601,375
1796	19.4	35.6	35.3	64.7	355,323,772	8,575,123
1797	21.5	53.1	28.8	71.2	381,525,836	7,434,735
1798	27.2	37.0	42.4	57.6	414,936,332	12,589,570
1799	32.5	43.6	42.7	57.3	423,367,546	18,956,831
1800	33.0	46.5	41.5	58.5	447,147,163	23,747,117
1801	35.9	59.7	37.6	62.4	497,043,488	20,468,383
1802	38.5	42.5	47.5	52.5	522,231,786	15,421,222
Peace of Amiens						
1803	40.4	30.9	56.7	43.3	528,260,642	19,472,154
1804	48.1	32.9	59.4	40.6	545,803,318	25,328,000
1805	53.2	53.0	50.1	49.9	575,529,952	26,339,915
1806	58.0	51.0	53.2	46.8	593,954,868	27,141,815
1807	62.3	50.0	55.5	44.5	601,733,073	32,073,339
1807	65.2	59.3	52.4	47.6	604,247,475	39,258,208
1809	66.5	58.7	53.1	46.9	614,789,092	39,672,210
1810	72.3	59.3	54.9	45.1	624,301,937	37,891,910
1811	80.4	65.0	52.0	48.0	655,583,448	42,616,988
1812	70.1	80.7	46.5	53.5	661,409,958	44,844,629
1813	76.7	105.3	38.9	61.1	710,023,535	48,970,246
1814	78.0	88.9	46.7	53.3	752,859,997	60,280,269
1815	82.8	95.5	46.4	53.6	816,311,941	44,727,108

¹ Silberling 1924 p. 215.

² Silberling 1924

³ Computed from Total Revenue and Loans, not net as per Silberling, *op. cit.*

⁴ Parliamentary Papers, 1857-58, Accounts and Papers, XXXIII, pp. 32-54. Britain and Ireland combined.
NOTE: Column 2 does not always equal the changes in Columns 5 and 6, because the fiscal years of the statistical series overlapped.

Pitt's income tax scheme eventually became an effective financial instrument, and it has sometimes been argued that the new tax marked a turning point in the financing of the wars. Criticism has always been directed at Pitt because he waited too long before raising taxes, and that he did not raise them sufficiently to pay for a larger portion of the cost of the war (Bastable 1892, pp. 557, 588-596; and Hargreaves 1930, pp. 108-134). In 1854, William Gladstone (1809-1898) claimed:

The expenses of a war are the moral check which it has pleased the Almighty to impose upon the ambition and lust of conquest that are inherent in so many nations. There is pomp and circumstance, there is glory and excitement about war, which, notwithstanding the miseries it entails, invests it with charms in the eyes of the community, and tends to blind men to those evils to a fearful and dangerous degree. The necessity of meeting from year to year the expenditure which it entails is a salutary and wholesome check, making them feel what they are about and making them measure the cost of the benefit on which they may calculate.

*(Hansard, Series III, Vol. 131, House of Commons Debates,
6 March 1854, p. 375)*

Pitt would have been hard put to use such Victorian moralizing in 1793, for the war of the French Revolution was not popular, and there were many who stood with Fox in outright opposition to Britain's attempt to suppress the ideals of the Revolution. Loans were Pitt's only alternative in the early stages, and even after 1803 borrowing continued to carry half the cost of the wars. During the ten years from 1793 to 1802, loans accounted for 58 percent of total expenditures, while from 1803 to 1815 it was 49 percent, the explanation for the difference being the revenue raised from income taxes. But despite the partial success of the tax policies devised by Pitt, and continued by his successors after his death in 1806, borrowing still accounted for 53 percent of the revenue generated over the course of the twenty-three years. The single most important characteristic of the French Revolution and Napoleonic Wars was Britain's reliance upon the National Debt as a method of public finance, a characteristic of all wars since that time. As Pitt knew only too well, nations can not finance wars out of taxes, William Gladstone notwithstanding.

Having decided to rely heavily upon increasing the National Debt to finance the wars, Pitt and his successors pursued two dubious public finance practices which undoubtedly inflated the debt burden: the sinking fund, and continually borrowing at low interest rates. Pitt initiated the sinking fund in 1786, as a peacetime program to reduce the National Debt that Britain had acquired during the colonial wars, particularly the War of the Spanish Succession and War of American Independence. The folly of Pitt's sinking fund was that once the war with France started he continued with the scheme, so Britain ended up incurring expensive new debts in order to pay off cheap old debts. The other policy, borrowing at low nominal interest rates (3 percent Consols) meant that the government had to sell stock at a

considerable discount. In the loan of February 1801, for example, the government raised £28,000,000, but funded a new loan for £49,210,000; the sum realized was 57 percent of the amount funded. Because the stock usually was selling at a discount, stockjobbers and loan contractors, such as David Ricardo, engaged in widespread speculation, so that the government continually was required to solicit bids for new funds.

Pitt's Sinking Fund, initiated in 1786 and amended in 1792, was the brainchild of Ricard Price (1732-1791), a nonconformist minister, if not a nonconformist political economist. In a series of pamphlets published in the early 1770s,⁴ Price argued that the National Debt was an unnecessary and undesirable burden. The continuation of the Debt perpetuated the historical influence of the brokers and jobbers of Exchange Alley, increased the significance of the government sector in the functioning of the economy to the detriment of the private sector, raised the cost of provisions which led to high money wages in commerce, and transferred wealth to other nations because of the large holdings of British loans by foreigners.

Price made a strong appeal, therefore, to wipe out the Debt, and this, he claimed, could easily be accomplished because of the arithmetic of compound interest. A National Debt of £100,000,000, for example, could be paid off in forty years by the government making an annual payment of £1 million to a group of Commissioners, who would buy debt from the public and invest the annual interest at compound. Over the forty year period the Commissioners would accumulate a principal of £40,000,000, and by continuously compounding the interest would generate an additional £60,000,000. In forty years the Commissioner would have accumulated the £100,000,000 which would be used to pay off its creditors.

Accepting Price's theory of the Sinking Fund, Pitt calculated the British government had an annual revenue of £15,397,171, and a permanent expenditure of £14,478,181, leaving a surplus of £919,290. He raised excise taxes by £100,000 (on spirits, wood, perfume and wig powder), and allocated the £1 million to the Sinking Fund Commissioners, with the provision they would receive a like flow until the annual income of the Fund was £4 million. The Commissioners were independent of Parliament, to prevent the raiding of the sinking fund to avoid raising taxes, a practice which had consistently taken place during Walpole's administration earlier in the century.

What Pitt nor Price did not envision was the war, and in 1792 Pitt claimed Britain would have fifteen years of peace. By 1793, of course, the surplus calculated in 1786 had turned into a deficit, and the government was required to borrow £1 million a year to maintain the sinking fund. Moreover, for each new loan contracted one percent was set aside for a separate sinking fund, and it is estimated that maintaining the scheme during the war added some £600,000 to the National Debt. When measured alongside the size of the National Debt, the costs of the sinking funds were not that large, but it was the logic of the scheme which drew

⁴ The most famous of Price's pamphlets was *An Appeal to the Public on the Subject of the National Debt* (1772), reprinted in McCulloch 1857, pp. 301-358.

criticism amidst the plethora of conversation engendered by the use of the Sinking Funds. For once Cobbett's analysis was correct:

There is something so consummately ridiculous in the idea of a nation's getting money by paying interest to itself upon its own stock that the mind of every rational man naturally rejects it.

(Cobbett 1815, p. 95)

And Gladstone claimed:

you were continually buying up stock at 3, 4 and 5 below the rate at which you were simultaneously creating stock in order to find the money to make the purchase.

(*Hansard*, Series III, Vol. 132, *House of Commons Debates*,
8 May 1854, p. 1475)

Although the Sinking Fund scheme received the major share of the criticism leveled at Pitt's public finance, it was not the most costly policy pursued. Far more important than the Sinking Fund was the system Pitt initiated whereby he borrowed at low interest rates, which required a high nominal capital for funding the debt. The policy was continued throughout the wars, with the exception of the Loyalty Loan of 1797, which went off at five percent. In all other instances, loans were contracted at a considerable discount, because stock as sold at three percent Consols and three percent Reduced. In the loan of 1801, for example, for each £100 subscribed, the lender received stock at £125 in three percent Consol, and £50 in three percent Reduced; £175 in stock being given for each £100 borrowed. The effective rate interest was 5¼ percent on the £100 subscription. In 1807, for each £100 subscribed, the government offered £70 in a three percent Consol, £70 in three percent Reduced and a Long Annuity (29 years) of 18s. Obviously such practices were not only costly but also encouraged speculation in government debt.

Each loan was offered in a three tier package: typically a three percent Consol, a three percent Reduced stock, and a Long Annuity. Only a country using a monetary system in which twelve pence equaled a shilling, twenty shillings to the pound, but the official unit was a guinea which equaled twenty one shillings, could devise a three tier loan package such as the British. In January of each year, the government would present its deficit budget announcing at the same time the proposed loan conditions. The face value of the three percent Consol, and the value of the three percent Reduced usually were not negotiable, but Loan Contractors were invited to bid on the price of the Long Annuity, the loan being awarded to the lowest bidder. Contractors normally obtained stock from the Chancellor of the Exchequer at a slight discount, and then sold off the stock to their list of subscribers at the prevailing market price. Contractors won if the market price of the loan did not fall. Each subscriber was required to make the initial payment at the time the loan was awarded, a stock coupon sheet being assigned in his name, and as he made each of the nine successive monthly installments he obtained a receipt. When the full £100 had been paid, the Bank registered the three tier package to the person

who presented the ten receipts. When the stock was fully subscribed it was called "Omnium," an old Exchange Alley expression meaning "all together." Besides stock that was fully paid up, there were also the sheets which showed the number of installments which had been paid, and these were called "scrip." Stockjobbers and other speculators traded both "scrip" and "Omnium", the most popular being "scrip" which was as transferable as any financial instrument. A scrip on which a few installments had been made was called a "light horse," one almost paid in full was a "heavy horse" (Morgan and Thomas 1969, p. 46). Subscribers usually were required to be sufficiently liquid that they could make the first several installments, but they could always borrow at a discount to complete the loan. As the price of the stock changed there was considerable speculation. What made the market particularly volatile was the government's policy of continuously funding the debt at low interest rates, but high nominal capital.

Assuming the market rate of interest was five percent, and the government needed to raise £10,000,000, the sum could be raised at par with the amount borrowed equal to the amount funded. But if the government chose to borrow at four percent, the contractors would need £12,500,000 as the amount funded, for which they would loan £10,000,000; at three percent the amount funded would be £16,666,666. In each instance, of course, the interest charge would be the same, £500,000, but when the time came for repayment the lenders would receive either £2,500,000 or £6,666,666 in addition to the subscribed sum. At three percent, the discount would be approximately 40 percent. Thus, as discussed previously, the loan of 1801 had a subscription of £28,000,000 but the government funded a total debt of £49,210,000, a discount of about 40 percent.

The explanation for Pitt's policy of funding at a discount was in part pragmatic, but mostly illusory. When he went into the market to make his first loan of the war in 1793, Pitt received only one bid at three percent. He was unable, apparently, to borrow at the higher rate which he sought. The contractors believed that the lower stock offered a better chance of a gain should the stock rise in value after Britain was victorious in the War of the French Revolution.

While Pitt may have tried to borrow at par, he accepted the realities of the money market and awarded the loan at three percent, thus funding a debt in excess of the actual subscription. The high nominal capital of the debt did not cause any particular concern because of the faith in the magic of the Sinking Fund, as compound interest would wipe out any liability the government was forced to assume. In this fashion, Pitt's two financial policies came together, the excessively funded debt being taken care of by the Sinking Fund. What no one seemed to realize was that the Sinking Fund magic was dependent upon high interest rates, even though Price had always stressed the desirability of compounding at high rates of interest.

After the first several loans went off at three percent, there was a certain momentum to continue to fund the debt at three percent as it provided some sense of symmetry to the financing of the wars. Even in 1793 three percent stock accounted for 57 percent of the Funded Debt, and by 1815 it had risen to 67 percent. Of the three percents, Consols were the major stock, and in 1815 they were funded for a

total of £382,447,774. On the London Stock Exchange trading in Consols was the order of the day, with David Ricardo one of the principle participants.

"Let Your Profits Run On"

When he commenced trading in his own right, Ricardo had limited tangible assets, but his intangibles were considerable. Attested to by Mallet, Ricardo started with £800, not a sizable amount for a stockjobber, and some years later Ricardo himself recalled he had not been too optimistic about his chances of success when he started in business. His first intangible asset was his own ability, which he had demonstrated when working for his father.

He is said to have possessed an extraordinary quickness in perceiving in the turns of the market any accidental difference which might arise between the relative price of different stocks, and to have availed himself of this advantage, so as to realize as much as £200 or £300 in one day, by selling out of one, and buying into another stock or *vice versa*. He is also said never to have carried his stock transactions to any speculative extent; but to have always, or generally sold out on the turn of the market, so as to realise a small percentage upon a large sum.

(Mallet, *Political Economy Club* 1921, pp. 205-206;
italics in original)

Given his abilities and his father's reputation in the business world, Ricardo was not without connections in the banking industry. Accordingly, the London banking house of Forster, Lubbock and Co. extended him a line of credit. If he were prudent in his transactions, the bankers told him they would honor any overdrafts which he might present, and they were in fact his bankers from that time forward (*Works*, Vol. X, p. 68)

With a line of credit and his own sagacity, Ricardo commenced stockjobbing, and although his brother Moses claimed that the talent for obtaining wealth was not held in much esteem, David was recognized as having extraordinary talents in such endeavors. As might be expected, Ricardo's first activity was trading Consols, and in 1793 he purchased a total of £16,068, sold off £15,543, for a net increase of £525 in stock. He obviously must have continued to trade Consols, but there are no transactions for the years 1794-1797. By 1798 he was dealing in the hundreds of thousands, as against his modest tradings in 1793.

As shown in Table VI-2, Ricardo both bought stock from other traders, and was a subscriber to new loans as they came on the market. He was, however, much more active by purchase than subscription, and even after he became a Loan

**Table VI-2. Ricardo's Trading in Three Percent
Consols,¹
And Their Yield Rates,² 1798-1816**

Year	Acquisition By Purchase	Acquisition By Subscription	Total	Balance on 31 December	Annual Yield Rate Percent	
					Low (5)	High (6)
	(1)	(2)	(3)	(4)	(5)	(6)
1798	£384,000	£324,000	£708,000	£18,000	5.2	6.3
1799	653,000	200,000	853,000	28,000	4.3	5.7
1800	474,000	396,000	870,000	10,000	4.5	5.0
1801	596,00	990,000	1,586,000	2,500	4.3	5.5
1802	716,000	95,000	811,000	19,000	3.8	4.5
1803	691,000	202,000	893,000	20,000	4.1	6.0
1804	923,000	321,000	1,244,000	42,000	5.1	5.6
1805	1,133,000	923,000	2,056,000	13,000	4.8	5.3
1806	1,761,000	930,000	2,691,000	61,000	4.6	5.1
1807	2,023,000	540,000	2,563,000	45,000	4.7	5.2
1808	2,429,000	159,000	2,588,000	30,000	4.3	4.8
1809	2,207,000	zero	2,207,000	102,000	4.3	4.7
1810	2,543,000	4,000	2,547,000	zero	4.2	4.7
1811	2,278,000	60,000	2,338,000	46,000	4.5	4.9
1812	1,694,000	954,000	2,648,000	78,000	4.8	5.4
1813	1,476,000	2,247,000	3,718,000	84,000	4.4	5.5
1814	1,743,000	1,216,000	2,959,000	163,000	4.1	4.9
1815	1,288,000	500,000	1,788,000	130,000	4.6	5.6
1816	1,232,000	73,000	1,305,000	295,000	4.6	5.0

¹ Sraffa's Table, *Works*, Vol. X, p. 72.

² Morgan and Thomas, (1969, Table II, pp. 277-278) There is a typographical error in the original table where the "high" and "low" yield rates are reversed for the year 1731-1962. These have been corrected above.

Contractor in 1811, he continued to concentrate upon buying from other traders. There were two exceptions to the strategy, as in both 1801 and 1813 his subscriptions were greater than his purchases. The yearly variation in the yield rates provide a clue to the magnitude of the gains and losses associated with trading in Consols, as well as some explanation for why Ricardo concentrated upon buying paid-up Consols, rather than dealing in subscriptions.

Although Consols were issued at three percent, they did necessarily carry the same face value. In 1801, for example, three percent Consols had a face value of £125, then £70 in 1807, and in 1813 they were issued at £60. The face value of the Consols determined the size of the corresponding coupon, but not the rate of interest. Using a face value of £70, the coupon was £2 2s (2 1/10). The formula for determining the yield on a Consol is: yield rate equals coupon divided by Consol price. If the price of the Consol sold at par, then the yield rate would equal the coupon: Three per cent equals two pounds two shillings divided by seventy pounds.

But Consols consistently sold at a discount, so the yield rate was always greater than three percent. Since the yield rate is equal to the coupon over the price of the Consol, the price is equal to the coupon over the yield rate. Taking 1803 as an example, the lowest yield rate was 4.1 percent when the price of a £70 Consol was £51 1/5 (£51.4s). The highest yield rate for the year was 6.0 percent, when the price of the Consol would have been £35. The change in the price of the Consol was £16 4s for the year, or 46 percent. It is not easy to determine whether the price fell or rose over the course of the year, but if a stockjobber bought at the trough and sold at the peak, he would have made a killing. There was a tendency, however, for the price of Consols to fall in the early months of the year, with new loans open to subscription beginning in late January and February. Holders of stock would sell off old debt in anticipation of more favorable terms offered by the new loan. Whether one was a bull or a bear, the variation in Consol prices offered the opportunity for significant gains and losses. Ricardo won more often than he lost.

The yearly figures reported in Table VI-2 understate the extent of Ricardo's business activities. Sraffa copied the amounts from the ledger sheets at the Bank of England, and only the transfer of Consols which would have required registration are included. As a stockjobber Ricardo traded in "scrip" and Omnium, and these puts and calls would not involve registration, as the clearances were made among the jobbers who maintained their own accounts. In addition, Ricardo did not just trade in three percent Consols, but also held stock in three percent Reduced, four and five percent Consols, Irish stock, and shares in the Bank of England, the East India and South Sea Companies. But the three percent Consols were the most important financial securities, and the magnitude of his trading is highly significant. Beginning in 1805, his annual acquisitions of three percent Consols exceeded £2 million, the greatest activity coming in the crucial war years 1813 and 1814.

Apparently Ricardo had no secret formula for making money, other than his "golden rules," which were to always "Cut short your losses," and "Let your profits run on," rules which any speculator would endorse. He did follow one strategy which interestingly he carried over into his economic theory, namely, look to the

long run and ignore the short run disturbances. In discussing "successful croesuses," John Bowring⁵ (1792-1872) claimed they succeeded by following some simple principle.

Ricardo said that he had made his money by observing that people in general exaggerated the importance of [short run] events. If, therefore, dealing as he dealt in the stocks, there was reason for a small advance, he bought, because he was certain the unreasonable advance would enable him to realize; so, when stocks were falling, he sold, in conviction that alarm and panic would produce a decline not warranted by circumstances.

(Bowring 1877, p. 58)

Given a happenstance such as a naval victory or a defeat, either the bulls or the bears would panic, as they exaggerated the event out of all proportion to its long-run significance, and having reacted immediately Ricardo would benefit from the over-reaction of his fellow jobbers. Later, when he wrote his economics, he typically assigned little significance to short run events, since he had learned in Exchange Alley that such events were of a minimal influence in the long run. As a stockjobber he made money because of the excessive reaction to events; as a theorist he typically refused to adjust his theory to incorporate their significance.

As a jobber, Ricardo seems to have stood somewhat aloof from participating in the excesses of many other jobbers; he was in some sense a loner, in that he did not engage in any of the frequent attempts to spread rumor, or engage in fraudulent types of behavior. He was one of the leaders of the move in 1801 to close the Stock Exchange to all but annually elected members, being one of the Committee for General Purposes, as were his future partners Barnes and Steers. In 1802 the new Stock Exchange, shown in Figure VI-2, was built in Chapel Court, off Bartholomew Lane, between Throgmorton and Broad Streets. Unlike the old exchange in the Coffee House at Sweating's Alley, where admission was open to anyone who paid sixpence a day, in the Chapel Court the membership fee was ten guineas a year, and closed to those not elected. The idea of an Exchange limited to an elected membership was repugnant to many of the more notorious jobbers, and Ricardo was one of the leaders of the move who were often ridiculed because of their participation in the several investigations of fraudulent trading.

Some idea of Ricardo's aloofness, *vis-à-vis* his fellow jobbers, is given in the *Sunday Times* obituary, to which reference has already been made.

Ricardo was always a great shareholder, and very often the original contractor in those enormous loans which marked the

⁵ Twenty years younger than Ricardo, Bowring was a disciple of Bentham, whose collected works he published in 1843. It was Bowring who wrote that Bentham boasted that he "was the spiritual father of Mill, and Mill was the spiritual father of Ricardo: so that Ricardo was my spiritual grandson." (Bowring 1843, Vol. X, p. 498).

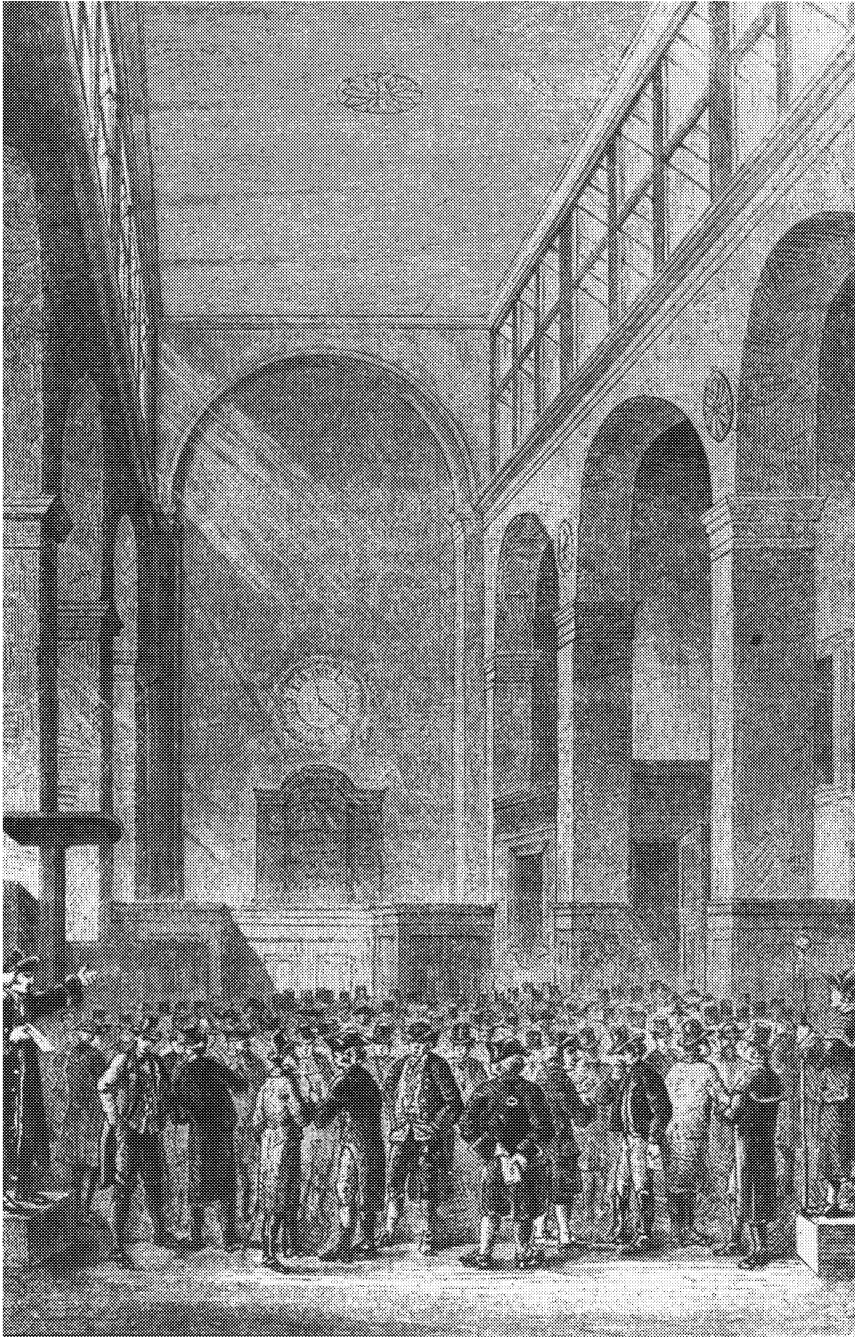


Figure VI-2. The Floor of the London Stock Exchange in Chapel Court, Opened in 1802

destructive policy of Pitt, fettered Europe, and hung a mill-stone round the neck of this country; but while he did this in the way of business, he was no advocate for the system, and no man could attach to his principles, or his conduct, a single stigma. While but too many of those who engaged in that traffic became obsequious admirers and unreasoning followers of Pitt, Ricardo passed through the ordeal without an imputation. It is no slender proof of the vigour of his mind, the steadiness of his principles, and the integrity of his conduct, that while all around him gave themselves up to the most prostituted and clamorous worship of the "great Statesman," Ricardo held fast his integrity, and silently followed those admirable chains of reasoning, which enabled him to bring true science to the counting-house, and elevate the character of a British merchant to a rank which it never before occupied. We well remember, that when the breach of the peace of Amiens made all the tribe of the bear-garden of the Alley toss up their caps, and astound the neighborhood with their yells, it was Ricardo who gave them the manly rebuke for rejoicing at gains, which were to be made by the dissolution of kingdoms and the misery of mankind. Ricardo's success in business was so complete as his means of seeking it were honourable.

(*Sunday Times*, 14 September 1823, p.1)

Obituaries frequently are laudatory, if not effusive, and the notice in the *Sunday Times* was of such character. Nevertheless, Ricardo was held in high esteem, not only due to his business acumen, but because of his sense of justice and a willingness to subordinate his advantages for the consideration of others. There were detractors like Cobbett, of course, but they were a small minority. Events often speak louder than words, and Ricardo's behavior when he was a loan Contractor, for the first time in 1807, contributed greatly to his reputation as an honourable man, at least in the business community of which he was a part.

Until 1807 the government loans had been awarded to the banking houses such as Boyd, Robarts, Baring and Goldsmid, as they acted as Contractors on behalf of their respective lists of subscribers. It was not unusual for differences to develop between the Contractors and those whose names appeared on the lists submitted to the Exchequer. The loans were awarded to the Contractors, and it was their responsibility to distribute the parts amongst the list of subscribers. But many subscribers never saw any part of the loans, as they were systematically excluded from receiving the portion they had subscribed, since Contractors retained larger shares for themselves. The extent of the inequitable distribution of the loans was dependent upon such factors as the amount of the discount the Contractor received

from the Exchequer, the current price of the stock, the scrip and the Omnium, as well as short run expectations. A contractor such as Francis Baring, for example, might submit a list in which he himself would propose a subscription of £1 million. After being awarded the Loan, Baring might retain as much as £2 million in his own name, with the result that the lesser subscribers were excluded. The ones excluded were usually members of the Stock Exchange, a situation that reflected the animosity which existed between the banking community and the Exchange.

When the £14,200,000 Loan of 1807 was awarded to the Contractors of Barnes, Steers and Ricardo, on behalf of the members of the Stock Exchange, the individual subscribers were given the opportunity to take the full amount of their proposed subscriptions, with the Contractors taking only what remained, a complete overturning of the precedents associated with loan distribution.

On 20 May 1807 there was a General Meeting of The Subscribers to the Loan of 1807, at which it was unanimously resolved that they should acknowledge the equitable manner in which the Contractors had distributed the Loan. On 11 March 1808, Ricardo received a letter from the Committee representing the 222 subscribers from the Stock Exchange:⁶

We have particular satisfaction, in enclosing you, a Copy of Resolutions passed at a General Meeting of Subscribers to the Loan of 1807 . . . the object of which has been to mark with distinguishing memorials the Integrity of your Conduct as joint Contractor, on that occasion, as well as, to convey to you that Testimony of public Approbation which you and your Brother Contractors, have so eminently deserved, at the hands of your Subscribers, for the equitable arrangements and final distribution of the Loans, entrusted to your joint appropriation amongst them.

We present you at the same time with a Silver Vase made under our directions, as The Committee appointed to carry the enclosed Resolutions into Effect.

We present it to you in the Name of your Subscribers as a Token of their respect . . . requesting you to accept the assurances of our friendly consideration . . .

(Works, Vol. X, pp. 125-126)

The Silver Vase bore the following inscription:

⁶ The committee members were C. H. Hancock, John Street, John Hodges, John Spicer and William Shepherd. From the content of the letter to Ricardo, it is clear that Barnes and Steers, as well as a fourth Contractor whose name did not appear, also received similar commendations and silver vases.

Presented to
David Ricardo Esq.
-by the-
Subscribers to the Loan of 1807
in Testimony
of their unanimous approval of his conduct as
Joint Contractor
on that occasion
-Whereby-
the just and equitable principle of mutual
participation between
Contractor and Subscriber
has been so manfully asserted, and so
fully recognised, to the honor of Himself
and his Brother Contractors; and to the satisfaction
of the Subscribers at large

Ricardo replied the same day he received the gift:

Anxious as I have even been to merit the good opinion of the gentlemen of the Stock Exchange, amongst whom I have passed so many years of my life, it would be difficult for me to convey to your minds the gratification which I feel at receiving the proofs, which you have this day presented to me, of their approbation of my conduct at a period of considerable anxiety to me, an anxiety caused by the importance of the concern which I had undertaken and by my desire to give satisfaction to those who had placed so flattering a confidence in me. That I had succeeded has been repeatedly manifested as well by the support which the loan experienced at their hands, as by the demonstrations of kindness which my colleagues and myself have received since and which have more than compensated the little merit that may have belonged to us. But the approbation of the subscribers as expressed at their general meeting and the elegant Vase with its accompanying inscription which you have this day in their name presented to me, are so disproportioned to that merit, that it is impossible for me not to feel that I owe them to their viewing my zeal in the common cause through the most partial medium. As they record their approbation they will ever be highly prized by me, and they will recall to my mind at the most distant time of my life a period of unalloyed gratification. Be pleased to accept yourselves and to assure the gentlemen who have so highly honored me of my heartfelt thanks, and my earnest wishes for their unceasing happiness and prosperity.

(Works, Vol. X, pp. 127-128)

Ricardo's profits ran on, as did his reputation. His concerns, however, were with matters beyond the confines of the loans and the Stock Exchange, as he moved into the wider arenas of British affairs. His gestation as a political economist had commenced.

Political Economy During the First Decade of the Century

It was in the winter of 1799 that Priscilla and David experienced one of those tragedies of life, when their third daughter and fourth child was stillborn. They were still living in Lambeth at the time, and while undoubtedly comforted by their siblings on both sides of the family, the continuing estrangement from the parents must have added to the loneliness of the cold winter months. Especially for Priscilla the absence of any contact with her mother, and the solace which such a relationship would have contributed, added to the melancholy and feeling of emptiness which accompanied the loss of the child. The conflict with her parents had been primarily with her father, the tyrannical "old doctor," and not "that good woman" his wife (*Works*, Vol. X, pp. 119, 120). The poor health which Priscilla experienced at the time, the first of a series of incidents when she suffered from melancholy, was partially related to her unhappy childhood.

To provide some relief for his grieving wife, David took Priscilla and their three young children to Bath, where she could partake of the famous thermal waters. Since Roman times, Bath had been the resort area of the nobility and the wealthy, who went there to drink of the medicinal waters, and sit in the hydropathic baths.

The length of the stay in Bath may have been as long as a month or more, as hydrotherapy is a leisurely form of treatment. Whatever, while Priscilla went to baths each day, and the children were attended by a nanny or two, David went browsing in the bookshops of Bath. It was a typical resort area, with numerous tourist shops and coffee houses. Some years later, John Cam Hobhouse noted in his diary (2 March 1822):

Dined with Lambton—an immense party and splendid dinner. I sat next to Ricardo, who told me he never thought of political economy till happening one day, during an illness of his wife, to be at Bath, he saw an Adam Smith in a circulating library, and turning over a page or two ordered it to be sent to his house. He like it so much as to acquire a taste for the subject.

(Broughton 1821, Vol. II, p. 179)⁷

As noted earlier, Ricardo was twenty-seven at the time, and he may have been impressed with Smith's opening paragraphs, quoted in the epigraph of this chapter.

⁷ Moses Ricardo relates the same story (*Works*, Vol. X, p. 7). The year of 1799 is attested to by McCulloch 1853, p. 471.

It is doubtful that Ricardo read the whole of the *Wealth of Nations* from cover to cover in the space of a few weeks. It is a book to be studied and pondered, and over the years Ricardo read and reread certain portions of Smith. When he was writing the first edition of his *Principles*, for several months running he wrote Mill and Malthus about his continuing study of Adam Smith.

During Smith's own lifetime there were five editions of the *Wealth of Nations*, the last published in 1789. The edition that Ricardo borrowed from the circulating library would have been one of these first five, probably that of 1789. In accordance with the customs of the times, Ricardo would have returned the book to the library when he left Bath. He probably purchased his own copy upon returning to London. Ricardo cites Smith frequently in *The High Price of Bullion* (1810) (*Works*, Vol. III, pp. 52-127), the references all being to the first edition. In the *Principles*, he cites David Buchanan's 1814 edition, and the copy found in his library has numerous marginalia in Ricardo's hand.⁸

Keynes once observed that the *Wealth of Nations* was the only treatise ever written on the subject of political economy, everything else being in the form of pamphlets, monographs or articles, pieces which chipped away at particular issues or topics (Keynes 1933, p.174). Smith, on the other hand, covered all topics, and Ricardo like any novice in political economy pondered and studied the contents of the *Wealth of Nations*. So much did Smith preempt the field that James Mill, writing in 1808, claimed it was the only work worthy of notice, as he lamented the "great difficulty with which the salutary doctrines of political economy are propagated in this country." (James Mill 1808a, p. 35).

Although he studied Adam Smith, and borrowed extensively from the framework of the *Wealth of Nations*, Ricardo early on also read the pamphleteers, and the *Edinburgh Review*, the journal most responsible for fostering the serious study of political economy in Britain. Professor Fetter has pointed out that, beginning with the first issue in October 1802, the *Edinburgh Review* was the closest thing to an economics journal that existed. As Fetter observes:

It reviewed practically all the significant economic literature as it appeared, and it discussed the great economic controversies of the day . . . Its reviews are an essential source of the development of economic theory in England in the early part of the nineteenth century.

(Fetter 1953, p. 232)

⁸ Buchanan (1814) was the only edition of the *Wealth of Nations* found in "Ricardo's library," as described by Sraffa, *Works*, Vol. X, pp. 399-402. Ricardo must have owned earlier editions, as evidenced by his references in the *High Price of Bullion*. In keeping with his personality, Ricardo had no book-plate, and the excessive marginalia in his hand in the Buchanan volume is the only evidence that Ricardo in fact used the edition. Weatherall 1976, p. 39.

The Hollander collection, housed in the University of Illinois Library, has a first edition of the *Wealth of Nations*, but it contains Osman Ricardo's book-plate. The volume could have been a gift, or part of the inheritance of the eldest son. David Ricardo himself, as Sraffa points out, did not possess a very large library. He discovered books late in life, and purchased only what he needed for his writing. It is interesting, for example, that Ricardo's Library contained a copy of the 5th edition of Malthus's *Essay on Population* (1817), and not any of the earlier editions.

The *Review* was of particular importance in the life of Ricardo because, after his initial introduction to Adam Smith, it was the major source of his study. Ricardo himself never wrote for the *Review*, though solicited on several occasions, but in time it became the leading advocate of his view of political economy, as Malthus complained to Sismondi (1819, pp. 23-24).

The *Edinburgh Review* was the brainchild of Sydney Smith (1771-1845). The second son of a wealthy landowner in Essex, Smith had to fend for himself, at least until his older brother died in 1839. Smith attended Oxford and was ordained an Anglican minister in 1794. Like his namesake, Adam Smith, he was employed as a tutor to accompany a young nobleman on a tour of the continent, particularly Germany. By 1797 Smith and his tutee had reached Edinburgh, but the war in Europe had reached such heightened proportions that they stayed in Edinburgh for several years. Having always wanted to study law, which his eccentric father had refused to support, Smith used the opportunity to study at the University where he attended the lectures of the famous Dugald Stewart (1753-1828). Stewart was in the great Scottish tradition of David Hume, Francis Hutcheson and Adam Smith, the proponents of moral philosophy: the concern with human conduct, the responsibility of society and the role of the individual in changing the human condition. These were the beginnings of philosophical radicalism, the principle of assessing critically the established order and the advocacy of schemes for reform. Of Dugald Stewart's role in the scheme of things, Hollander claimed that

the clearness and vigor of his critical exposition and the timeliness of his general subject matter draw [sic] to his lecture hall, and thereafter kept about him in more or less close association an audience if not large in number, at least remarkable in their then promise and subsequent performance, and comprising "not merely a proportion of students who were passing through their college years, but also, and chiefly, an audience of riper years, especially members of the bar." The average number of students enrolled was less than fifty; but the list included such names as Francis Horner, Sydney Smith, Francis Jeffrey, the Earl of Lauderdale, Henry Cockburn, Henry Brougham, Macvey Napier, Archibald Alison, James Mill and Thomas Chalmers—the group of men from whom emanated the most substantial contributions to the progress of economic thought in the next generation.

(Hollander 1895, pp. 19-20; the internal quote is from Hamilton, 1854-1858, Vol. X, p. lv).

Smith and three of the Scots, Brougham (1778-1868), Horner (1778-1817) and Jeffrey (1773-1850), started the *Edinburgh Review*. It was initially conceived of as a vehicle for surveying the areas of literature, public affairs and general human knowledge. Apparently little thought was given to the idea that it would also be a forum for the discussion of topics in political economy. But given the strong

precepts of moral philosophy, the founders were against the established order, and that made them strong advocates of Whiggish causes: the end of the slave trade, Catholic emancipation, the extension of suffrage, changes in the penal code and an initial opposition to the war with revolutionary France. As young men, the founders of the *Review* even were fearful of detection as they held secret meetings, each arriving by a different route and time interval.

Smith was the unofficial editor of the first three issues, but thereafter Jeffrey assumed the role, which he retained until 1829. Jeffrey has been recognized as the first great editor of a literary journal, and it was largely due to his talents, both as an editor and author, that the *Review* was so successful. His writing was harsh and biting, reflecting the insight of a great literary critic, as he and his contributors struck out at sophistry and pretension. It has been the received doctrine of literary critics that prior to the *Edinburgh Review* the reviewing of new volumes was hackneyed, largely written by the hirelings of the various publishing houses of Fleet Street. There is now some reason to question this interpretation, and perhaps the reviewing of books during the last several decades of the eighteenth century was not so inferior as has been assumed (Roper 1978). But the *Edinburgh Review* was a watershed in literary criticism, as Jeffrey limited the number of reviews, was highly selective in his choice, and encouraged reviewers to use a new publication as a stepping stone to the critical survey of a particular topic, as opposed to a perfunctory overview of the contents of a volume. As a result, the *Edinburgh Review* was patently independent of publishing houses, as the critical evaluation of new works reached new heights of perfection.

Initially the anonymity of contributors to the *Review* was associated with their fear of detection because of their political outlook, but Jeffrey was more interested in criticism, and so he extended anonymity to reviewers to protect them from publishers and authors who might take umbrage because their latest contribution was unfavorably reviewed by one of Jeffrey's troops. To entice the best writers, Jeffrey paid five guineas a page, an unheard of amount at the time. Economists like Mill and Malthus supported themselves, in part, by writing for the *Review*, where a single contribution could bring as much as £100 or more. The first few issues sold out immediately and were reprinted several times over, and by July of 1803 the *Review* had a circulation of 2,500. In 1814, when the circulation was up to 13,000, Jeffrey estimated the readership at 40,000, as copies were found in the homes of the famous and infamous.

The *Edinburgh Review* became so influential and uncompromisingly partial to Whig causes that a competing journal, the *Quarterly Review* commenced in 1809. The *Quarterly* was instituted by the famous London publisher John Murray (1778-1843), with Sir Walter Scott (1771-1832) in support. Although never a Tory journal, the *Quarterly Review* was less hardened in championing the causes of the Whig opposition than the *Edinburgh Review*. Nor did the *Quarterly* devote so much space to topics on political economy.

In the first issue of the *Edinburgh Review* there were four articles on political economy, three by Horner and one by Brougham. The most famous article was Horner's long and insightful review of Henry Thornton's volume, *An Inquiry into*

the Nature and Effects of the Paper Credit of Great Britain (1802). With this article Horner established himself as one of the most analytical monetary theorists in Great Britain, and his influence continued to grow, as the bullion controversy became the dominant issue of the first decade of the century. While he did not contribute as many reviews as Brougham,⁹ Horner was more influential because of the depth of his analysis. In a sense, Horner was the first in-house economist of the *Edinburgh Review*. In 1802, Horner left Edinburgh for London, where he studied for the English bar, and then entered the House of Commons in 1806, where he served until his death in 1817.

Given Horner's legal work and duties in Parliament, he stopped writing, even though he kept books which he intended to review for Jeffrey, but never seemed to find the time. His greatest instance of procrastination was a requested review of Malthus's quarto edition of the *Essay on Population* (1803). For two years Jeffrey pleaded with him:

Will you, or will you not, do Malthus . . . Is it fair to the Review, or kind to me, or well for yourself, to keep up an article of this kind for so enormous a time?

(Quoted in James 1979, pp. 112-113)

In commenting on the fact that Horner never wrote the Malthus review, Patricia James suggests that since the two became friends, Horner was reluctant to be critical, for he obviously did not agree with the *Essay* (James 1979, pp. 112-113). That Horner and Malthus became very good friends there is no question, and James's point is supported by the following letter from Horner to Jeffrey, which she apparently overlooked. In January 1804, Horner wrote to his old friend Jeffrey:

In about a week hence I mean to set about Malthus for you, and mean to work at it very seriously; his book has made itself a great name among the thinking people here. *That I may judge it with more freedom, I have declined one or two opportunities of cultivating the author's acquaintance; which I mean however to when I get loose from my task.* He is a man in conversation of good sense, great candour, and liberality; the last is a rare qualification for an English clergyman, even after the splendid instance of our friend Smith.

(Horner 1957, p. 10; italics added)

Horner must have waited too long, as he and Malthus met, and the review was never written. Horner was once described by Sydney Smith as a "literary tiger, whose den is strewed with ten times more victims than he can devour" (Horner 1957, p. 7). The fact that Malthus's quarto edition was never reviewed, in the leading journal of the times, was of some concern to the author as well as others.

⁹ Fetter credits Brougham with twenty articles between 1802 and 1810, while Horner contributed but eight. (Fetter 1953, pp. 243-247)

Knowing of Horner's habit of procrastination, one might have expected Jeffrey to find another reviewer, but that would have been difficult, since Horner was by far the most qualified political economist.

With Horner's slack-off in the pace of his contributions to the *Review*, with half of them in the first volume, Brougham became the major contributor on political economy, but his pieces were never particularly analytical, and Jeffrey sought out new contributors. Horner's friendship with Malthus was responsible for the latter being recruited and Brougham probably was responsible for Mill being asked to contribute. Malthus's first article in the *Review* was "Spence on Commerce," a review significant not because of anything Malthus wrote but what he did not write. In other words, Malthus's review of Spence was not strong enough in rejecting the notion of *Britain Independent of Commerce* (Spence 1808). Malthus on Spence did not enhance his reputation as a political economist, and probably even detracted from it, since the reviewer gave evidence of wavering on some fundamental Whig causes, namely the extension of foreign trade and unlimited manufactures. Malthus's review of Spence was anonymous, of course, but those on the inside of Whig politics and the *Edinburgh Review* knew he was the author. In contrast to Malthus, two other young political economists, Mill and Torrens, launched their careers by strongly attacking Spence's book.

The particular issue that gave occasion to Spence's work was the latest of Napoleon's numerous attempts to defeat the British. Spence dealt with a short run problem, but one with numerous long run consequences. Having failed in his attempts to invade Britain, Napoleon launched his Continental System in 1806, thereby hoping to close the continent to British trade. The tactic had immediate consequences, as British commercial interests feared the loss of their markets, and there was some panic. The next year, William Spence (1783-1860) published his pamphlet, alleging there was nothing to fear from Napoleon's Continental System, for even if it were successful in blockading all British goods from the European market, Britain's wealth would be unaffected. His arguments rested upon two footings, one empirical, the other theoretical.

Spence's first proposition was that Britain's wealth was only to a small degree dependent upon foreign trade, and even less dependent upon continental commerce. The relative importance of commerce had to be understood, as Spence wrote:

No one can be more deeply impressed than I am, with the conviction of the value of commerce, as a mean of procuring a mutual interchange of conveniences between distant countries; none can more highly appreciate its vast importance, considered as an engine for communicating and extending civilization, virtue, and knowledge, over every part of the globe. The sole tendency of the arguments employed, has been to place commerce on its proper basis; to strip it of the delusive and false value which has been so long attached to it, and to inculcate more just ideas of our independence. Every true lover of his country, would deny with indignation, the assertion, that Britain is in a state of

dependence: yet, how can she with truth be said to be otherwise than dependent, if her wealth, her power, and her prosperity, be derived from her commerce, from a source, which the caprice of one set of customers, or the slavery of another, may at once annihilate? But, fortunately, this opinion, however prevalent, is founded in error. Britain is truly independent. Her resources, the cause of her wealth and prosperity, are intrinsic, inherent in herself, and cannot be influenced by any thing external. From her soil every year is brought into existence real wealth, to the amount of at least one hundred and twenty millions sterling; and this too, by a sixth of her whole population, so that five sixths of her inhabitants are released from all care of directly providing themselves with food, and are left at liberty to be employed as manufacturers, as soldiers, as sailors, or in the multifarious other occupations which the refinements of civilized life require.

Such being the immense amount of our internal wealth, let us no longer entertain ideas of our dignity, so mean, and degrading, as to believe, that all our riches and greatness, are derived from the sale of a few cargoes of manufactures, the whole profit of which, even if we did not spend more than twice this profit in consumable luxuries, could not amount to above a twelfth part of the revenue we derive from our land. Let us no longer elevate our commerce to an importance so much above its due, but, considering it, as it really is, the mean of procuring us luxuries merely, which we could very well do without, let us deem ourselves wholly independent of it, and regard those whom we supply with our necessary and durable articles of manufacture, as much more obliged to, and dependent on us, than we on them.

(Spence 1808, pp. 74-75)

There were not a great many knowledgeable political economists who disagreed with this proposition, and Torrens even went out of his way to praise Spence's rejection of "the degrading opinion that England's greatness depends upon anything which foreigners can grant or take away" (Torrens 1808, p. 56). Had Spence left the matter at this point, there would not have been any controversy, just as there would have been no reason for Spence to publish in the first place.

To support his notion that England could be independent of foreign commerce, Spence relied upon the old physiocratic proposition that agriculture was the single source of wealth, with manufacturers and commerce being sterile. The system was based upon Quesnay's *Tableau Economique*, with the economy divided into three sectors, agricultural producers, landlords and sterile manufacturers; each sector represents one third of the population. The reproduction cycle begins with the producers in possession of three input units, one each of food, raw materials and manufactures; the sterile class possesses only two input units, one food and one raw material. The landlords, the sole benefactors of the system, have for their

consumption, a unit of food and a unit of manufactures. At the end of the reproduction cycle, agriculture has an output of five units, three of food and two of raw materials, the result being that this sector has a net product of two units. The manufacturing class has produced two units of manufactures, sterile because the sector began the cycle with two inputs, and produced two outputs. Through the circulation process, where money functions solely as a medium of transfer, the landlord class obtains its necessary consumption goods (food and manufactures), the sterile class exchanges its two manufactures for food and raw materials, and the proprietors retain three-fifths of the sector's output. The net product supports the landlords, and it is their consumption which keeps the system in equilibrium. The original reproduction scheme of political economy, Quesnay's *Tableau* pinpointed the neutrality of money, a notion which Adam Smith particularly admired, and gave stress to the physical conditions of production as the *sine qua non* of economic analysis, something else which Smith admired. The system also laid stress upon the concept of a surplus as a necessary condition for economic activity, and this surplus was also the sole basis of taxation, with the landlord class the only economic source of taxes. The peculiarity of the system was the limitation of the concept of a net product to agriculture, and the designation of sterility to all other sectors. Adam Smith summed up Quesnay's concept of sterility:

Artificers and manufacturers . . . are in this system represented as a class of people altogether barren and unproductive. Their labour, it is said, replaces only the stock which employs them, together with its ordinary profits. That stock consists in the materials, tools, and wages, advanced to them by their employer; and is the fund destined for their employment and maintenance. Its profits are the fund destined for the maintenance of their employer. Their employer, as he advances to them the stock of materials, tools and wages necessary for their employment, so he advances to himself what is necessary for his own maintenance, and this maintenance he generally proportions to the profit which he expects to make by the price of their work. Unless its price repays to him the maintenance which he advances to his workmen, it evidently does not repay to him the whole expence which he lays out upon it. The profits of manufacturing stock, therefore, are not, like the rent of land, a neat produce which remains after completely repaying the whole expence which must be laid out in order to obtain them. The stock of the farmer yields him a profit as well as that of the master manufacturer; and it yields a rent likewise to another person, which that of the master manufacturer does not. The expence, therefore, laid out in employing and maintaining artificers and manufacturers, does no more than continue, if one may say so, the existence of its own value, and does not produce any new value. It is therefore altogether a barren and unproductive expence. The expence, on

the contrary, laid out in employing farmers and country labourers, over and above continuing the existence of its own value, produces a new value, the rent of the landlord. It is therefore a productive expence.

(Adam Smith 1937, pp. 630-631)

The critical assumption, as Adam Smith pointed out, was the notion that agriculture alone was capable of producing a surplus product. Once it was demonstrated that a surplus could arise in any type of market activity, the physiocratic policy implications which gave agriculture a preeminent role in the society had to be rejected. Although he had high praises for the writings of the *Économistes*, and considered Quesnay an outstanding theorist, Smith analyzed the fallacy of limiting the concept of a surplus agricultural production. Mill and Torrens, in their attack upon Spence, largely reiterated what Smith had written, since their principal criticism was the physiocratic definition of wealth which gave agriculture a unique role. Mill claimed that:

to give even tolerable plausibility to the theory of the *Économistes* we must allow that nothing is useful or valuable to man but the bare necessities of life, or rather the raw produce of the soil. If any thing else is valuable to him, whatever creates that value must add to his riches. The reasonings of the *Économistes* indeed proceed upon a most contracted and imperfect view of the operations and nature of man. How limited would be his enjoyments were he confined to the raw produce of the soil!

(James Mill 1808b, pp. 27-28; italics in original)

For Torrens:

The competition of manufacturers . . . would restrict the price of these articles to a quantity of provisions, barely sufficient to replace the subsistence of the manufacturer, whilst he was employed on them; all the articles which the manufacturer might fabricate in the course of a year, would not, at the end of that year be in possession of the land proprietors in exchange for provisions. On the contrary, a *part* of the manufacturer's articles would be sufficient to purchase a quantity of provisions equal to the subsistence he had consumed whilst employed on them; the *other part* would remain with him for his own consumption.

(Torrens 1808, p. 8; italics in original)

Torrens' *other part* is, of course, a surplus over and above the cost of subsistence, and the manufacturing process has produced a net product, just as in Quesnay's case of agriculture. The refutation of the *Économistes*, and therefore Spence, rested upon showing that wealth was not limited to the output of agriculture, and that while a nation had to exchange a portion of its output in order to obtain a portion of

another nation's output, as equivalents exchanged for equivalents, both nations gained as the result of the transfer. Torrens described the benefits derived from trade:

The *act* of exchanging does not, indeed, bring wealth into existence; but the *expectation* of exchanging gives rise to divisions of labour, which multiply, to an immense extent, the articles that supply our wants and gratify our desires. Prohibit trade and the division of labour ceases: restore it, and the divisions of labour, with all their benefits, return . . . the benefits resulting from the divisions of labour . . . are to be referred to trade, as to their original and proper source.

(Torrens 1808, p. 17; italics in original)

And, as James Mill put it:

The commerce of one country with another, is in fact merely an extension of that division of labour by which so many benefits are conferred upon the human race. As the same country is rendered the richer by the trade of one province with another; as its labour becomes thus infinitely more divided, and more productive than it could otherwise have been; and as the mutual supply of all the accommodations which one province has and another wants, multiplies the accommodations of the whole, and renders the country a wonderful degree more opulent and happy; the same beautiful train of consequences is observable in the world at large, that great empire, of which the different kingdoms and tribes of men may be regarded as the provinces. In this magnificent empire too one province is favourable to the production of one species of accommodation and another province of another. By their mutual intercourse they are enabled to sort and to distribute their labour as most peculiarly suits the genius of each particular spot. The labour of the human race thus becomes much more productive, and every species of accommodation is afforded in much greater abundance. The same number of labourers whose efforts might have been expended in producing a very insignificant quantity of home-made luxuries, may thus in Great Britain produce a quantity of articles for exportation, accommodated to the wants of other places, and peculiarly suited to the genius of Britain to furnish, which will purchase for her an accumulation of the luxuries of every quarter of the globe. There is not a greater proportion of her population employed in administering to her luxuries, in consequence of her commerce, there is probably a good deal less; but their labour is infinitely more productive; the portion of commodities which the people of

Great Britain acquire by means of the same labour, is vastly greater.

(Mill 1808b, pp. 38-39)

It could be argued that the concept of an agricultural net product was a positive proposition, in the sense that the extractive industries possessed production characteristics not found in manufactures or commerce. That is, the acceptance of a proposition about a production function peculiar to agriculture need not carry the corollary that such a system was superior in terms of values and morals. Ricardo, for example, also attributed to agriculture a peculiar production characteristic, diminishing returns, which designated the sector as inferior to the rest of the system, and detrimental to progress. Quesnay certainly did not believe that his proposition of the net product was ideologically neutral, since it contained a normative element: agriculture was superior to a mercantile system in terms of morals and values. A country produced wealth when it grew corn, but not if it produced manufactures or traded its corn in exchange for the items of commerce. Nor did William Spence deny the normative, since he concluded his essay with the famous statement:

though Britain, according to Bishop Berkeley's idea, were surrounded with a wall of brass, ten thousand cubits in height, still she would as far excel the rest of the nations of the globe in riches, as she now does, both in this secondary quality, and in the more important ones, of freedom, virtue and science.

(Spence 1808, p. 92)

Spence's pamphlet sold out quickly, with eight editions in 1807-1808, but it received its greatest publicity when Cobbett published excerpts in his *Political Register*. Published weekly, and costing but a penny, Cobbett's *Register* practically serialized Spence, with seven issues extolling the theme that commerce should perish (*Political Register*, 7, 21, 28 November 1807; 5, 12 December 1807; 23 January 1808 and 16 April 1808). As expressed by Cobbett, there was almost an implied ray of hope that Napoleon's continental blockade would be successful. Though Britain was at war with France, and Napoleon the enemy, for Cobbett there was also the enemy of the "monied interest," whose goal was the destruction of rural England:

the great tendency of the commercial system is draw the real wealth of the whole country towards the metropolis, there, upon the labour of the working classes, to maintain, in idleness and luxury, innumerable swarms of place-men, pensioners, tax gatherers, jews, jobbers, lingers, parasites, and buffoons.

(Cobbett, 23 January 1808)

Spence himself did not view the monied interests as an evil group of men, but merely that the importance of commerce was overstated, and its growth should be limited. Only commerce necessary to provide for the essential imports, turpentine and some woods, was required, and the import of luxuries should be abolished. Spence was apparently somewhat uneasy about Cobbett's support, but in battle one welcomes any allies, and in a late edition of the pamphlet he added a note:

Much as I differ with this gentleman on many of his political opinions, I should be guilty of injustice if I did not express my thanks to him for so effectively promoting the object I had in view in publishing this pamphlet . . . which he has copied into his widely-circulated publication.

(Spence 1822, p. 66, note)

There were several themes in Spence's pamphlet, one of the most pervasive being the suggested tendencies for disequilibrium between the sectors of agriculture, manufactures and commerce. To export, a nation must import, and half of Britain's imports were injurious to national health: tobacco, sugar, tea, wine, rum, brandy, "luxuries of the most fugitive description." If the consumption of such items was eliminated, as it should be, then some 300,000 who produced the exports required to gain the unnecessary imports, would be unemployed until absorbed into agriculture. British capital was at the moment superior to the rest of Europe:

But this superiority cannot last long. When capital is at all acquired, it rapidly accumulates; and even supposing our capital to increase, in the same degree with that of our rivals, this event would reduce the profit of stock so low in this country, that we should be willing to lend it, as the Dutch did, to any other nations, which, in consequence of the cheapness of labour, could afford to give more for it.

As far, then, as we are at present able to foresee, it seems highly probable, that, in the revolution of no very long period of time, we shall lose a portion, perhaps a considerable one, of our commerce. If the system, which esteems commerce the source of our wealth and our prosperity, were well founded, this would be a dreary and melancholy prospect. To every disinterested patriot, who carries his ideas farther than the present moment, it would cause the most distressing feelings, to reflect, that in a few years, in less than half a century, perhaps, his country was destined to lose the source of her greatness, and after having stood so proudly preeminent amongst nations so long, was at length doomed to retrograde into poverty and insignificance.

(Spence 1822, pp. 82-83)

Implicit in his discussion of the future redundancy of British capital, Spence incorporated the physiocratic tendency for underconsumption. Quesnay, in his discussion of the *Tableau*, gave great emphasis to the necessity of a balance between the three sectors, and a disproportionate expansion in any one sector would play havoc with the total system. In any reproduction scheme, intersector transactions are essential to the completion of the cycle, and Quesnay's model was the first to draw attention to the problem of underconsumption. Spence's physiocratic outlook, of necessity, emphasized the same problem. Britain could avoid the future redundancy of capital by giving greater recognition to the immediate superiority of agriculture.

While Torrens ignored Spence's underconsumption emphasis, for James Mill it represented a major theoretical weakness, and one which could easily be refuted. There could, Mill recognized, be a redundancy in the production of any one single commodity, its quantity being carried beyond "its due proportion." For a nation, however, this was impossible:

What is the difference when the goods are in great quantity and when they are in small? Only this, that in the one case the people are liberally supplied with goods, in the other that they are scantily; in the one case that the country is rich, in the other that it is poor: but in the one case, as well as in the other, the whole of the goods will be exchanged, the one half against the other; and the market will always be equal to the supply. Thus it appears that the demand of a nation is always equal to the produce of a nation. This indeed must be so; for what is the demand of a nation? The demand of a nation is exactly its power of purchasing. But what is its power of purchasing? The extent undoubtedly of its annual produce. The extent of its demand therefore and the extent of its supply are always exactly commensurate. Every particle of the annual produce of a country falls as revenue to somebody. But every individual in the nation uniformly makes purchases, or does what is equivalent to making purchases, with every farthing's worth which accrues to him. All that part which is destined for mere consumption is evidently employed in purchases. That too which is employed as capital is not less so. It is either paid as wages to labourers, who immediately buy with it food and other necessaries, or it is employed in the purchase of raw materials. The whole annual produce of the country, therefore, is employed in making purchases. But as it is the whole annual produce too which is offered to sale, it is visible that the one part of it is employed in purchasing the other, that how great soever that annual produce may be it always creates a market to itself; and that how great soever that portion of the annual produce which is destined to administer to reproduction, that is, how great soever the portion

employed as capital, its effects always are to render the country richer, and its inhabitants more opulent, but never to confuse or to overload the national market. I own that nothing appears to me more completely demonstrative than this reasoning.

(James Mill 1808b, pp. 83-84)

Mill's principle that a nation's supply of goods generates the nation's demand for the same goods ("always exactly commensurate"), established his reputation as an economist, and *Commerce Defended* temporarily laid to rest the physiocratic underconsumption argument. But only temporarily, for Malthus was in the wings, waiting for his cue.

At Horner's suggestion, Malthus was invited to review Spence for the *Edinburgh Review*, and his article of some twenty pages appeared in the January 1808 issue (Malthus 1808a, pp. 429-448). It was to some extent an unfortunate timing, because neither Mill nor Torrens had published as yet. Cobbett first picked up Spence's cudgel in November 1807, about the time Malthus was preparing his article, and although not aware of the full extent of the support which the *Political Register* would generate, as Cobbett's most vociferous outbursts came in late January, Malthus did acknowledge the attention "repeatedly drawn" to Spence's pamphlet "in a journal of great circulation" (Malthus 1808a, p. 430). This statement was an obvious reference to Cobbett's *Register* and its influence. Mill and Torrens, in their respective pamphlets, addressed themselves directly to the ideas of Spence and Cobbett, with Torrens saying he differed with "Mr. Spence and Mr. Cobbett on subjects of political economy" (Torrens 1808, p. 56), while the full title of Mill's pamphlet included Cobbett: *Commerce Defended. An Answer to the Arguments by which Mr. Spence, Mr. Cobbett, and Others Have Attempted to Prove that Commerce is not a Source of National Wealth.*

Whatever, it appears that Malthus did not have quite the proper sense of which way the wind was blowing; if he had desired to continue to contribute to the *Edinburgh Review*, he should not have taken the position which emerged in his review of Spence.

On the theoretical question of Quesnay, where agriculture alone produced a net product, Malthus pointed out that no "rational political economist" could agree. If Spence had read his Adam Smith, he would know that:

the real revenue of the whole society is to be estimated, not only by the food that is consumed, but also, by all the manufactures and commodities of all kinds which are produced . . .

(Malthus 1808a, p. 431)

Like Torrens and Mill, Malthus demonstrated that wealth was created by manufactures and commerce, and the accumulation of profits from the latter two sources was responsible for the "proud preeminence which England enjoys." Nor did Malthus agree that the import of perishable consumption items was detrimental to the national health:

we should decidedly prefer a present of a glass of claret, or port, to refresh us after the weary task of reviewing Mr. Spence, to the hardest and most ever lasting button that was ever constructed.

(Malthus 1808a, pp. 444-445)

Wealth was created in any successful channel of agriculture, manufacturing or foreign trade, but the latter "contains within itself the seeds of its own decay" (Malthus 1808a, p. 446). With this statement, and the analysis used to support it, Malthus essentially came down on the side of Spence, not a place for one writing in the Whig cause.

Malthus had three arguments to support his view that foreign trade was limited. First, if a nation's exports exceeded its imports, there will be a favorable inflow of specie, which would raise domestic prices and lower those in foreign markets. Hence, exports will fall off, and the balance of trade will correct itself through the flow of specie. If a country with a favorable trade balance attempts to prevent prices from rising by sterilizing the inflow of specie, the recourse to a paper money standard would still exert a pressure upon prices, the results being the same as if the additional specie circulated:

This, we conceive, according to the principles of that admirable illustration of the balance of trade given by Hume, is the natural check to foreign commerce; and it is illustrative to observe, that the greater is the industry, the skill, the capital, and colonial richness of any country, the lower will be the value of its currency; or the higher its general prices before a check to its foreign commerce occurs.

(Malthus 1808a, p. 448)

Secondly, a nation that excels in foreign trade may find itself dependent upon other countries for "some of the most necessary and important articles of its commerce" (Malthus 1808a, p. 447). A violent disruption in foreign countries would have domestic repercussions, and any nation would be advised to produce articles at home, rather than depend upon imports. In his article on Spence, Malthus had only one short paragraph to describe his reservation about relying upon foreign goods, but when he defended the corn laws in 1815, the argument became crucial, as discussed in the next chapter.

Thirdly, if a nation sells a great portion of its output in foreign markets, and grows rich in the process, that nation must hold down domestic wages to be externally competitive

We certainly are most ready to acknowledge, that the sale of these articles abroad tends to enrich Great Britain; but we think at the same time, that there are other objects worthy of the attention of Great Britain beside mere riches. When the question is between wine and hardware, we have no hesitation in rejecting the hardware; but if the question were, between the wine and an

improvement in the condition of the poor, we are confident that we should as little hesitate in rejecting the wine: and in this feeling, we hope that Great Britain and her senators will always sympathize with us.

(Malthus 1808a, p. 448)

This latter argument was strange, coming from the author of the *Essay on Population*, since there he had argued that it was not possible to improve the condition of the poor.

Malthus summed up his evaluation of Spence in the following words:

In these objections to foreign commerce, we trust that Mr. Spence will see nothing inconsistent with the remarks which we have ventured to make on his pamphlet; as we evidently object to the great extension of this species of trade;—not because we agree with him in thinking that it is not productive of wealth, but because we think that its great extension is naturally attended with a bad consequence, similar to the excessive accumulation of the precious metals; because we think, that security and independence, with moderate wealth, are preferable to greater riches subject to frequent reverses; and because we think, that the happiness of the lower classes of people ought not to be put in competition with the sale of a few more woollens and cottons.

(Malthus 1808a, p. 448)

The month after Malthus's review of Spence appeared, Horner wrote Jeffrey:

I hope it will not be for want of solicitation on your part, if he [Malthus] does not continue to supply you with articles. Of all subjects, political economy is at present the most productive of useful publications, and *though his general views are sometimes imperfect*, he is always candid, and an advocate of what he believes to be most liberal and generous.

(Horner 1957, p. 10; italics added)

According to Fetter's list of authors in the *Edinburgh Review*, Malthus contributed a total of six articles, five in a three-year period, 1808-1811, and a sixth in 1821 (Fetter 1953, pp. 246-247, 250). Of these early articles, one was on Spence, and two each on the Irish question and the bullion controversy; the sixth was a review of Godwin's answer to Malthus, a highly questionable procedure.¹⁰

In her recent biography, James suggests that Horner's misgivings over Malthus's imperfect views, arose because of the initial article on the Irish question (James 1979, p. 149). Fetter, in contrast, says they arose because of Malthus's

¹⁰ For a discussion of the origins of Malthus's review of Godwin, see James 1979, pp. 376-382.

review of Spence (Fetter, in Horner 1957, p. 10). The reason for the difference in interpretation is that James never mentions the Spence article, since apparently she does not believe Malthus ever wrote the review.

There are several reasons for agreeing with Fetter. The most obvious reason is that Malthus's reservations in the Spence article, as to the expansion of foreign trade, were very consistent with his later views, as well as those expressed in the *Essay on Population*. The Spence review shows a high level of theoretical understanding, not only of Hume and Smith, but of the Physiocrats as well, and there were not too many political economists who possessed Malthus's sophistication. When Spence's rebuttal to Mill and other critics¹¹ was reviewed in the April 1809 issue of the *Edinburgh Review*, the tone of the response was quite different from the initial article on Spence, and there were no reservations about trade expansion. The piece was highly polemical, concluding with the observation:

We have thus endeavoured to expose this delusion respecting commerce; and we heartily wish, that, along with it, we could banish that spirit of paltry cavilling and verbal contention which seems to have so generally infected the present generation of writers on subjects of political economy. This trifling is not merely vexatious: it may mislead some; and it unquestionably tends to bring the science itself into discredit with ordinary readers. A writer may no doubt display considerable talent in supporting an absurd theory; but he ought to recollect, that those who wish to be made wiser by what they read, feel extremely little interest in any of those discussions in which ingenuity is matched against common sense. It is rather a remarkable circumstance, that this paradox about the inutility of foreign commerce, should have been spread abroad at a time when our merchants and manufacturers are actually suffering no inconsiderable evils from its interruption.

("Spence on Agriculture and Commerce," 1809, p. 59)

Malthus's articles on the Irish question were reviews of two books by Thomas Newenham (1762-1831). The first article appeared in April 1808 under the title: "Newenham and Others on the State of Ireland" (Malthus 1808b, a review of Newenham 1805, Dudley 1807, and Croker 1808). There was nothing in the article that a Whig, such as Horner, would find objectionable, and Jeffrey wrote it was "admirable" and

more consonant to my own sentiments and impressions than anything I have yet met with in the writings of my contributors.

(Quoted in James 1979, pp. 149-150)

¹¹ William Spence, *Agriculture the Source of the Wealth of Britain; A Reply to the Objections urged by Mr. Mill, the EDINBURGH REVIEW and others, against the Doctrines of the Pamphlet, entitled "BRITAIN INDEPENDENT OF COMMERCE,"* reprinted in Spence 1822, pp. 95-192.

Since the review of Newenham was published in July, and Horner's reservations and concern about Malthus's imperfect ideas set down the preceding February, but a month after the Spence piece, there seems to be no question but Horner was commenting on the latter, not the former. In fact, Horner had not even seen the Newenham review at the time he wrote Jeffrey, as Malthus did not finish the review until April.

That Malthus was not asked to respond to Spence's rebuttal is significant, as is the fact that Spence quoted extensively from the *Essay on Population* to support his claim that Mill was in error about the future redundancy of commerce. He quoted from the *Essay*:

The principle states of Europe, except this fortunate Island, have of late suffered so much by the actual presence of war, that their commerce and manufactures have been nearly destroyed, and we may be said in a manner to have a monopoly of the trade of Europe. All monopolies yield high profits, and at present, therefore, the trade can be carried on to advantage, in spite of the high price of labour. But when the other nations of Europe shall have had time to recover themselves, and gradually to become our competitors, it would be rash to affirm that, with the prices of provisions and of labour still going on increasing from what they are at present, we shall be able to stand the competition.

(Spence, *Agriculture*, pp. 117-118; the passage cited is in the fourth edition of Malthus's *Essay* (1807), p. 44)

Then Spence delivered the coup de grace:

The Edinburgh Reviewer, too, however he may differ with me on other points, is precisely of the same opinion on this. After stating it is his opinion that commerce contains within itself the seeds of its own decay, in consequence of circumstances which occasion a great rise of prices in those countries where it has greatly flourished, he continues, 'And though, owing to the peculiar advantages we have enjoyed, this cause has not yet affected our commerce, yet we think that, preceding in the same course, it must do so ultimately.'

(Spence, *Agriculture*, p. 118)

At his point in time, Malthus was arguing that England's high cost of labor, because of the high cost of provisions, would not permit its manufactures to be competitive with France, Germany and the rest of Europe. It was an argument that struck at the heart of the corn law controversy of later years, when the question of the supply of imported corn became crucial. If, as Ricardo and others later claimed, corn could be purchased abroad at prices below the cost of domestic producers, there would be little pressure on the price of provisions, and wages need not rise. It was a

supply side theory, one that tied the expansion of manufactures to the availability of cheap grain. In the first decade of the century Malthus was a supply-side economist himself, contending that British manufactures could not continue to be competitive because of the rise in the cost of provisions.

Malthus's supply argument was first set out in the *Essay on Population*, again in the review of Spence, and then in the second article on the Irish question (Malthus 1909, a review of Newenham 1808). The later review covered the details of the wide-ranging injustices imposed upon the Irish, stemming from British policies which kept the country in a virtual state of subjugation. Malthus advocated immediate and complete Catholic emancipation, and the lifting of the heavy burden of tithes and taxes, whereby ninety percent of the populace supported and maintained the establishment of the Anglican minority. It was not, he said, just a matter of religious bigotry, a bigotry contrary to true Christian ideals, but a system which had economic consequences for both Irish agriculture and English manufactures. As Newenham's study revealed, the expansion of Irish corn production was an untapped British resource, and if the system of tithes and taxes was relaxed, there would be an increase in the supply of corn, and a great benefit to England. As Malthus put it:

The tables in the Appendix, relating to the corn trade of Ireland, exhibit a very promising picture of its increasing exports, and explain in great measure the cause of the decreasing wants of the empire for foreign corn . . . There can be little doubt, from the progressive state of Irish exports of corn, that if things remain quiet for some years, the empire will be entirely independent of foreign supplies, except in times of scarcity; and for this independence it will be indebted to Ireland.

In our review of Mr. Newenham's former work, we observed, that if England were to choose a territory calculated to afford her the most effectual assistance, she could not have fixed upon a portion of land of the same extent, so peculiarly suited to her wants as Ireland. We were then alluding principally to the defence of the empire; but the same thought forced itself upon us when we advert to its resources; and it is impossible to contemplate the immense supplies of the first importance, which we receive from this fruitful island, and their prodigious capability of increase without feeling the conviction that it should be prized and cherished by us as our richest mine of wealth, as well as our strongest pillar of defence.

(Malthus 1809, pp. 167-168)

In 1809, Malthus undoubtedly was more interested in the benefits which would accrue to Irish agriculture, by the expansion of corn cultivation, than he was with the cost benefits for English manufactures. But neither in the *Essay on Population* nor in the Newenham reviews was there any indication of an underconsumption

argument. That position only emerged in his review of Spence, where he advocated a limit upon the future expansion of English manufactures, and that is what led to Horner's misgivings. In time, of course, Malthus would come to rely more and more on the underconsumption argument, and reject his initial emphasis on the supply side. He then fell back upon Spence, and questioned Mill's principle. In 1814, before any of the corn law pamphlets had appeared, he wrote Ricardo that

I by no means think that the power to purchase necessarily involves a proportionate will to purchase; and I cannot agree with Mr. Mill in an ingenious position which he lays down in his answer to Mr. Spence, that in reference to a nation, supply can never exceed demand. A nation must certainly have the power of purchasing that it produces, but I can easily conceive it not to have the will . . .

(*Works*, Vol. VI, p. 132; Thomas Robert Malthus to David Ricardo, 11 September 1814)

If Horner was somewhat equivocal in his attitude as to Malthus's abilities as a political economist, he was emphatic about James Mill as a monetary theorist. Horner, of course, was an outstanding expert on money, as shown in his reviews of Thornton (Horner 1802) and King (Horner 1803). Early in the summer of 1810, Horner, Thornton and Huskisson were busy writing the *Bullion Report*, which was submitted to the House of Commons on 13 August. In July, Horner was especially concerned that the *Edinburgh Review* should find a competent individual to review the *Report*. He wrote his old friend Jeffrey:

I would rather do something for you myself . . . rather, I mean, than trust that subject in the hands of one of your mercenary troops, one of whom was guilty of deplorable heresies in the account of a book by one Smith.

(*Works*, Vol. III, p. 9)

The article to which Horner referred was "Money and Exchange," which had been written by Mill (Mill 1808a) (Bain 1882, p. 91).¹² By December, Horner must have learned that Mill was the one "guilty of deplorable heresies," and he again wrote Jeffrey:

All I beg of you, though I have no right to ask any thing, is not to let Milne¹³ lay his hands upon us.

(*Works*, Vol. III, p. 10)

¹² In commenting on Mill's review of Smith, Hollander called it "interesting as an exhibit of the entering spirit of speculative method and argument into economic writing; as a contribution to monetary discussion it is crass in manner and with respect to the conspicuous phenomena of the moment, the fall in the exchanges and the premium on gold, it is reactionary in content." (Hollander 1895, p. 44)

¹³ Milne was the original family name, changed to Mill by his mother, Isabel Fenton (Bain 1882, p. 3, and Mazlish 1975, p. 48).

It is interesting that thereafter Mill's contributions to the *Edinburgh Review* were confined to topics on India, and domestic politics.

Horner's influence in the *Edinburgh Review* was not limited to his own contribution, and he had a great deal of influence as to who wrote for the journal. Malthus's last opportunities were the two articles on the bullion controversy because Horner could not find anyone else. He tried to entice Ricardo to review the *Report*, but he refused. Malthus certainly was preferred to Mill.

With Horner's death in 1817, the in-house political economist for the *Review* became James Ramsey McCulloch (1789-1864), followed by Nassau Senior (1790-1864). Under McCulloch's tutelage the *Review* became doctrinaire, if not oppressive, and while professing to the espousal of Ricardo's views, that was not really the case. Senior was anti-classical in outlook, and therefore not a Ricardian in any sense.

The branch of economics that dominated the first decade of the century was monetary theory and policy. It was the subject which precipitated the greatest controversy, was Horner's particular forte and was Ricardo's first field of study. Horner became a monetary theorist, if not in some sense the first monetarist, because of the articles about the money supply which he wrote for the *Review*, and of the consequences of the Bank of England's unrestrained issue of paper money. In one sense, Francis Horner was David Ricardo's first mentor in the study of political economy.

A mentor relationship typically is thought of as a personal interaction between the novice and the experienced teacher or advisor, but it need not be personal, as many a devotee has been acquired through the written word. Whatever the means, the mentor's role is guiding

the initiate into a new occupational and social world and acquainting him with its values, customs, resources and cast of characters. Through his own virtues, achievements and way of living, the mentor may be an *exemplar* that the protégé can admire and seek to emulate.

(Levinson 1978, p. 98; italics in original)

Through the pages of the *Review*, Horner introduced Ricardo to the world of monetary economics. As Fetter has observed

Horner's writings on monetary matters were already widely read when Ricardo's interest in economics had scarcely expanded beyond the details of the Stock Exchange, and Horner's writings were one of the influences that directed Ricardo's fertile mind toward a systematic analysis of economic problems.

(Fetter in Horner 1957, p. 18)

The initial mentor role was purely intellectual, as the advisor sharpened the thinking of the novice economist. As time passed the relationship became personal

and eventually intimate, and it was Horner who first suggested that Ricardo write a scholarly article on monetary policy, rather than just letters to the editor of the *Morning Chronicle*. They could have met as early as 1809, when Horner joined the Geological Society; Ricardo had become a member the previous year. They both must have been active members of the Society, which met for dinner on the first Friday of each month, because in April 1810 they both were elected to the seven-man board of permanent trustees.¹⁴ Each remained a trustee until his respective death, suggesting a common commitment to a serious study of geology.

Like most of Ricardo's close friends, Horner came from a contrasting environment. At age fourteen, the age Ricardo entered the Stock Exchange, Horner entered the University of Edinburgh; Horner was six years senior and with considerable training and experience, both as a lawyer and a member of the House of Commons. He was the first political economist with whom Ricardo formed any type of relationship, an interaction which matured as the bullion controversy once again became preeminent in 1809. It marked the culmination of Horner's career as a political economist, and signaled the commencement of Ricardo's.

Monetary Expediency

The peculiarities of the British monetary system in large measure owe their origins to Isaac Newton, when he was Master of the Mint. In effect he was the one who put the country on the convertible gold standard, setting the English pound equal to $123\frac{1}{4}$ grains of 22 carat gold, or 113 grains fine gold.¹⁵ The mint price of an ounce of gold was established at £3 17s 10½d, with Bank of England notes fully convertible into specie at that price. Because bank notes of less than a £20 denomination were not printed, Newton set the price of a pound of gold at £46 14s 6d, using the Troy system of account, or 12 ounces to the pound (£3 17s 10½d x 12 = £46 14s 6d). The system was further complicated because the major coin was the guinea (21 shillings), so a pound of gold was equal to 44½ guineas. Anyone with bullion could go either to the Mint or the Bullion Office of the Bank of England and have gold coined into any of the several denominations.

¹⁴ Besides Horner and Ricardo, the other trustees were: William Babington, M.D., F.R.S. (1756-1833); Robert Ferguson, F.R.S.; George Bellas Greenough, M.P., F.R.S., (1778-1855); Sir Abraham Hume, Bart., M.P., F.R.S. (1749-1838); and Samuel Woods. (Woodward 1908, p. 32) Of the seven trustees, five made it into the *Dictionary of National Biography*. There were at the time about eighty members in the society, and an additional hundred honorary members. Cf. "List of Members" in Woodward 1908, pp. 268-273. The vast majority of the members were also Fellows of the Royal Society, but neither Horner nor Ricardo were eligible for election to the Royal Society. On 14 June 1810, the Geological Society established a council, and Ricardo was selected one of twenty-one members. He served twice, 1810-1811 and 1815-1816. Among the "active and influential members in the early days of the Society," Ricardo was one of a baker's dozen who did not publish a paper in the *Transactions* of the Society. (Woodward 1908, pp. 33, 306). In a five-line biographical sketch on Ricardo, the fact that he was of "Jewish parentage" was noted. (Woodward 1908, p. 37)

¹⁵ The best sources on the background of the British banking system are Clapham (1945) and Cannan (1925).

Even though it was illegal to melt coins and export bullion, convertibility encouraged the practice, so whenever the market price of bullion exceeded the mint price, traders and bullion dealers exchanged their coins at the Bank and sold in the foreign or domestic markets. Arbitrage maintained the equilibrium between the market and mint price of gold bullion. Silver was also convertible, but because the coins were in smaller denominations they had a high velocity and were usually eroded, so the Bank frequently refused to exchange new coins for old, or exchange them at par for bank notes.

By modern standards the British banking system at the end the eighteenth century was not very efficient, but quite advanced for the times. The Bank of England had exclusive monopoly privileges in London, where its Bank notes circulated freely with no resistance to their acceptability because of free convertibility. Bank notes were issued in denominations of £10 and £20, with a few larger, and were the closest thing to legal tender which existed. In the area outside London were some 200 small country banks, but because of the Bubble Act they had to be partnerships, with less than six partners. The country banks also circulated notes, the most popular in a £5 denomination, and these usually were in use in the geographic region of the separate banks. Depending upon a correspondence relation with the Bank of England, occasionally country bank notes were acceptable in London, but notes of the Bank of England were always acceptable in the countryside, because they were as good as gold. Due to this inverted relationship, it was assumed in some circles that the Bank of England in effect controlled the amount of the notes issued by the country banks, as well as the quantity of its own notes in London itself. One of the issues in the bullion controversy was whether the Bank of England controlled the issues of notes by the country banks, or whether they were indeed independent. Critics of the Bank of England, like Horner and Ricardo, took the former position, while supporters of the Bank took the latter.

As shown in Table VI-3, in 1792 notes of the Bank of England came to a little over £11 million, backed by bullion reserves of £6.5 million. In the country as a whole, there was some £20 to £30 million in bullion, much of it hoarded, while some was held by the country banks. There are no statistics on the total amount of notes issued by the country banks, but Cannan estimated it was about equal to that of the Bank of England (Cannan 1925, p. viii).

In the first two years of the War of the French Revolution, the government deficit was not large, and the amount of the notes issued by the Bank of England declined slightly, as bullion reserves actually rose. In 1795 Pitt's failure to raise taxes to offset the increased expenditures meant a two-fold increase in the deficit, which the Bank of England partially financed by increasing its notes. Some drain in the Bank's bullion reserves took place.

The Bank's bullion reserves reached a critical level in February of 1797, when they fell to £1.1 million. The Bank's total liabilities were about £16 million at the time, leaving a bullion reserve of about seven percent. Napoleon was preparing for invasion, and the Pitt Government had a deficit of £27.4 million coming on the heels of the previous year's deficit of £36.2 million. The Bank Directors informed

**Table VI-3. Time Series
Relevant to the Bullion Controversy, 1797-1816**

Year	Government Deficit ¹ (£ millions)	Bank of England Notes in Circulation ² (£ millions)		Coin and Bullion with Bank ² (£ millions)		Jevon's Wholesale Index (1792 = 100) ³	Market Price of Gold (per ounce)
		(1)	(2)		(3)		
		Feb.	Aug.	Feb.	Aug.		
1792	-1.9	11.3	11.0	6.5	5.4	100	£3 17s 10½d
1793	4.4	11.9	10.9	4.0	5.3	106	
1794	9.4	10.7	10.3	7.0	6.8	105	
1795	31.8	14.0	10.9	6.1	5.1	126	
1796	36.2	10.7	9.2	2.5	2.1	134	
1797	27.4	9.7	11.1	1.1	4.1	118	
1798	19.9	13.1	12.2	5.8	6.5	127	
1799	19.8	13.0	13.4	7.6	7.0	140	
1800	22.4	16.8	15.0	6.1	5.2	152	
1801	26.5	16.2	14.6	4.6	4.3	164	£4 6s 0d
1802	13.1	15.2	17.1	4.2	3.9	128	
1803	10.4	15.3	16.0	3.8	3.6	138	£3 19s 6d
1804	12.4	17.1	17.2	3.4	5.9	131	
1805	16.0	17.9	16.4	5.9	7.6	146	
1806	12.7	17.7	21.0	6.0	6.2	143	
1807	8.0	17.0	19.7	6.1	6.5	142	
1808	10.0	18.2	17.1	7.9	6.0	160	
1809	12.8	18.5	19.6	4.5	3.7	173	£4 13s 0d
1810	9.7	21.0	24.8	3.5	3.2	176	£4 4s 6d
1811	18.4	23.4	23.3	3.4	3.2	158	
1812	21.2	23.4	23.0	3.0	3.1	159	
1813	36.7	23.2	24.8	2.9	2.7	160	£5 10s 0d
1814	35.2	24.8	28.4	2.2	2.1	164	£4 5s 0d
1815	19.9	27.3	27.2	2.0	3.4	142	£4 9s 0d
1816	2.5	27.0	26.8	4.6	7.6	117	

¹ Cannan (1929, Table I, p. xliii) The size of the annual deficit was always less than the increase in the national debt because of the policy of selling stock at low interest rates but issued at a discount.

² Cannan (1929, Table II, pp. xliv-xlv) Figures refer to the Bank of England only; the accounts were tallied in February and August of each year.

³ Jevons (1884, Table VIII, pp. 144-145) The Jevons Index of Wholesale Prices covered forty commodities with a base year of 1782. The index (1782-1865) has been converted to a 1792 base for comparability with other series. Jevon's index was based upon gold up to the year 1797 when it was converted to paper currency.

Pitt of their precarious bullion situation, and on Sunday, 20 February 1797 he called a meeting of the inner circle which drafted a resolution that instructed the Bank of England to immediately suspend all payment in gold bullion. The resolution became law on 3 May 1797, under the Bank Restriction Act. The suspension was an innovation which reflected once again Pitt's utilization of "Romer's rule." In 1797 Pitt also floated the Liberty Loan, as subscribers were solicited in an act of patriotism, a reflection of the emergency which existed.

The Bank of Ireland suspended payment in specie immediately, as did the Bank of Scotland and the country banks, even though the government order applied only to the Bank of England. Initially the suspension was to last until 24 June 1797, but through a series of continuing Parliamentary acts the policy remained in effect for twenty-five years. The Whig opposition, led by Fox, claimed that in converting to a paper currency Britain would soon have the same difficulties which the French experienced with their *assignats*.¹⁶ While there was some recognition of the immediate need for suspension, there were grave misgivings, even though 4,000 merchants and banking houses in London signed petitions to the effect they would accept bank notes even though they were no longer convertible. The denomination size of the currency issued by the Bank of England was reduced to £1 and £5, as well as the larger bank notes, but none of these financial instruments ever were declared legal tender by the Government. In 1811, Lord King (1776-1833) refused to accept bank notes in payment of land rent, with the result that Parliament then made it illegal to refuse to accept bank notes in payment of any financial obligation.

During the period of the French wars, there were two periods when the suspension of payment in specie was debated and discussed, in 1801-1803 and again in 1809-1811.

In 1801 the price index had risen to 164 (1792 = 100), with gold selling at a 10 percent premium. In large measure the inflation was caused by the very poor English harvest of 1800, and wheat prices rose considerably. The high price of bread meant the poor relief had to be increased, and in the second edition of his *Essay on Population* Malthus claimed the increase in poor relief was £7 million. It was his view that the increase in the money supply came from the country banks, as it was in the countryside that food prices had risen the most (James 1979, p. 193). There were others, however, who believed the inflation was caused by the Bank of England's excessive issue of bank notes. Convertibility always had prevented this from occurring in the past, as Cannan so succinctly noted:

Before the Suspension the convertibility of the notes absolutely prevented the Bank from increasing its issue whenever the value of a given quantity of gold was appreciably greater than that of the notes which promised to pay that quantity; the Bank

¹⁶ In 1789 when the Revolutionary Government seized all ecclesiastical lands, it issued paper currency supposedly backed by the value of the new public lands. When land values collapsed, the assignats became worthless and inflation raged. Despite the imposition of price controls in 1793, the French used the assignats to patch their wallpaper. Inflation was one of the reasons that Napoleon was able to come to power.

could not lend additional notes promising to pay the bearer on demand, say, £210 at a moment when any bearer would find it profitable to demand the 200 golden guineas to which he was entitled because he could sell them for substantially more than £210. At such a moment more notes would be coming in than were going out, and more gold going out than coming in, and this would continue until parity was restored or the Bank broken. In order to continue doing as they did before the Suspension, therefore, the Directors should not only have considered the soundness of each particular advance but should also have considered how the whole position would have looked if the Suspension had not been in force. Had they done so, they would clearly have limited advances and reduced the amount of notes in circulation whenever £1 in notes became worth appreciably less than $123\frac{1}{4}$ grains of standard gold in the market—or, as it would commonly be expressed, whenever the price of gold rose appreciably above £3 17s. 10½d., and would have maintained this policy until £1 in notes and $123\frac{1}{4}$ grains of gold were again equal in value.

(Cannan 1925, p. xix)

In the absence of convertibility, the Bank could have used the interest rate to ration loans and thus exercised some control over the money supply, but at the time there was a usury Law ceiling of five percent, and that made the interest rate device inoperative. In addition, the principal borrower was the government, and it was pursuing its policy of borrowing at three percent.

In the 1801-1803 period the leading bullionists were Henry Thornton (Thornton 1802), Walter Boyd (Boyd 1801) and Lord King (King 1803). It was alleged that the premium on the price of gold (10 percent), the low rate of British exchange in Hamburg, and the domestic inflation were all symptoms of the excessive issue of Bank notes by the Bank of England. Attention was called to the fact that by February 1800 the Bank's notes had reached a new high of £16.8 million, as shown in Column 2 of Table VI-3. As bankers themselves, the first bullionists devoted considerable space to the discussion of existing banking practices, the relation between the Bank of England and the country banks, and the effect of an expansion in the money supply upon domestic prices and foreign exchange rates. Undoubtedly Thornton's views were given the greatest acclaim because of Horner's review of his pamphlet in the *Edinburgh Review*.

Horner's review summarized the main points in Thornton's analysis, freed from the mass of detail, and also made clear the difference in adjustment under convertible and inconvertible conditions. Horner gave a reasoned defence of convertibility as a monetary objective, while at the same time recognizing that this might not be practical in a war situation. The review was both an

exposition that carried the message of Thornton's book to a much wider audience than the readers of the book and a positive contribution to economic analysis.

(Fetter in Horner 1957, p. 7)

Although King's pamphlet did not appear until 1803, by which time the cries had diminished in importance because of the Peace of Amiens, still it called attention to the fears of the bullionists:

when the obligation to pay in coin ceases, the currency no longer retains . . . [its] value, but is in danger of being depreciated from two different causes; viz., by want of confidence on the part of the public, and an undue increase of the quantity of notes.

(King 1803, p. 7)¹⁷

None of the early bullionists alleged that there was in fact any loss in the public's confidence in the currency, since there had been no interruptions in commerce or trade, except those directly associated with the prosecution of the war. Nor did they specifically claim that the differential between the market and mint price of gold was a measure of the degree of redundancy in bank notes, as Ricardo later argued. Moreover, Thornton, Horner et al agreed that so long as the war continued the suspension of payments was a necessity. The bullionists really were looking to the end of the war, as they built their case for the necessity of a return to the gold standard. It is highly significant, in this respect, that the appearance of the several pamphlets and reviews coincided with the cessation of hostilities in 1802. Actually, peace negotiations had commenced in October 1801, and Pitt's resignation in February had come not only because he favored Roman Catholic emancipation, but because the country was war weary. The first phase of the bullion controversy did not lead to any type of Parliamentary inquires, though the question was debated.

As early as 1797 Addington had been passing on to Pitt the strong, though damped-down, defeatism of many back-benchers. Pitt, too, was a man for peace—but his desire for it was never unconditional. Yet by 1801 many arguments were advanced for peace at any price. The treaty of Lunéville marked the complete collapse of the continental alliances and, said Addington, "there

¹⁷ In the July 1803 issue of the *Edinburgh Review*, Horner published an article, "Lord King on the Bank Restrictions." The article was not really so much a review of King as it was a setting forth of the issues of the bullion controversy, but since Horner agreed with King there was no major difference between them. Horner noted, "To our mind, at least, the reasonings and statements of Lord King appear now quite decisive. We mean, decisive as to the actual consequences of the measure of 1797, and its pernicious influence upon the system of circulation. For of the impolicy of that measure, we never for a moment entertained a doubt. To have apprized the public of that, it was quite sufficient, that the most intelligent and best informed persons owned themselves unable at the time to descry its probable effects; and that it was in itself a violent interference of the Legislature, forcing the arrangements of commerce out of their accustomed and natural course." (Horner 1803, p. 416)

was not the least prospect of obtaining any such alliances" for the present, so complete was the exhaustion of Europe.

(Watson 1960, p. 406)¹⁸

Should peace come, as it did in 1802, the bullionists were prepared to bring an end to the suspension of payments, and to break the control of the Bank of England. The anti-bullionists, meanwhile, had relied upon the issue of expediency as their major defense, and claimed that so long as the Government demanded loans the Bank had no alternative but to be responsive. The premium on the price of bullion they attributed to the heavy continental remittances of the war, and not to an excess in the issue of bank notes. Theirs was a demand-pull argument, not one grounded in an excess in the supply of domestic currency. The return to hostilities in May of 1803 put the bullionists on the defensive, as even the most ardent critics of Pitt's previous war strategies now agreed that total victory was the prime objective.

During the second stage of the bullion controversy the first salvo was fired by Ricardo with his anonymous article in the *Morning Chronicle*, 29 August 1809. The newspaper was published by James Perry (1756-1821), had a daily circulation of about seven thousand and was the Whig paper of London. Perry was an extremely popular figure, not only in Westminster but in London as well, as he frequented the numerous coffee houses in search of material for the following day's *Chronicle*. By 1809 Ricardo was well known in the financial and banking world, and when he showed his piece to Perry it was quickly published. Ricardo's article was short but to the point: the difference between the market and the mint prices of gold was the measure of the degree of the excess in bank notes issued by the Bank of England. Further proof of the depreciation of the bank notes was the difference in the rates between England and Holland. Cannan claimed that Ricardo's article reflected "a lucidity never surpassed in the author's later works" (Cannan 1925, p. xxi) On the first point:

When the Act restricting the Bank from paying in specie took place, all checks to the over issue of notes were removed, excepting that which the Bank voluntarily placed on itself, knowing that if they were not guided by moderation, the effects which would follow would be so notoriously imputable to their monopoly, that the Legislature would be obliged to repeal the Restriction Act.

Whilst the Bank is willing to lend, borrowers will always exist, so that there can be no limit to their over-issues, but that which I have just mentioned, and gold might rise to 8£ or 10£ any other sum per ounce.—The same effect would be produced in the price of provisions and on all other commodities, and there would

¹⁸ Henry Addington (1757-1844) was Speaker of the House of Commons, and later Prime Minister after Pitt's resignation in 1801. He resigned in May 1804, when Pitt returned to form his second administration. In 1805, Addington became Lord President of the Council in Pitt's cabinet.

be no other remedy for the depreciation of paper, than the Bank withdrawing the superabundant quantity from circulation, by insisting on the merchants paying their bills as they became due, and refusing to renew their loans until the scarcity of circulating medium should so raise its value that it would be at par with gold. It could rise but little above that price, for from that moment importation of gold would commence, and if the Bank were gradually to withdraw all their notes from circulation, the place of those notes would as gradually be supplied by imported gold, which the high price—I mean the high price in goods, would infallibly draw to this country.

If my view of this subject has been correct, we are enabled to ascertain the amount of depreciation at which Bank notes at any time may be, and when gold was at £41. 13s. per ounce, they appear to have arrived at the enormous discount of 20 per Cent.

(*"The Price of Gold," Works, Vol. III, p. 17*)

On the second point:

If further proofs of the depreciation of Bank notes were wanting, and that it was caused by an over-issue, it would be found in the present rate of exchange with foreign countries. To make this apparent may require us to consider what is meant by the rate of exchange, and the rules and limits to which it is subject.

If I purchase from a resident in Holland goods of that country, the bargain is made in the money there current. I have consequently contracted to pay him a certain number of ounces of silver of a given purity. As the comparative value of silver and gold is equal over the world my debt may be either estimated in silver or in the number of ounces for which it would exchange. And if a merchant in Holland has purchased from a resident in London goods which are valued in English money, he has contracted to pay a certain number of ounces of gold of known purity of fineness.

To save the expence of the freight and insurance attending the exporting and importing of a quantity of gold to liquidate these debts, it suits the convenience of both the parties after agreeing how much money of the one country is equivalent, considering its weight, purity, &c. to that of the other, and which is called the par of exchange, to make a transfer by means of a bill, which is done by my paying to the English merchant the sum which I am indebted to my Correspondent in Holland, the English merchant ordering his Correspondent to pay to mine the same amount, estimated at the rate of exchange agreed on, in Dutch

money. The advantage to both parties is saving freight and insurance. Now if two or more parties had been indebted to merchants in Holland, there would have been a competition between them for the purchase of this bill, and the seller would no longer have been satisfied with saving the freight and insurance on the importation of his gold, but would have exported, and would have obtained a premium for his bill, which it would have been the interest of either of the other parties to have given him, provided such premium did not exceed the expence of the transport of the metals. It is necessarily kept within that limit, for either would say, "the number of ounces of gold which I owe in Holland are ready to pay my debt. I am willing to give them to you to pay it for me, and to add to it the expences which would attend the sending it; but nothing can induce me to give more, as if you do not accept my offer, I shall suffer no further disadvantage by sending the gold!"—This is therefore the natural limit to the fall of the exchange, it can never fall more below par than these expences; nor can it ever rise more above par than the same amount.

(Works, Vol. III, pp. 18-20)

The market price of gold had reached £4 13s in early August, a depreciation in the currency that Ricardo said was near 20 percent (19.4 percent). In his view the situation was solely the result of the excessive issue of Bank notes, and it was his emphasis upon the singularity of the cause of the inflation which set him apart from most of the other bullionists. Although he cited no evidence in "The Price of Gold" article, he claimed that the absolute excess in the issue of Bank notes was about two to three million pounds. As indicated in Table VI-3, Bank notes amounted to £19.6 million in August 1809, as against £17.1 million the previous August, undoubtedly the two million he was talking about. As he predicted, the issue of Bank notes continued to rise, and in the following year they were £24.8 million.

Part of the reason for the rise in the amount of Bank notes was that, in 1808, British trade in South America was greatly expanded, and while Ricardo said, "Whilst the Bank is willing to lend borrowers will always exist," he gave no indication as to the identity of the new borrowers. Of course, Government borrowing was continuous. Ricardo's statement is significant for his emphasis upon supply, and the assertion of an unlimited demand on the part of borrowers. In a cryptic comment, Edwin Cannan once claimed that "We are indebted to the Bullion controversy for the Ricardian theory of value" (Cannan 1917, p. 306). What Cannan must have had in mind was Ricardo's exclusive emphasis on the supply of Bank notes as the cause of the depreciation, and his denial that demand played any role in the process, with the first indication of such a theory being stated in his initial article.

Ricardo had no index numbers to rely on, but if he had, he would have been able to point to the fact that prices in 1809 were higher than at any time during the

period of the suspension, as Jevons's index later was to show. But as to the consequences of the suspension, he was convinced

that all the evils in our currency were owing to the over-issues of the Bank, to the dangerous power with which it was entrusted of diminishing at its will, the value of every monied man's property, and by enhancing the price of provisions, and every necessary of life, injuring the public annuitant, and all those persons whose incomes were fixed, and who were consequently not enabled to shift any part of the burden from their own shoulders.

(*Works*, Vol. III, p. 21)

The remedy was not an immediate return to convertibility, since no one advocated such a policy, but Parliament should insist that the Bank "gradually withdraw to an amount of two or three millions of their notes from circulation" (*Works*, Vol. III, p. 21). Such a procedure would restore the equilibrium between the market price and the gold mint price of £3 17s 10½d. The policy would reduce the domestic price of every commodity (proportionately), and restore the limits on the amount of the foreign exchange fluctuation between the gold import and gold export points, a range of no more than the two or three percent, the amount necessary to cover the costs of transportation and insurance on the international transfer of an ounce of gold bullion.

Two weeks after Ricardo's anonymous article appeared, an anonymous letter to the Editor of the *Morning Chronicle* was published under the title "Price of Gold," signed by "A Friend of Bank Notes, but no Bank Director," and published 14 September 1809. As Ricardo was to find out very soon, the "Friend to Bank Notes" was none other than his old friend Hutches Trower, with whom, it will be recalled, he had been discussing political economy since 1802.

In Trower's opinion, the author of "The Price of Gold" was exaggerating the seriousness of the situation, since the country was not on the brink of bankruptcy. Moreover, the current high price of gold was the consequence of an excess demand for bullion, and not an excess in the quantity of Bank notes. The market price of gold still would be £4 13s., "if there were not a single bank note in circulation" (*Morning Chronicle*, 14 September 1809). According to Trower, the British mint price of £3 17s 10½d was purely arbitrary, and when the time came for the repeal of the suspension of payment in specie, "it may be necessary to alter the standard price of gold, in order to bring it nearer to the market price; and thereby to prevent that exportation, which otherwise will unquestionably take place" (*Idem*). Trower's analysis of the price of gold was in terms of partial equilibrium, as he failed to see the relation between specie and the general price level, in accordance with the quantity theory of money.

Ricardo answered "A Friend of Bank Notes" by discussing the major points in dispute (*Works*, Vol. III, pp. 21-27). First, there was nothing arbitrary about the mint price of gold, since "forty four guineas and a half are of the same weight as a pound of gold, and one-twelfth of that quantity or £3 17s 10½d of an ounce." For twenty years, before the suspension of specie (1797), 44½ guineas had always

purchased a pound of uncoined gold, with only a slight variation above or below the mint price.

Will this writer explain to us why any demand, however great, should induce any one to give, as has been lately done, 55l. 16s. in bank notes, for a pound of gold, if they are of equal value with 55l. 16s. in coin? Does he reflect that the gold actually contained in 55l. 16s. weighs one pound and a fifth of a pound? Is it seriously believed that he would give this for a pound? If it is agreed that he would not, then is the fact of the depreciation of bank notes fully established. If for the purchase of gold a greater quantity of corn, hardware, or any other commodity, were given than usual, it might justly be said that the scarcity of gold had increased in value. But what is the fact? If I go to market with corn or hardware, I can purchase 55l. 16s. in bank notes with precisely the same quantity that I am obliged to give to procure a pound of gold, or 46l. 14s. 6d.

(*Works*, Vol. III, pp. 22-23)

For Ricardo it was not demand which caused the market price of gold to be twenty percent above the mint price; it was not a question of a rise in the scarcity of gold, since no scarcity could raise the market price above the mint price "unless it be measured by a depreciated currency." The depreciation was solely the result of an excessive issue of Bank notes, the closest thing to legal tender that existed.

As for raising the mint price of gold to meet the market price, Ricardo argued that such a policy would merely raise prices, and there would still be a twenty percent differential between the new mint and market prices of gold, and referred the "Friend of Bank Notes" to Adam Smith (Smith 1937, pp. 336-338).

In rebuttal, Trower retreated, as he admitted that the idea of raising the mint price to meet the market price was "an error which I shortly detected on reflection" (*Morning Chronicle*, 30 October 1809). But more important, Trower completely shifted the argument by assuming that silver, not gold, was the real measure of value. If silver was the measure of value, then the current market price of gold (£4 13s) was not "evidence of Bank notes being at a discount." As a result of this new assumption, Trower and Ricardo were talking about quite different worlds, and as Ricardo later wrote:

Is it fair that Mr. T should not argue on things as they are, but on those which he supposes may take place at some future period? The act prohibiting the coinage of silver may be repealed, and when that happens, Mr. Trower may be right, silver may then become the standard measure of value, but whilst the law continues in force gold must necessarily be that measure, and the value of bank notes therefore must be estimated by their comparative value with gold coin or bullion.

(*Works*, Vol. III, p. 37)[?]

Accordingly, Trower's second letter and Ricardo's reply (*Works*, Vol. III, pp. 28-33; *Morning Chronicle*, 23 November 1809)[?] were not particularly germane to the central issue of the consequences of the suspension of specie payment by the Bank of England. With Trower asking "what if" silver were the measure of value, and Ricardo asserting that gold was by law the measure of value, and moreover Lord Liverpool (1727-1808) had proved it had to be the measure because silver was always a debased currency (Liverpool 1805; reviewed in Brougham 1806), there was no common meeting ground. Ricardo's second reply to Trower was nothing much more than a restatement of Liverpool's position, with long quotations from his *Treatise*.

The Trower-Ricardo public controversy in the *Morning Chronicle* ended with Ricardo's second reply, even though they carried on discussion in private. Sraffa claims they each wrote two papers on the issue of whether silver or gold was a better medium of exchange. None of the papers were printed, until Sraffa published two in the *Ricardo Pamphlets* (*Works*, Vol. III, pp. 34-46). Although Trower never again published, he corresponded with Ricardo on a regular basis after they both retired from the Stock Exchange, and provided a very effective sounding board for the development of Ricardo's views, not only on economics but politics as well.

In his article on "The Price of Gold," Ricardo had no citations to other authors, and it was a straightforward statement of his own analysis. In his first reply to Trower he had made reference to Adam Smith, while in the second he leaned heavily upon Liverpool's *Treatise*. In late autumn of 1809 he must have been at work rewriting and enlarging the article on gold, for on 3 January 1810 John Murray published Ricardo's first pamphlet, *The High Price of Bullion. A Proof of the Depreciation of Bank Notes*. Sraffa says the first Murray advertisement announced a publication date of 28 December and *The Times* announced it for 30 December. Altogether four editions of his *Bullion* pamphlet were published. The second edition contained no new material, with only corrections in style and typographical errors, published 18 February 1810. In the third edition, 10 March 1810, Ricardo included his views on Horner's speech in the Commons that initiated the Bullion Committee. The fourth edition was published in April 1811, and contained a new long Appendix, in which Ricardo dealt with the criticisms of his pamphlet raised in the *Edinburgh Review*. The reviewer, of course, was Malthus. Prior to April, Ricardo published the Appendix as a separate pamphlet.

The first difference between Ricardo's article on gold and his *Bullion* pamphlet was length, the first being seven pages, while the latter ran to forty-nine pages. The Appendix to the fourth edition ran an additional twenty-eight pages. The second difference between the two works is that the pamphlet shows evidence of considerable research on the monetary theory of other writers. In addition to the works of the classics, like Adam Smith, John Locke, Sir James Stuart and David Hume, Ricardo refers to the major writers of the first bullionist group of the 1801 period, namely Liverpool, King and Thornton, plus Horner's reviews of the last two. In terms of the policy recommendation, and the analysis which supported it, Ricardo's pamphlet showed no change from the original article. The analysis was more sophisticated and established the author's reputation as a monetary theorist.

As Malthus said in his review of the pamphlet, Ricardo laid out two important doctrines: First,

every kind of circulating medium . . . is necessarily depreciated by excess, and raised in value by deficiency, compared with the demand, without reference either to confidence or intrinsic use. . . And if we deny the application of these principles to the currencies of different countries, it will be quite impossible to explain the reason why the wants of some countries do not absolutely exhaust them of the precious metals, and the desirable products of others overload them with bullion; why, instead of such a state of things, the precious metals are, on the whole, maintained in such proportions in the different countries of the commercial world, as, in reference to the commodities which form the subjects of their mutual intercourse, to be nearly of the same value in each.

and second,

the doctrine, that excess and deficiency of currency are only *relative* terms; that the circulation of a country can never be superabundant, except in relation to other countries; that, as, after the discovery of the American mines, the different countries of Europe absorbed into their circulation three or four times the quantity of gold and silver which they before possessed, so, if the paper currency of one country would pass in another, or if proportional issues were made in all the different countries of the commercial world at the same time, there is no limit to the quantity which might be absorbed, without any such redundancy as would overflow the circulation, and occasion the efflux of the precious metals, though it might be continually occasioning the melting of coin into bullion.

(Malthus 1811a, p. 341)

As Ricardo himself put it:

Thus then it appears that the currency of one country can never for any length of time be much more valuable as far as equal quantities of the precious metals are concerned, than that of another; that excess of currency is but a relative term; that if the circulation of England were ten millions, that of France five millions, that of Holland four millions, &c. &c. whilst they kept their proportions, though the currency of each country were doubled or trebled, neither country would be conscious of an excess of currency. The prices of commodities would every where rise, on account of the increase of currency, but there would be no

exportation of money from either. But if these proportions be destroyed by England alone doubling her currency, while that of France, Holland, &c. &c. continued as before, we should then be conscious of an excess in our currency, and for the same reason the other countries would feel a deficiency in theirs, and part of our excess would be exported till the proportions of ten, five, four, &c. were again established.

(Works, Vol. III, pp. 56-57)

As long as countries remained on a monetary system grounded in bullion, either through an underbased coinage or a fully convertible paper system, exchange rates will never fluctuate above or below par by an amount in excess of the "expenses attending the transportation of the precious metals." The costs of shipping gold were believed to be four or five percent, and the price of bullion in England would never rise above the price of £4 an ounce. But with a market price of £4 13s, Ricardo calculated the depreciation near 20 percent, some 15 percent in excess of the margin permitted by the gold export point. The 15 percent differential was solely the result of the suspension of the Bank's historically required payment in specie, and measured the amount by which the value of bullion exceeded the limits established by free convertibility.

Parliament, by restricting the Bank from paying in specie, have enabled the conductors of that concern to increase or decrease at pleasure the quantity and amount of their notes; and the previously existing checks against an over-issue having been thereby removed, those conductors have acquired the power of increasing or decreasing the value of the paper currency.

(Works, Vol. III, p. 75)

To buttress his analysis, Ricardo cited Thornton's work, where it had been demonstrated that before the suspension in 1797 the Bank Directors themselves reduced the quantity of notes in circulation whenever the exchange rate was unfavorable to Britain, "for the safety of their establishment" (Thornton 1802, p. 208). Ricardo quoted Thornton to the effect that the Bank Directors:

By diminishing their paper, they raise its value; and in raising its value, they raise also the value in England of the current coin which is exchanged for it. Thus the value of our gold coin conforms itself to the value of the current paper, and the current paper is rendered by the Bank-directors, of that value which it is necessary that it should bear in order to prevent large exportations;—a value sometimes rising a little above, and sometimes falling a little below, the price which our coin bears abroad.

(Works, Vol. III, p. 76)

What was necessary in 1810 was that the Bank be required to reduce the quantity of its notes, if not for the safety of the establishment, then for the safety of Britain.

In response to Ricardo's initial recommendation that the Bank withdraw two to three millions of their notes from circulation, Cobbett referred to a philosopher in the *Chronicle* who would

have the Bank make such regulations as would *enhance the value of money*; . . . make us pay more to the fund-holders than we now pay when every reflecting man wishes that we had to pay them less instead of more.—Besides does this writer imagine, that the *country* bankers would not make money to supply the place of any reduction at the Bank of England?

(Cobbett 1809, pp. 377-378; italics in original)

As almost a postscript to his first reply to Trower, Ricardo answered Cobbett's query:

By withdrawing a certain quantity of Bank of England notes from circulation it is supposed, by Mr. Cobbett, that their place would be immediately supplied by country bank notes. No such effect would, in my opinion, take place; on the contrary, I think such a measure could oblige the country-banks to call in at least as many, if not considerably more, of *their* notes.

A Bank of England note and a country bank note are now of equal value, and their quantities are proportioned to the business which they have to perform. By withdrawing Bank of England notes from circulation you increase their value and lower the prices of commodities in those places where they are current. A Bank of England note will then be more valuable than a country bank-note, because it will be wanted to purchase in the cheaper market; and as the country bank is obliged to give Bank of England notes in exchange for their own, they would be called upon for them till the quantity of country paper should be reduced to the same proportion which it before bore to the London paper, producing a corresponding fall of the prices of all commodities for which it was exchangeable.

(*Works*, Vol. III, pp. 26-27; italics in original)

In the *Bullion* pamphlet Ricardo set forth the same theory, only there he assumed that for every three million in Bank notes either added to or withdrawn from circulation there would be a fourfold change in the notes of the country banks. If the Bank increased its notes by three million, the country banks would increase theirs by twelve million. Again he assumed that while there was imperfect

substitutability between Bank of England and country bank notes, there was perfect (and instantaneous) transferability of commodities.

If in London, where Bank of England notes only are current, one million be added to the amount in circulation, the currency will become cheaper there than elsewhere, or goods will become dearer. Goods will, therefore, be sent from the country to the London market, to be sold at the high prices, or which is much more probable, the country banks will take advantage of the relative deficiency in the country currency, and increase the amount of their notes in the same proportion as the Bank of England had done; prices would then be generally, and not partially affected.

(*Works*, Vol. III, p. 87)

He concluded by repeating his assertion that the country banks could never increase the amount of their notes unless there was first an increase in notes issued by the Bank of England.

Sir Philip Francis (1740-1818) in his *Reflections* (Francis 1810), requested that David Ricardo explain, "without resorting to metaphysics," why

he believes, that any increase in the issue of Bank paper *enables the country banks to add more than four times that amount of their own*. All this, he would be able to explain, if it be true, by a short paragraph in the *Morning Chronicle*.

(Francis 1810, p. 60; italics in original)

Rather than reply in the *Chronicle*, Ricardo wrote to Francis to explain his view. In addition to the theoretical significance of Ricardo's reply, we also observe an interesting stylistic character in the piece in that for the first time Ricardo uses an expression which in time would be his trademark, namely "Let us assume" or "Let us suppose." In any event, "Let us suppose," Ricardo wrote to Sir Philip Francis, the total circulation is twenty million pounds, one fourth in London and three fourths in the countryside. Assume further that there is no increase in the quantity of goods in either sector, but that the Bank increases its notes from 5 to 6 million and the country banks continued with 15 million in their notes. Prices would rise in London, but not in the country. Commodities would move to the high-price sector and there would be a new equilibrium at a higher price level in the two sectors, but no change in the quantity of country bank notes.

In order to prevent prices from falling in the country, because of the flow of goods out of London, the country banks would increase their notes to restore equilibrium and their increase would be four times the increase of the Bank notes.

If the country banks commenced this operation by adding to the amount of their notes, whilst the amount of those of the Bank

of England remained stationary, they could not maintain them in circulation. Their notes would be exchanged for Bank of England notes till they were reduced their former amount. The steps by which this would be effected are these. There would be a rise in the prices of commodities in the country only; which would therefore be sent from London the country to be sold for country bank notes in the dearer market; the country bank notes would be exchanged, as by law they may be, for Bank of England notes as these would be wanted to purchase again in the cheaper market, and this would continue whilst there existed any profitable difference in the prices of commodities in the two markets. By these means the country bank notes would speedily be reduced to their former amount.

(*Works*, Vol. VI, pp. 12-13; David Ricardo to Sir Philip Francis, April 24, 1810)

We find no indication that either Cobbett or Francis responded to the explanation of why Bank notes were the controlling influence over the quantity of country bank issues. Ricardo and Francis became personal friends, so they may have settled the issue in conversation, but no further correspondence passed between them. As for Cobbett, he continued each week to say something on the bullion issue, particularly about the increasing cost of provisions, and the subsequent depreciation of the currency. Several times he referred to "R" as a writer in the *Chronicle*, who had proper views of the bullion issue, and he quoted extensively from Ricardo's first reply to Trower. Since he wrote from sheltered Botley, seldom being in London, he probably did not know that "R" was "a stock jobber of Change Alley." In referring to Ricardo and Trower as "philosophers who write in the *Chronicle*," he was, of course, using the title in a pejorative manner.

Cobbett's weekly *Political Register*, the paper with the largest circulation, is a proper guide to the increasing public concern with inflation and the depreciation of the pound sterling. A £5 note in 1802 would purchase two hundred loaves of bread, it was claimed, while in 1809 it would "fetch but seventy-five." [?] Although Ricardo was an early participant in opening up the debate over bullion prices in 1809, he was not alone in being concerned with the deteriorating situation. In Parliament, Horner and Thornton both had participated in the 1801-1803 debate, and they certainly were aware of the monetary changes that were occurring. It is entirely possible they read Ricardo's article in the *Chronicle*, but unless they made private inquiries with the Editor, Perry, the author's identity would have been unknown. Ricardo knew of the existence of Horner and Thornton, but the reverse was not the case. Ricardo's *Bullion* pamphlet may have stimulated some discussion in political economy circles, but in 1809 he did not move in that world, and Fetter is absolutely correct in asserting that Ricardo had no influence over the appointment of the Bullion Committee or in the writing of the *Bullion Report* (Fetter 1942, p. 655). The various discussions which have linked Ricardo with these events are of

two derivations: overzealous advocates who assumed his later influence extended back in time, and mischievous detractors who questioned his motivation.

A one-month interval elapsed between the publication of Ricardo's *Bullion* pamphlet and Horner's speech in the Commons, calling for the "accounts and returns respecting the present state of the circulating medium and the bullion trade" (Cannan 1925, p. xxi). On 19 February 1810 a Select Committee was appointed with Horner as Chairman, and in his absence it was headed by Thornton or Huskisson. Many of the twenty-two Committee members were prominent in business as well as Parliament; Cannan found that twelve made it into the *Dictionary of National Biography* (Cannan 1925, p. xlii). By coincidence, the twenty-two member Committee held hearings and took evidence on twenty-two different occasions, as the Directors of the Bank of England, loan contractors and leaders in business and finance gave testimony on their views of the situation. In August of 1810 the *Bullion Report* was delivered to the House of Commons. The best authority as to the writing of the *Report* would be the Chairman of the Committee, and in a letter to his friend, Lord Murray (1779-1859), Horner reported:

The Report of the Bullion Committee is not yet out of the printer's hands; so that those who praised you were liberal enough to bestow that praise upon credit. I can let you into the secret, however, that the Report is in truth very clumsily and prolixly drawn, stating nothing but the very old doctrines on the subject it treats of, and stating them in a more imperfect form than they have frequently appeared in before. It is a motley composition by Huskisson, Thornton, and myself; each having written parts, which are tacked together without any care to give them an uniform style, or a very exact connection. One great merit the Report, however, possesses; that it declares, in very plain and pointed terms, both the true doctrine and the existence of a great evil growing out of the neglect of that doctrine. By keeping up the discussion, which I mean to do, and by forcing it again upon the attention of parliament, we shall in time (I trust) effect the restoration of the old and only safe system.

(Horner 1994, p. 643; Horner to J. A. Murray, 26 June 1810)

The "true doctrine" was that under an inconvertible money system there would be some constraint on the issue of bank notes, and the best indications of a redundant issue were the price of bullion and foreign exchange rates. Failure to consider these factors would result in a considerable deviation of the market price of bullion above the mint price of £3 17s 10½d. The fact that the market price of bullion was £4 13s was considered evidence the Bank of England had issued excessive notes. Nevertheless, the *Bullion Report* attributed some of the "evil" to a trade imbalance, caused by the Government's subsidy to its continental military campaigns, and an excess demand for bullion from commercial sources. Horner believed that the separation of the several causes "may stand for a while unsolved"

(Horner 1994, p. 657; Horner to J. A. Murray, 29 November 1810). It is interesting in this regard that even with the sophisticated statistical techniques of the eighth decade of the twentieth century, the separation of the causes of inflation — an excess money supply and external "shocks" to the system (such as the rising costs of food and petroleum) — remains "unsolved."

The difference between the position taken by the *Bullion Report* and that of Ricardo was the latter's denial of "shock" as a cause of the high price of bullion. In reviewing several pamphlets on the bullion issue, Malthus called attention to Ricardo's difference with the *Bullion Report*:

One of the principal faults . . . in almost all the writers that are unfavorable to the Bank restriction, is, that they have not made sufficient concessions to the mercantilist side. We have already adverted to the error (confined, however, principally to Mr. Ricardo, and from which the [R]eport is entirely free) of denying the existence of a balance of trade or of payments, not connected with some original redundancy or deficiency of currency.

(Malthus 1811a, p.361)

For Ricardo, the excess in the market price of bullion was "wholly and solely" caused by the redundancy in bank notes, the position taken in both his article and the *Bullion* pamphlet. The evening that Horner first raised the question of the price of bullion in the House, he noted his disagreement with those who attributed the elevation of the price of bullion exclusively to the superabundance of the paper circulation. By that date (1 February 1810) both Ricardo and Robert Mushet¹⁹ (1782-1828) (Mushet 1810) had published their respective pamphlets, and as they both took the position to which Horner took exception, he must have had them in mind.

Four days after Horner's speech, Ricardo wrote that he begged to differ and to further trouble him with "my reasons" why the excess of the market above the mint price was attributable "wholly, and solely, to the superabundance of the paper circulation" (*Works*, Vol. VI, p. 1; David Ricardo to Francis Horner, 5 February 1810). Significantly, the letter constituted Ricardo's first correspondence on political economy. He claimed that three causes could produce a market price of gold in excess of the mint price: (1) debasement of the coin used as the principal measure of value; (2) the relative value of gold to silver in the market being in excess of the relative value in coin; and (3) a superabundance of paper circulation.²⁰ So far as the first reason was concerned, he saw no question, as the Bank of

¹⁹ Evidence that Mushet's pamphlet was published in January is supported by a letter from Ricardo to Horner, 6 February 1810, in which the author refers to the statistical tables in the Mushet pamphlet. (*Works*, Vol. VI, p. 8.)

²⁰ "I might add here a fourth cause. The severity of the law against the exportation of gold coins, but from experience we know that this law is so easily evaded, that it is considered by all writers on political economy, as operating in a very small degree on the price of gold bullion." (*Works*, Vol. VI, p. 2)

England would never accept a guinea which did not weigh 5 pennyweights 8 grains, the official weight. Since the third cause was what he believed to be solely responsible for the depreciation of the currency, all he had to do was convince Horner it was of *minimal* importance that the relative ratio of silver to gold in the market was higher than the relative value of silver and gold coins.

The relation of gold to silver had been the point in dispute in the Trower-Ricardo exchange, and discussed in the *Bullion* pamphlet (see *Works*, Vol. III, p. 67, n.1, for the wording in the first and second editions of *Bullion*). Ricardo tried once again to explain his view, this time to Horner. In his speech in the Commons, Horner had observed that the market ratio of silver to gold was 15½ to 1, while the value in minted coins was 15-9/124 to 1. Ricardo did not dispute the facts. By law, an ounce of gold could be coined into £3 17s 10½d, and 15-9/124 ounces of silver could also be coined into £3 17s 10½d. In the market, however, 15½ ounces of silver had to be given in exchange for one ounce of gold, and as someone put it, "either the gold had quitted the silver, or the silver had quitted the gold" [?]. For those who chose silver as the measure of value, the price of gold had risen due to demand conditions, caused by an increase in the Government's need for bullion payments, or from an increase in mercantile trade.

What Ricardo argued was that those who chose silver as a measure of value could, "on their own principles," only explain a rise in the price of gold to £4 an ounce (*Works*, Vol. VI, p. 6). If an ounce of gold was equal to 15½ ounces of silver, the silver would coin into 80 shillings, or £4; a £4 price of gold was between 2 and 3 percent in excess of the mint price of £3 17s 10½d. (Actually it was 2.7 percent, as 2.125s/77.875s equals 2.7 percent.) Any gold price above £4 "must be called a depreciation in the value of Bank notes." Since the actual price of gold was 90 shillings an ounce, or £4 10s, that was better than 15 percent above the mint price of £3 17s 10½d. (It was 15.6 percent, as 12.125s/77.875s equals 15.6 percent.) Although Ricardo did not do the calculation, the silver measure of value could only explain 2.7 percent of the 15.6 percent by which the market price of gold exceeded the mint price and, good theorist that he was, Ricardo never worried about 2 or 3 percentage points.

Moreover, Ricardo claimed silver could not be the measure of value because of the law that prohibited the coinage of silver coins, "while that of gold is freely permitted," and "therefore neither gold bullion, silver bullion, nor any commodity is rated in the silver but in the gold coin" (*Works*, Vol. VI, p. 3). If bank notes were representative of gold coin, then the 90 shilling price of gold proved that "they are depreciated 15 percent."

The *Bullion Report* did not go as far as Ricardo in attributing the high price of bullion and the adverse exchange rate to the unrestricted issue of the Bank of England. But the *Report* leaned far enough in his direction, and called for the end of the suspension of specie payment within two years after the end of the war.

Publication of the *Report* induced a flood of pamphlets attacking the Committee's views, with anti-bullionists taking the position that the high price of bullion was caused by an adverse balance of payments brought on by the Government's need to export bullion for military needs and to purchase foreign corn

to compensate for poor domestic harvests. Pamphlets by Atkinson (1810), Cock (1810), Eliot (1810) and Grenfell (1810) were representative of such a position, while the bullionists were supported by Huskisson (1810) and, of course, Francis, Ricardo and Mushet. The Pryme Collection at Cambridge University contains scores of the pamphlets written on both sides of the issue, with much rhetoric and heat of exposition.²¹

As previously indicated, Ricardo was asked to analyze the *Report* for the *Edinburgh Review*, but while he refused that particular assignment, he did write a short review for the *Morning Chronicle* (*Works*, Vol. III, pp. 131-139; published 6 September 1810). He was as critical of the Bank as he was supportive of the findings and conclusions of the *Report*:

The Bullion Committee has most ably illustrated the principles upon which a paper currency should be regulated; and I trust the day is not far distant when we shall look back with astonishment at the delusion to which we have so long been subject, in allowing a company of merchants, notoriously ignorant of the most obvious principles of political economy, to regulate at their will, the value of the property of a great portion of the community; in a country, too, justly famed for the protection which it affords to the produce of the industry of the meanest of its inhabitants.

(*Works*, Vol. III, p. 133)

Ricardo quickly followed his initial review of the *Report* by defending it against attacks by Sinclair (1810) (*Morning Chronicle*, 18 September 1810) and Jackson (1810) (*Morning Chronicle*, 24 September 1810). But his most extensive defense of the *Report* was his *Reply to Mr. Bosanquet's Practical Observations on the Report of the Bullion Committee*, published in January, 1811. Charles Bosanquet (1769-1850) was a merchant and an officer of the South Sea Company. His attack was considered the most striking refutation of the Committee's findings, as Horner himself admitted.

I had dismissed the subject from my mind as soon as the Report was presented, but am now deep in it again. The discussion, which is in great activity in London, will do much good; and enable us to set a good many questions at rest . . . Bosanquet's very unfair but dexterous pamphlet has given me a good deal of exercise in this way: He leaves the main argument quite untouched, when his ignorant or unfaithful misrepresentations of the facts are explained.

(Horner 1994, p. 657; Horner to J. A. Murray,
29 November 1810)

²¹ The origin and character of the Pryme Collection is described in Fetter 1939. Unfortunately no catalogue has ever been prepared listing the contents of the Pryme Collection, giving it limited availability.

Ricardo agreed with Horner's evaluation that Bosanquet's attack was "formidable." It contained six objections to the position of the *Bullion Report*, which in summary denied them in "practical terms," grounded upon error of fact. Of particular significance was Bosanquet's attack upon Ricardo, whom he held responsible for the *Report*, writing of

Mr. Ricardo's work, not only as having been the immediate cause of the inquiry which has since taken place, under the authority of the house of commons, but as a syllabus of the *Report* which has been presented by the Committee.

(*Works*, Vol. III, p. 10)

Thus commenced the myth that Ricardo was responsible for both the appointment of the Bullion Committee and his own *Bullion* pamphlet considered as a draft of its *Report*. In his *Reply to Bosanquet*, Ricardo contributed somewhat to the confusion. The six principles which Bosanquet had attacked, were, Ricardo said, "in all essential points the same as those which I have avowed," but to avoid confusion he would "consider them as the principles of the Bullion Committee only" (*Works*, Vol. III, p. 162). He would, however, on occasion mention the "shade of difference" that existed between his own views and those of the Committee. (*Works*, Vol III, p. 162) With this introductory statement, Ricardo then took up each of the six principles which Bosanquet claimed were in error, and the *Reply* was as much a reiteration of his own views as those of the Committee. In the Sraffa edition of Ricardo's *Works*, the *Reply to Bosanquet* runs a hundred pages, divided into nine chapters, several of which contain sections. At Mill's suggestion — the first evidence of his editorial advice (*Works*, Vol. VI, p. 14; James Mill to David Ricardo, 25 December 1810) — a detailed Table of Contents was included.

In the first of his two articles, where he reviewed several bullion pamphlets (Malthus 1811a and 1811b²²), Malthus commented that with the "able reply" of Ricardo

we are persuaded, that an impartial and attentive inquirer after truth will see, that the facts of Mr. Bosanquet, as far as they are stated correctly, may be easily explained, in perfect accordance with the main doctrines of the Report.

(Malthus 1811a, p. 359)

For the remainder of the 1809-1811 period, the only item that Ricardo published after the *Reply* was his Appendix to the fourth edition of the *Bullion* pamphlet. This, of course, was his answer to the criticisms raised by Malthus, where he repeatedly objected to the fact that Ricardo "perseveres in the confined view . . . of the causes that operate upon exchange, and in considering redundancy

²² Pamphlets reviewed in Malthus 1811a): Mushet, Ricardo, Huskisson, Bosanquet, Ricardo's *Reply* and Blake 1810. Pamphlets reviewed in Malthus 1811b): Huskisson, Giddy, Tavers, and two anonymous.

or deficiency of currency as the mainspring of all commercial movements." (Malthus 1811a, p. 359)

Like Horner, Malthus believed there was more than one cause of the export of specie, and all of it could not be explained by the operation of the domestic banking system. As a good quantity theorist, Ricardo always assumed that an adverse balance of payments would be temporary, since the price mechanism would quickly restore equilibrium, given a proper monetary system. If Britain had an adverse balance of payments, the export of bullion would reduce the price of British goods *vis-à-vis* other countries, where prices would be rising from the inflow of bullion. With the fall in the British price level, the export of commodities would soon replace the export of bullion. Gold was no different than any other commodity, and would only be exported if cheaper than goods, as the export of bullion in exchange for goods "never arises except from a redundant currency."

If we consent to give coin in exchange for goods, it must be from choice, not necessity. We should not import more goods than we export, unless we had a redundancy of currency, which it therefore suits us to make a part of our exports. . . . we should not export it, if we did not send it to a better market, or if we had any other commodity which we could export more profitably.

(Works, Vol. III, p. 61)

The export of coin was the effect, not the cause, of an unfavorable balance of payments. The real cause was a redundant currency. Malthus's criticism of such a formulation was that the demand for British goods in foreign markets might be restricted, as Ricardo "overlooks the varying desires and wants of different societies" (Malthus 1811a, p. 343). As a firm believer in Mill's principle, that there was never the absence of a vent for all commodities, Ricardo claimed the only reason equilibrium would not be restored was that bullion continued to be the cheapest commodity to export. It was redundant, of course, because of the excessive issue of Bank notes, and domestic prices could not fall when bullion was exported under such conditions. In his reply to the reviewer in the *Edinburgh Review*, Ricardo wrote:

It is particularly worthy of observation that so deep-rooted is the prejudice which considers coin and bullion as things essentially differing in all their operations from other commodities, that writers greatly enlightened upon the general truth of political economy seldom fail, after having requested their readers to consider money and bullion merely as commodities subject to "the same general principle of supply and demand which are unquestionably the foundation on which the whole superstructure of political economy is built;" to forget this recommendation themselves, and to argue upon the subject of money, and the laws which regulate its export and import, as quite

distinct and different from those which regulate the export and import of other commodities. Thus the Reviewers, if they had been speaking of coffee or of sugar, would have denied the possibility of those articles being exported from England to the continent, unless they were dearer there than here. It would have been in vain to have urged to them, that our harvest had been bad, and that we were in want of corn; they would confidently and undeniably have proved that to whatever degree the scarcity of corn might have existed, it would not have been possible for England to send, or for France (for example) to be willing to receive, coffee or sugar in return for corn, whilst coffee or sugar cost more money in England than in France.

(*Works*, Vol. III, pp. 103-104; the quote is from Malthus 1811a, p. 341)

Besides answering the criticisms of the Reviewer, Ricardo also set out his scheme for the resumption of specie convertibility, despite the opposition of the anti-bullionists.

It is often objected to the recommendation of the Bullion Committee, namely that the Bank should be required to pay their notes in specie in two years, that, if adopted, the Bank would be exposed to considerable difficulty in providing themselves with the requisite amount of bullion for such purpose; and it cannot be denied, that before the Restriction Bill can be repealed, the Bank would be in prudence bound to make ample provision for every demand which might by possibility be made on them.

(*Works*, Vol. III, p. 123)

Recognizing this inability of the Bank to accumulate sufficient bullion to meet the domestic demand for payment in specie, Ricardo proposed the Bank "be required by Parliament to pay (if demanded) all notes above £20—and no other, at their option, either in specie, in gold standard bars, or in foreign coin (allowance being made for the difference in purity) at the English mint value of gold bullion viz 3l. 17s 10½d per oz." (*Works*, Vol. III, p. 124).

Ricardo's Ingot plan, with a paper currency for amounts under £20 was designed to fit the needs of an expanding industrial society. He believed the plan was necessary "to enable a country, by means of paper currency (always retaining its standard value), to carry on its circulation with the least possible quantity of coin or bullion" (*Works*, Vol. III, pp. 126-127).

Having entered anonymously into the discussion of the bullion problem that confronted Britain during the Napoleonic Wars, within the short span of two years Ricardo had become one of the leading monetary theorists of the country. He had taken an extreme monetarist position, namely, the domestic inflation and the export of gold bullion were both caused "wholly and solely" by the unrestricted issue of

notes by the Bank of England. Until there was a return to at least a partial redemption of payment in specie, the problems would continue. Not only had Ricardo taken an extreme position, he had attacked the intelligence and integrity of one of the most sacred institutions, the Bank of England: that "company of merchants, notoriously ignorant of the most obvious principles of political economy."["?"] He had also, of course, attacked the King and his cabinet, for they had been responsible for the initial suspension of the payments in specie.

So quickly had Ricardo eclipsed all other monetary theorists that his fame confused the actual sequence of events. When McCulloch edited his *Works* of Ricardo, the principles of the *Bullion* pamphlet and the *Bullion Report* were "substantially the same" (McCulloch 1853, p. 473). William Smart, in his report on the writings of the period 1809-1811, came to the same conclusion (Smart 1910, Vol. I, pp. 236-237). If either writer had read Malthus's review of Ricardo's *Bullion* pamphlet, perhaps "substantial" would have been replaced by "in the same direction." By Marshall's time, it was Ricardo "who wrote the *Bullion* report" (Marshall 1923, pp. 41-42), and Horner is not mentioned. That Ricardo became the leading defender of the *Bullion Report* there can be no question, but as for his initiating the formation of the Committee, or the writing of the *Report*, such assertions are founded in error. They represent a disservice to the thought and influence of Horner, Thornton and Huskisson, all of whom had contributed to the bullion controversy long before any word from Ricardo. He would have been the first to admit his initial indebtedness to their works.

As a critic, Bosanquet linked Ricardo to the formation of the Bullion Committee, either from confusion or in an attempt to show a connection between the *Report* and the Stock Exchange. In an often cited article, Silberling also claimed that

Ricardo was not content to let the matter rest with the publication of a pamphlet, and, working through his friend Francis Horner, who now sat in the House of Commons, he began at once to agitate his program in Parliament. Horner managed to have a Committee appointed to canvass the subject of the high price of specie, the state of the exchanges, and other alleged signs of impending ruin, and "to report the same with their observations thereupon, from time to time, to the House."

(Silberling 1924, pp. 429-430)

In Silberling's view, London's financial world was highly polarized, the bankers as Loan Contractors on one end, the Stock Exchange Jobbers on the other. The bankers were naturally bullish, the stock jobbers bearish, with Ricardo their leader. The appointment of the Bullion Committee was instigated as a bearish tactic to discredit and ruin the bankers and was successful as the price of Consols dropped sharply in September 1810. Silberling concluded the decline led to "one of the most desperate commercial revulsions and financial panics ever known in England." (Silberling 1924, p. 437)

On 16 May 1810, a new Loan of £12 million had been awarded to two banking houses, Baring-Battye and Company, and the Goldsmid Brothers, Abraham and

Benjamin; one of the unsuccessful bidders was the Exchange list headed by Barnes-Steers-Ricardo. The 1810 Loan went off at a premium of $1\frac{1}{4}$ to 2 percent; by July, Consols were selling at a high of $69\text{-}\frac{3}{4}$, but by late September they were at a 10 percent discount, and Abraham Goldsmid committed suicide. The panic was precipitated, according to Silberling, by the *Bullion Report*:

The recommendations were negated by a decisive majority in the House when the Report was debated in 1811; but not until the supporters of the Government had unfortunately been led into very extravagant nonsense in their somewhat flustered efforts to meet a subtle indictment of the nation's credit and at the same time avoid divulging too much valuable information to the enemy. The most important immediate effect of the Report, at any rate, was to create a general fear of abrupt and arbitrary deflation.

(Silberling 1924, p. 437)

There are a number of problems with the Silberling analysis. In the first place, the crisis of 1810 was largely attributable to the success of Napoleon's continental blockade and a reaction to the widespread speculation of 1809 in South America, and not to the bearish successes of stock jobbers.

Until July 1809, while Napoleon was engaged in the Austrian campaign, the Baltic trade had been active, as indicated by a figure of £6 million for exports to Germany in that year. Import prices began to fall in 1809, as the northern channels opened . . .

This flow of imports was not only in articles for consumption within Britain but also in colonial products . . . designed for re-export to the Continent. But the situation there changed quite suddenly. Napoleon, from the summer of 1809 and more especially in the summer of 1810, tightened his blockade . . . the flow of colonial commodities to Britain, however, continued on an even larger scale in 1810 than in 1809 . . . Stocks piled up in the warehouses of British merchants . . .

Prices fell sharply, bankruptcies increased, and in the manufacturing districts unemployment appeared on a large scale. . . . The movement of the prices of India Stock, Bank Stock, and Consols . . . reflects a sharp speculative advance [from mid-1808], losing momentum by early 1810, giving way to decline until late 1811.

(Gayer et al 1953, pp. 92-93, 95-97)

The number of bankruptcies was particularly indicative of the change in economic conditions between 1809 and 1811, rising from 68 in July 1809 to a high of 239 in January 1811 (Gayer et al 1953, Table, p. 94).

There is probably no question that Ricardo was on the bear side in 1810, but that does not lend support to the assertion he instigated the Bullion Committee to endorse his bearish actions. The idea suggests the great man theory of history, and attributes to Ricardo powers which he did not possess. From the evidence it appears he did not even know Horner in February 1810, as suggested by the appropriately formal letter to him at the time the Committee was being formed. In addition, by 1810 Ricardo had been a successful Loan Contractor on one occasion (1807) and was a bidder for the 1810 Loan. If he and his fellow Stock Exchange members had been awarded the Loan, they would have suffered from the fall in the price of the stock, so that the assumed polarization of bankers and jobbers does not fit the facts. Beginning in 1811, Ricardo was the successful bidder for the Loans, and if anything, he was on the bull side.

Finally, Silberling erred in claiming the *Bullion Report* called for an immediate return to cash payments. Prior to the *Report* the legislation called for a return to cash payments within six months of the end of the war. The time period was extended to two years, as a result of the Committee's recommendations. As a consequence, the inflationary phase of the bullion controversy subsided, because nothing substantial could be done about the return to a specie payment until the war was brought to an end.

Chapter VII

MALTHUS AND THE CORN LAW: RICARDO AND HIS CIRCLE

In April of 1812, David Ricardo was forty. He was passing through the Mid-Life Transition into middle adulthood, a stage of life when there is a polarity between generativity and stagnation (Erikson 1963, pp. 266-268; Erikson 1968, pp. 138-139). It is a period when a man begins to come to terms with the actualities of his approaching death, and draws upon his own internal resources to generate whatever productivity his capabilities may permit. If he is successful in making the transition, a man may well experience his greatest achievements in his forties. In middle adulthood a man also demonstrates the degree of acceptance of the responsibilities for his own adolescent children and for society in general. The stronger the pull in the direction of the pole of generativity, the greater the individual's demonstration of his "caring" about the individuals and social institutions of the culture and society which surround him.

Levinson traces the historical roots of the notion that at forty a man acquires the status of maturity. The Talmud designates the forties as the period of a man's "understanding," an appreciation of the meaning of his own life. Confucius said "At 40, I no longer suffered from perplexities," while Solon, the Greek poet, claimed that in the early forties, "the tongue and the mind . . . are now at their best."

All agree, then, that the years from about 40 to 60 permit the greatest actualization of one's capabilities and virtues and the greatest contribution to society, despite some decline in youthful strength and energy.

(Levinson 1978, p. 324)

Though life is said "to begin at forty", there is no institutionalization of the Mid-Life Transition, the period of one or two years on either side of two score years. At puberty, when there is the transition to adolescence, a Bar Mitzvah or a Confirmation serves as the rite of passage, just as marriage symbolizes the beginning of early adulthood. At the other end of the life cycle, the transition to late adulthood is marked by retirement from the active work force, and the closing of man's most productive years. Although there is no particular event which marks the transition into the forties, the study of biography is rich with examples of men who have changed the directions of their lives at this crucial time. It is in biography, therefore, that the Mid-Life Transition emerges as a tool for analyzing the structure of a man's life.

There are three perspectives from which the Mid-Life Transition may be viewed: (1) the biological and psychological changes in the physical man, (2) an altering of the intergenerational behavior pattern, and (3) the change in career aspirations, marked most dramatically by the termination of an existing life structure and the initiation of a new one (Levinson 1978, pp. 23-33, 191-259). There is an overlapping of the three perspectives, and an interconnection, such as the change in the parental role may permit a man to break out in new directions, or a change in health may necessitate a new career.

After forty there is some reduction in a man's physical abilities, but not to any significant degree. At this stage in life he loses some of the vitality of his youth, and there are usually some signals that one should alter the pace of life. By the time David was forty-seven he had lost all the hearing in one ear, and most of his teeth, deteriorations which were gradual, since there is no indication of an injury or illness which would be responsible for the loss of hearing. The early loss of hearing was particularly significant, because it was from an abscess in the middle ear that Ricardo died in 1823. Undoubtedly an early infection in the ear had led to a drainage to the middle ear and when the pus hardened there was a permanent loss of hearing. As the drainage continued to accumulate in the eustachian tube it finally burst and eroded the brain and was fatal. In the absence of surgery, fluid in the eustachian tube is fatal. The tooth decay was characteristic of the period, and David was not the only man in his forties who suffered from that particular infirmity. The extent to which these health conditions contributed to his decision to leave the Stock Exchange is open to speculation. The day-to-day activities of the Exchange were strenuous. When Trower learned that Ricardo was retiring he wrote:

Even *you* must, by this time, be parched and panting for the Country; and impatient to turn your back upon the modern Babylon.—I am rejoiced to find, that you have wisely determined no longer to subject yourself to the anxieties and vexations of business. Rest assured, that you will daily find occasion to applaud the wisdom of your resolve; and that you will become more enamoured of the vegetable part of the creation the better you are acquainted with it.

(*Works*, Vol. VI, p. 237; Trower to Ricardo, 23 July 1815; italics in original)

Intergenerational changes occur because of the rise and fall of successive generations, as the process alters the relation which a man has with those younger and older than himself. As he moves through the life cycle he also moves from the status of younger to older generation. One's cohorts are those six or seven years older or younger, with a gap of some fifteen years separating the several generations. When a man reaches forty his children usually are a full generation apart, as is his parent's generation. At forty he is now a member of the generation dominating the establishment, and becomes more involved with his peers as he begins to concentrate upon his own personal desires and aspirations. The relation with his children changes in that he can no longer treat them with benign control, as they are young adults and must be accepted as having their own aspirations. As David pointed out to his father-in-law, Wilkinson, a father should not look upon adult children as if he were an "eastern monarch ruling over abject slaves." (*Works*, Vol. X p. 120; Ricardo to Wilkinson, 12 Sept. 1803) In middle adulthood a father must find new ways of exercising parental influence, offering leadership and caring, and treating them seriously as young adults. They are of another generation, not just an extension of his own ego.

The year David was forty was when the family moved to Grosvenor Square in the West End. The move reflected a caring for the welfare of the children. The two oldest daughters, Henrietta at sixteen and Priscilla fifteen, were being tutored by teachers who lived in Westminster, and their mother insisted they be close at hand. The trip from New Grove to Westminster would have required several hours and Upper Brook Street was much more convenient and safe. Also in 1812, the oldest son, Osman, became a pensioner of Trinity College, Cambridge.

The Ricardo daughters were tutored privately, while the three sons each attended Charterhouse and Trinity. Dating to 1611, Charterhouse was the most eminent public school in London, located just north of the City, outside Aldersgate. The school originally was limited to forty boys, but by 1805, when Osman entered, the enrollment was several hundred. After finishing at Charterhouse, Osman went up to Cambridge in September 1812. The next month, while the rest of the family was vacationing on the coast at Ramsgate, David spent a weekend at Cambridge visiting his son. The purpose was the same as for any father who visits his son at college, to inquire as to the surroundings, and to be assured that the learning is satisfactory. In a long letter to Priscilla, written over the course of two days, David reported the details of their son's life and the favorable reports received from his tutors. For the first time in his life Osman was living on his own, and it was a new role for the father, where he had to show approval and caring. David described the problem to Priscilla:

He appeared as comfortably settled as if he had been here for months, and in displaying his cups and saucers his plates, his tea board, toasting for &c. &c. expected more compliments to his taste, than I generally am disposed to bestow. If he would have been satisfied with one effort, I would have willingly made it,—but at one time he asked me how I like his plates,—half an hour

after he observed that I had not admired this,—then I had not noticed that, so once for all I told him every thing was superb.

(*Works*, Vol. X, p. 137; David Ricardo to Priscilla Ricardo, 24 October 1812)

David was particularly close to his adult children, and as the years passed those who married lived in close proximity to Gatcomb Park. As the father told Mill, "we all continue to love each other and to enjoy each other's company" (*Works*, Vol. IX, p. 44; David Ricardo to James Mill, 28 August 1821). David did not approve of his daughter Fanny's choice of a husband, because the man associated with wastrels, but in the end he and Priscilla relented. It is extremely interesting, in view of his own problems with his parents over marriage, that when Fanny married against his wishes David withheld a marriage gift of £2000:

it is not my intention to place her upon the same footing with her sisters. She has displeased me and I shall therefore limit the portion to the ten thousand Pounds which will be settled on her.

(*Works*, Vol. X, p. 163; David Ricardo to Edward Austin Senior, 5 December 1818)¹

Something of the relation which David had with the younger generation was attested to by John Stuart Mill:

My being an habitual inmate of my father's study made me acquainted with the dearest of his friends, David Ricardo, who by his benevolent countenance, and kindness of manner, was very attractive to young persons, and who after I became a student of political economy, invited me to his house and to walk with him in order to converse on the subject.

(John Stuart Mill 1873, p. 54)

At the time young Mill was fifteen, but much advanced in his thinking and education, each in turn the product of his father's authoritarian tactics. Ricardo did not entirely approve of Mill's sternness, and told him that John needed the company of strangers,

for from the very retired and private manner in which he has been educated he stands in need of that collision which is obtained only in society, and by which a knowledge of the world and its manners is best acquired. With such knowledge John will probably become a shining character, and will convince the world that he has not degenerated from his sire.—

(*Works*, Vol. VII, p. 326; David Ricardo to James Mill, 8 November 1818)

David gave his own sons the best of educations, as Trinity was one of the first of the colleges to emerge from the doldrums in which Oxbridge had fallen during

¹ Austin was the father of Edward Austin, who married Fanny Ricardo. Ricardo's will was dated 13 days prior to his daughter Fanny's death, and in the will she was treated the same as her married sisters.

the last half of the eighteenth century. He brought up his sons to live as country gentlemen, and his daughters were tutored to be cultivated women. Only one or two of the Ricardo children appeared at all interested in intellectual pursuits, and perhaps it was for this reason that David was so fond of and encouraging to young John Stuart Mill. As Mill said, Ricardo was "attractive to young persons," and had no difficulty in bridging the generational gap that separated them.

It was also in 1812, when David was forty, that Abraham Ricardo died, thus severing his final link with the older generation. Priscilla's father, the "Old Doctor," had died in 1809, preceded some years by his wife; David's mother had, of course, died in 1801. David was the oldest Ricardo to have children, as was the case with Priscilla and the Wilkinsons. By 1812 they had become the older generation in both families, and David's fortieth year was symbolic of the change in his generational status.

The capacity to experience, endure and fight against stagnation is an intrinsic aspect of the struggle toward generativity in middle adulthood. Stagnation is not purely negative nor to be totally avoided. It plays a necessary and continuing part in mid-life development. The recognition of vulnerability in myself becomes a source of wisdom empathy and compassion for others.

(Levinson 1978, p. 30)

After his marriage David had continued as a stockjobber, because it was the only way of life he knew, and numerous restrictions stood in the way of a Jew, or former Jew, pursuing other walks of life. Despite the fact he was immensely successful as a speculator, it is clear he was not particularly in sync with the world of the Stock Exchange. He was far from being the typical stockjobber, nor did the role of Loan Contractor offer much of a respite from the activities of the bourse. He viewed his financial success as a means of escape from the business world, and the opportunity for retirement, since he obviously found his life lacking in the intellectual stimulus which he had sought in his youth.

At forty David had reached a turning point in his life. His immediate success as a monetary theorist during the bullion controversy of 1809-1811 meant he now had the opportunity to achieve in a new way and move in different circles from those in which he had been reared. In the world of ideas there were no prejudicial barriers to entry, and by 1812 he had demonstrated the possession of the one crucial ingredient necessary for success in the intellectual world, the ability to reason and theorize. The bullion controversy had provided the opportunity to achieve in a new way, one which had been smoldering ever since he discovered Adam Smith in 1799.

He is reappraising his life. He makes an effort to reconsider the direction he has taken, the fate a man at around 40 is simply reacting to an external situation. of his youthful dreams, the possibilities for a better (or worse) life in the future. He interprets the culminating event and others within this context.

(Levinson 1978, p. 32)

The move to the West End in 1812 was not just motivated by the needs of his family, and it was surely that, but symbolically it represented a shift in David's own interests from those of the City to the concerns of state in Westminster; from a concern with business to those of public affairs. He had already demonstrated his awareness of the social issues of the times, and had entered upon a new life. It was the time of the awakening of his inner resources and the pursuit of a new career as a practitioner in his "favorite science." Even though in 1812 he could not walk away from the world of business, due to his intense involvement with loan contracting, his mind and heart were now in a new arena. Soon after he had purchased Gatcomb Park he wrote:

I believe that in this sweet place I shall not sigh after the Stock Exch^g and its enjoyments.

(*Works*, Vol. VI, p. 115; David Ricardo to Thomas Robert Malthus, 25 July 1814)

When the wars with Napoleon finally came to an end, he left "modern Babylon" for the world of ideas. Meanwhile, after 1810 it was intellectual pursuits which dominated his life, and it was then that he met the two men who would have the greatest influence upon his career as a political economist: James Mill and Robert Malthus.

James Mill and Robert Malthus

Ricardo did not publish any articles or pamphlets between April 1811, the fourth edition of *The High Price of Bullion* and February 1815, with the appearance of his *Essay on Profits*.² In the interval he was much involved with his business as a Loan Contractor, and early on read several books and manuscripts in the area of money. At Mill's request he read large portions of Étienne Dumont's (1759-1829) French translation of Jeremy Bentham's "Sur les Prix," providing detailed comments and criticisms (*Works*, Vol. III, pp. 267-341).

It was also during this period that Ricardo and Malthus commenced their long and extensive correspondence; over three-fourth's of Ricardo's correspondence between 1811 and 1815 was with Malthus. Besides Malthus, Ricardo's other most frequent correspondent was Mill, but since they both lived in London there was much less need for letters. Moreover, Ricardo had a much different type of relation with Mill than he did with Malthus. Mill became, in a sense, a career manager, while Malthus was the disputant in economic theory.

James Mill (1773-1836) was born at Logie Pert, in the Scottish lowlands, some forty miles south of Aberdeen. His father was a shoemaker, his mother the daughter of a fairly substantial farmer. It was the mother, Isabel Fenton, who changed the

² *An Essay on the Influence of a Low Price of Corn on the Profits of Stock; Shewing the Expediency of Restrictions on Importation: With Remarks on Mr. Malthus' Two Last Publications.* In *Works*, Vol. IV, pp. 9-41.

family name from Milne to Mill, and also determined that her eldest son would be educated, and called Mr. Mill. The inhabitants of Logie Pert thought Milne's wife was uppity:

What right has she to suppose that her son will be called *Mr.* Mill and his wife *Mrs.* Mill.

(Bain 1882, p. 5 n; italics in original)

To carry out the plans for educating her son to be a gentleman, Isabel Mill exempted him from all family chores, duties his brother and sister assumed. James was to spend his time in study and, after completing the education offered by the local parish schools, was enrolled in Montrose Academy, one of the better burgh schools of Scotland. He was at Montrose for about five years, drilled in Greek, Latin and the classics, with Joseph Hume one of his classmates. As an outstanding student, Mill came under the patronage of Jane Stuart, wife of a local nobleman, Sir John Stuart. Through her intervention, Mill enrolled at the University of Edinburgh, where he studied for the priesthood. In October 1798, he was licensed to preach the Gospel, but not ordained (Bain 1882, p. 22).

While Mill was reared in a religious household, and his parents devoted, probably it was more because of Jane Stuart that Mill was ordained, since one of the conditions of her patronage was that he would pursue religious training. After graduating from Edinburgh, Mill tried his hand at preaching and tutoring, and for some years was the tutor of a Stuart daughter, Wilhelmina. Apparently he moved between Edinburgh and Aberdeen, trying to find a place for himself, and finally in February 1802 he went to London, accompanying Sir John Stuart, who was taking his seat in the new session of Parliament.³

At the University of Edinburgh Mill attended the lectures of Dugald Stewart, but although he was part of the environment of the beginnings of moral philosophy, he did not participate or interact with the members of the radical circle. As his biographer noted:

I am struck with the absence of Mill's name from the Speculative Society, the oldest and greatest of all the Edinburgh Debating

³ John Belsches (1753-1821) was the only child of Emilia Stuart and William Belsches. The father died in 1755, and Belsches was reared by his mother, studied for the Edinburgh Bar but did not practice law. In 1777 Emilia Stuart Belsches inherited the very large Stuart family fortune, upon the death of her uncle Sir William Stuart. The baronetcy of William Stuart dated back to 1706, during the reign of William and Mary. Although Emilia Stuart Belsches inherited a large fortune there was no land, and in 1777 she purchased the estate of Fettercairn from the family of the Earl of Middleton. In 1797, Emilia Stuart Belsches bequeathed to her son John Belsches the estate of Fettercairn and the title of her grandfather, Sir Daniel Stuart. Hence, John Belsches became Sir John Stuart of Fettercairn, and his wife Lady Jane Leslie Belsches thereafter was Lady Jane Stuart.

Of the lesser nobility, Sir John Stuart could not sit in the House of Lords, but in 1801 he was elected to the House of Commons for the shire of Kincardine. Sir John Stuart took his seat in 1802, and continued to serve until 1807, when the Whigs rewarded him with a post of Baron of the Exchequer, a sinecure with an annual salary of £2,000. Sir John Stuart did not distinguish himself, either in Parliament or the Court of the Exchequer, and did not make it into the Dictionary of National Biography, or any of the biographical volumes of the nineteenth century. He is best known for his namesake, John Stuart Mill.

Societies, and adorned by nearly all the highest names of the time. . . . to have been in Edinburgh and not to belong to it, seemed to argue a man unknown. It is vain to ask why he did not enter the Speculative Society. We can see, however, that the absence of his name from the brilliant company that composed it in those years, has led to his being passed over when the roll of his Edinburgh contemporaries is mustered in history.

(Bain 1882, pp. 33-34)

Mill was twenty-nine when he moved to London, and whatever his inclinations may have been in Scotland, he completely changed the directions of his life in England. He supported himself "by the pen," as he put it, writing for various reviews and journals. In 1805 he became editor of the *St. James's Chronicle*, a somewhat conservative newspaper. Before this assignment he had submitted articles to the *Anti-Jacobin Review* and *The Literary Journal*, publications which hardly were in keeping with the inclinations of one of the founders of philosophical radicalism. But regardless of the views taken by Mill at this point in his career, his major purpose was to support himself by writing, and it did not seem too important to question the subject matter. He was, by now, a man of letters. When he married Harriet Burrow in June 1805, Mill's income from writing was better than £500 a year. His wife brought a dowry of £400, and her mother purchased a house for the newly married couple, for which Mill paid a rent of £50 a year. Harriet Burrow was a woman of great beauty, and Mill

too readily took for granted that she would be an intellectual companion to himself. Without anticipating the view of Mill's domestic interior, as it appeared when he was surrounded by a numerous family, I may say at once that Mrs. Mill was not wanting in any of the domestic virtues of an English mother. She toiled hard for her house and children, and became thoroughly obedient to her lord. As an admired beauty, she seems to have been chagrined at the discovery of her position after marriage. There was disappointment on both sides: the union was never happy.

(Bain 1882, pp. 59-60)

Harriet Mill gave birth to nine children. The first was named for Sir John Stuart, of course, and another for Lady Jane Stuart; Wilhelmina Forbes Mill carried the married name of the Stuart daughter whom Mill had tutored in Edinburgh. One of the Mill children was named Jeremy Bentham, and another George Grote, the latter after a young economist who became one of Mill's disciples. One of the daughters was Harriet, like her mother, while the source of the other three names, Clara, Henry and Mary, is unknown. It is not unusual, of course, for parents to name their offspring after close friends, but in Mill's case the practice seems to have been carried to the excess, a suggestion of "head hunting," the practice of seeking

out the famous. As Mazlish has noted, the practice of associating one's offspring with persons outside the lineage is an attempt to find new origins (Mazlish 1975, pp. 56-57). Sometimes, however, it is difficult to sever the past, and so far as the two Scotsmen, Horner and Jeffrey, were concerned, Mill was still Milne.

Mill was thirty-two when he married, the period of late settling down, when a man's primary task is to advance sufficiently so as to become an important individual in society. The year following his marriage Mill resigned his editorship of the *Chronicle* and the *Journal*, to commence writing his *History of British India*. He was striking out for a new life structure. Originally it was intended that the *History* would take three years, but in fact it was over eleven before he completed the volumes (James Mill 1817). The project on India was undertaken with the obvious intention that upon completion he would be famous, and with fame there would be financial security. The writing of the *History* dominated his life, for even during those periods when he was involved in reviewing and publishing articles on other subjects, necessary to maintain some flow of income, there was always *India* waiting to be continued. There were also the three to four hours a day which he spent with young John, honing him as

he exerted an amount of labour, care, and perseverance rarely, if ever, employed for a similar purposed, in endeavoring to give, according to his own conception the highest order of intellectual education.

(John Stuart Mill 1873, p. 4)

In 1807, James Mill faced something of a crisis, as his mentor Sir John Stuart resigned his seat in Parliament, became a judge in the Court of the Exchequer, and returned to Scotland. Stuart always had been one of Mill's important sources of information about government affairs, and the world of politics. They were not of one mind on social and economic issues, and as the years passed, the gulf widened. Still there was a mentor relationship, not only with Sir John but also Mill's patron, Lady Jane. The vacuum which now existed, from the departure of the Stuarts, was quickly filled the next year when Mill met Bentham for the first time. During the next decade Mill's life was never his own, as the sixty-year-old philosopher devoured his newest disciple. He insisted that Mill spend long hours with him, as he exploited the struggling journalist to carry out his various schemes. Four or five months out of each year, Mill and his family lived with Bentham on his country estate in Surrey, and between 1810 and 1818 Bentham rented Mill a house, close to his own in Westminster, for £50 a year so he would be close at hand.

The definitive study of the relation between Mill and Bentham was by Halévy, who claimed:

It was to James Mill that this hermit, this maniac owed the fact that he became the popular chief of a party that was half philosophical and half political.

(Halévy 1972, p. 256.)

According to Halévy, Bentham had little influence on British affairs prior to his association with Mill, being much better known in France, and on this score there is no dispute. Mill's role was to popularize Bentham's educational scheme, his legislative reform, and to mold a group in Parliament which eventually would be responsible for the Reform Act of 1832 (Halévy, 1972, Part II, Chapter III, "Bentham, James Mill and the Benthamites"). There is a good deal of the great man theory of history in Halévy's story, with not enough emphasis given to the changes in Britain's social structure following Waterloo. Although Bentham and Mill were active in the political arena, it is debatable just how influential they were at the time. So far as Ricardo was concerned, Halévy attributed influences to Mill and Bentham which cannot be substantiated, particularly with respect to his economics, and the degree to which Ricardo was associated with utilitarianism.

In the Bentham-Mill view, education was the principle means by which the Malthusian population pressure would be checked. Man could be taught to control his baser instincts, to equate the number of children he should have with his ability and opportunity to earn a living, a theory practiced by the celibate Bentham, but not Mill. The philosophy was carried forward by John Stuart Mill and became the essence of philosophical radicalism, with the education of the individual held out as the solution to poverty, and the conditions of man in an industrial environment. The education of the common man should follow the principles of chrestomathy, a grading of things to be learned in terms of their utility to the individual, as he learned to use the felicific calculus. In the tradition of Adam Smith (Smith 1937, pp. 736-740), the education of the common man was the responsibility of the state, where each individual would be given the opportunity for education in accordance with his need, supported by taxpayers in accordance with their ability to pay. Government intervention was to be limited to education, as the philosophical radicals embraced *laissez faire* in all other instances. In his early pamphlet, *Defence of Usury*, Bentham wrote:

In a word, the proposition I have been accustomed to lay down to myself on this subject is the following one, viz. *that no man of ripe years and of sound mind, acting freely, and with his eyes open, ought to be hindered, with a view to his advantage, from making such bargain, in the way of obtaining money, as he thinks fit: nor, (what is a necessary consequence) any body hindered from supplying him, upon any terms he thinks proper to accede to.*

This proposition, were it to be received, would level, you see, at one stroke, all the barriers which law, either statute or common, have in their united wisdom set up, either against the crying sin of Usury, or against the hard-named and little-heard-of practice of Champerty; to which we must also add a portion of the multifarious, and as little-heard-of offence, of Maintenance.

(Bentham 1952, Vol. I, p. 129; italics in original)

Individualism was the essence of Bentham's utilitarianism. It was not that usury laws were difficult, if not impossible, to administer but they were in conflict with the individual's right to do as his wishes dictated. Moreover, the principle of utilitarianism carried the corollary that the solution to all social and economic problems rested with the individual, after he had been given the opportunity of an education to learn the fundamentals of the pain-pleasure calculus. By means of education a man could learn to evaluate future consequences in the present, to learn that today's savings would provide the means for greater happiness in the future. The establishment of savings banks for workers, therefore, became one of the main objectives of the Benthamite reformers. Hard work, frugality, and the control of one's emotions were combined in a manner which led to the development of self-made man. All of these traits were found in Mill himself, as his son described:

My father's moral inculcations were at all times mainly those of the "Socratici viri;" justice, temperance (to which he gave a very extended application), veracity, perseverance, readiness to encounter pain and especially labour; regard for the public good; estimation of persons according to their merits, and of things according to their intrinsic usefulness; a life of exertion in contradiction to one of self-indulgent ease and sloth . . . His standard of morals was Epicurean, inasmuch as it was utilitarian, taking as the exclusive test of right and wrong, the tendency of actions to produce pleasure or pain. . . . He was not insensible to pleasures; but he deemed very few of them worth the price which, at least in the present state of society, must be paid for them. The greater number of miscarriages in life, he considered to be attributable to the over-valuing of pleasures. . . temperance. . . was with ruin. . . almost the central point of educational precept . . . He would sometimes say, that if life were made what it might be, by good government and good education, it would be worth having: but he never spoke with any thing like enthusiasm even of that possibility.

(John Stuart Mill 1873, pp. 47-48.)

Mill possessed these traits and beliefs prior to meeting Bentham in his early thirties, but he found in Bentham's utilitarianism the affirmation of his philosophical outlook and he embraced both the man and his ideas. The Bentham-Mill view of education was heretical on several scores. The educational plans had no role assigned to religion, which did not sit well with the established church, or any of its splinter groups. In addition, Bentham-Mill advocated not only universal primary education, but secondary as well, and that would cost a considerable sum. Nor did they have any affinity with working class schemes, such as those of Robert Owen, Cobbett and later the Chartists. The French Revolution had shown the error of basing reform upon the shoulders of the lower classes, with the result that utilitarianism was not only highly individualistic but elitist as well.

The study of political economy was a means to the end of the aristocratic establishment, with its continuing intervention and frustration of the workings of market forces, the area that permitted the greatest opportunity for the freedom of the individual to pursue his own interests, sharpened by the pain-pleasure calculus. It was in this way the utilitarianism was joined with the programs for *laissez faire*.

John Stuart Mill wrote that his father's fondest memory, connected with the publication of *Commerce Defended* (1808), was that it led to his initial meeting with Ricardo, "the most valued and most intimate friendship of his life" (John Stuart Mill 1909, p. 563). Here was a personality the antithesis of Bentham, a man who sought pleasure but never measured it against pain. Bain claimed that Mill and Ricardo did not meet until 1811, the same year he came to know Francis Place (1771-1854) (Bain 1882, p. 115). Neither the younger Mill nor Bain gives any details of the reason for the first meeting between Mill and Ricardo, and there is good reason for assuming they were both wrong about the year. They undoubtedly met in 1810, after Ricardo had published his *Bullion* pamphlet, the reason being that Mill wanted him to read and evaluate Bentham's monetary writings.

In 1808, when Mill published *Commerce Defended*, Ricardo was unknown outside the world of the Stock Exchange, and there would have been no reason for Mill to seek him out. With the appearance of Mill's pamphlet his reputation as a political economist was established and it might be thought Ricardo sought him out. But Ricardo was not one to go looking for important or well-known persons, a trait which Mill possessed. The first correspondence between them was in December 1810, when Mill sent Ricardo the manuscript of Dumont's translation of Bentham's papers on money (*Works*, Vol. VI, pp. 13-14; James Mill to David Ricardo). The tone of the letters suggests that they knew one another quite well, and Mill refers to their discussion of the Bentham papers.

Bentham's manuscript, which Dumont translated, had been written in 1801, at the beginning of the bullion controversy. Bentham was actually not so much interested in the debate, as he was in pushing his Annuity Note proposal, which he had been writing for several years. The details of the scheme are not important at this time, but they did involve a taxing scheme for country banks.⁴ Bentham tried for several years to have someone in the Office of the Exchequer consider his Annuity Plan, but was unsuccessful. Those who read any parts believed it was not practical. In April 1801, Nicholas Vansittart (1766-1851) became a joint Secretary of the Treasury, and Bentham pushed his scheme once again, and finally Vansittart read the manuscript, but objected because it would increase the paper currency, of which there was already an over-abundance.⁵ When he sent his manuscript to Vansittart, 20 April 1801, Bentham wrote:

⁴ The Annuity Note proposal was initially published in Bowring 1843, *Works*, Vol. III, pp. 117-162. An analysis of the proposal, and its fate, is discussed by Smart in Bentham 1952, Vol. II, pp. 47-95. For Bentham's "Annuity Notes and National Wealth," see *idem*, pp. 301-342.

⁵ [Nicholas Vansittart's] Objections to the Annuity Note Plan with [Bentham's] Answers. Stark 1952, Vol. II, pp. 343-350.

In dismissing the topic of money, allow me, Sir, to add—unknown to you as I am—since it may help to put both of us at our ease,—that there is no trouble on the occasion of this business that I would not *gladly* take upon me, *nor* any pecuniary indemnification not to speak of remuneration that I would accept for it.

Anxious to guard, according to the measure of my faculties, against the delusions to which the subject is so particularly exposed, the chief part of my time, for about these two years, has been occupied in an endeavour to sound the depths of it. The result has not been favourable to the Country Banks: and, whatever may be the fate of the proposed Government paper, I am preparing a pamphlet to which I think of giving for a title, *The True Alarm*, (in contradistinction and reference to Mr. Boyd's, which appears to me to be in great measure, though perhaps not wholly, *false*,) or *Thoughts on Pecuniary Credit,—its advantages—inconveniences—dangers—and their remedies*. By the *inconveniences*, I mean *rise of prices*, (allowance made for the still greater, but temporary effects of bad seasons.) By the danger I mean that of General Bankruptcy. By the remedy, I do *not* mean *suppression* of paper money,—a remedy which would at once convert the danger into the height of the disease.

(Bowring, *Works*, Vol. X, p. 364; italics in original)

Boyd's pamphlet (Boyd 1801) provided one of the earliest attacks upon paper money and, while not reviewed in the *Edinburgh Review*, the author expressed views which were very similar to those of Ricardo some years later. Boyd claimed:

The premium on bullion, the low rate of exchange, and the high price of commodities, [are] . . . symptoms and effects of the superabundance of paper.

(Boyd 1801, p. xxxi)

On the relation between the Bank of England and the country banks, Boyd also anticipated Ricardo:

The Bank of England is the greatest source of all the circulation of the country; and, by the increase or diminution of its paper, the increase or diminution of that of every country bank is infallibly regulated.

(Boyd 1801, p. xx)

Prolific though he was, Bentham carried few of his writings through to publication, relying upon amanuenses and friends to complete his works. James Mill, for example, rewrote and edited his *A Catechism of Parliamentary Reform* (1817); John

Stuart Mill wrote out his five volume work, *Rationale of Judicial Evidence* (1827); and Peregrine Bingham did the same for his *Book of Fallacies* (1824). To Dumont, Bentham owed his French reputation, as Dumont not only translated and published Bentham's early works, but rewrote large sections. Stark, in commenting on the condition of Bentham's papers, said they were "in no kind of order" and "resemble a pack of cards after it has been thoroughly shuffled" (Stark 1952, Vol. I, p. 7). The Bentham manuscripts on *The True Alarm* were in such a condition when sent to Dumont at his request, after the project had been abandoned by Bentham. Various parts of the essay contradicted other portions, and it was Dumont's task to make something of the work (Sraffa, "Note on 'Notes on Bentham,'" *Works*, Vol. III, p. 263). He translated the chaotic mass of papers into French, rewrote large portions of the manuscript and organized the material into three books, with the general title, "Sur les prix." The first book contained an introduction and a discussion of the value and source of wealth; book two was concerned with the effect of paper money on the level of prices; book three offered Bentham's remedies for the problem that increases in the money supply were necessary for increases in wealth. Dumont had completed the task sometime before 1809, and when the bullion controversy was reopened he sent the manuscript to Mill, asking for his guidance as to possible publication. Whether the volumes were to be published in French or English is unknown, but to translate them back into English would have been difficult, as Stark found when he performed the task (Stark 1952, Vol. III, pp. 65-216).⁶

When Mill sent Ricardo volumes one and two of "Sur les prix", he commented:

—The whole will interest you, unfinished as is the state in which you will find it—but I do not think it will do for publication. In some respects it is too elementary—in others too abstruse—the premises and conclusions are not placed in the most lucid order, and the views are not always correct.—In fact they are loose papers of the author, not put in order, on a subject which he ceased to study before he had probed it to the bottom.

(*Works*, Vol. VI, p. 14; James Mill to David Ricardo,
25 December 1810)

Over the holiday Ricardo read Bentham's papers. He used a procedure which he always followed, that of writing his numbered Notes on a separate paper, each number corresponding to one made on the manuscript. Altogether, Ricardo wrote out seventy-one comments on Bentham's paper, each one indicating either disagreement or an inability to understand what the author was saying. When Bentham wrote:

⁶ "For some time the country has, in spite of its prosperity, felt oppressed by a triple burden, excess of money, war, and bad harvests. Each of these causes has contributed to the rise of prices, but it is necessary to distinguish clearly their respective shares in producing that result, so as not to take as a complete cure a remedy which would apply only to one of these evils, without doing anything for the two others." Stark 1952, Vol. III, pp. 192-193.

All value is founded upon utility, upon the use one might make of the thing.⁷

(*Works*, Vol. III, p. 284)

Ricardo commented:

I like the distinction which Adam Smith makes between value in use and value in exchange. According to that opinion utility is not the measure of value.

(*Works*, Vol. III, p. 284, n.24)

But it was of Bentham's monetary theory that Ricardo was most critical, the central theme of the manuscripts. On New Years Day, 1811, Ricardo wrote Mill a long letter, setting forth his views. It was difficult to be critical of so ingenious and profound an author, "but he was wrong on four major points." First, Bentham did not appear to be aware that a paper currency would be kept within bounds when the notes were convertible into specie, as the possibility of convertibility prevented an overissue. Second, the author did not consider the consequences which an unrestricted issue of paper currency would have upon foreign exchange rates, "an effect highly important to be considered."

Ricardo's third criticism was more crucial. Bentham had argued that although there were disadvantages associated with increasing the paper currency, namely rising prices, there were also benefits which would accrue to society, since more goods would be called into circulation. Bentham's formulation rested upon an assumption that inflation would primarily disadvantage those persons who were on fixed incomes (rentiers), and such a redistribution of income would raise the demand for commodities. It was an argument which rested upon mercantilist assumptions about the relation between money flows and real output, what Keynes called the "scientific truth in mercantilist doctrine" (Keynes 1936, p. 335). It also was a theory which struck the heart of the classical views of Smith. As Ricardo commented on Bentham's argument:

he has supposed that money calls goods into existence which but for that money would not have been produced.—This opinion is advanced in many parts of his work . . . I confess I should come to quite an opposite conclusion. As paper money is generally introduced for commercial purposes he is of opinion that it is almost always attended with the advantages which he had before ascribed to the proper introduction of metallic money. As much of the revenue of a country consists in a fixed money rent he supposes an unwillingness in those who receive it to save or rather to expend it on those objects which shall cause a future increase of revenue. Now as all the money introduced by commercial means

⁷ "Toute valeur est fondee sur l'utilite, sur l'usage qu' on peut faire de las chose."

would be so expended he considers the same beneficial effects would follow as if those with monied incomes had thus beneficially employed their rents and annuities.

The increase of money in my opinion can have no other effect than raising the prices of the commodities. By such means some members of the community are enriched at the expence of others; there is a mere transfer of property, but no creation. Whether those who are enriched will employ their additional income more economically or more advantageously than those who before possessed it, must be matter of speculation only. My opinion however is that by no class are greater savings made than by those who are in possession of fixed monied rents and annuities. As far as they have come under my observation, and I have seen a good deal of monied men, they are amongst the most accumulating of the community.

There appears to me only one way in which any addition would be made to the Capital of a country in consequence of an addition of money; it would be this. Till the wages of labour had found their new level with the altered value of money,—the situation of the labourer would be relatively worse; he would produce more relatively to that which he consumed, or rather he would be obliged to consume less. The manufacturer would be enabled to employ more labourers as he would receive an additional price for his commodities; he might therefore add to his real capital till the rise in the wages of labour placed him in his proper sphere. In this interval some trifling addition would have been made to the Capital of the community.

(*Works*, Vol. VI, pp. 15-17; David Ricardo to James Mill, 1 January 1811)⁸

The benefits of inflation, if there were any, would occur because of a temporary decline in real wages, and not because of any redistribution of income between renters and the mercantile class. The wage lag would have a "trifling effect" in the short run. It must be assumed that both Bentham and Ricardo were thinking in terms of a once-over increase in the money supply, and not a process of a continuing inflation, nor did either consider the consequences of rising prices upon mercantile expectations.

While Bentham was indeed "radically wrong" on a few fundamental principles of political economy, Ricardo made no overall recommendation for or against publication. Several days later Mill wrote he had discussed Ricardo's objections to

⁸ Bentham's position was: "Effets d'une addition au numeraire selon son premier emploi." (*Works*, Vol. III, pp. 317-319) Ricardo's fourth criticism of Bentham was ambiguous. The issue was the reserve ratio of banks with small deposits versus large deposits. Bentham assumed the ratio of reserves to deposits would be constant, while Ricardo said banks with large deposits would keep a higher percentage of reserves. He did indicate whether he thought it was a question of mere size (where he would be wrong) or whether a different source of the deposits of large banks would require a higher reserve ratio (where he would be correct). (*Works*, Vol. VI, p. 317)

the manuscript with Dumont, who happened to be in London at the time. Dumont was anxious to go ahead with publishing his version of Bentham's "Sur les prix," despite the negative comments from Ricardo. As Mill reported:

I said that I thought the best thing would be for you and him to converse together on the subject, for that you would have read the papers much more attentively than I had, and that the points on the subject were more minutely present to your mind than to mine.

(*Works*, Vol. VI, p. 19; James Mill to David Ricardo,
4 January 1811)

The following Friday, Dumont and Mill met Ricardo at his office on Throgmorton Street at three-thirty in the afternoon, and from there the three proceeded to Ricardo's home in New Grove, where they dined on mutton and discussed the Bentham manuscript. The two guests spent the night, continuing the discussion on Saturday. Ricardo must have prevailed, in that Bentham's manuscript was not published. It is interesting that Bentham himself was never involved in the situation and had no contact with Ricardo, though he probably did discuss the matter with Dumont and Mill.

There are several obvious conclusions to be drawn from the initial interchange between Mill and Ricardo. First, Ricardo was the accepted authority on matters of political economy, and his views were the determining influence in the end. He alone understood the implications of Bentham's analysis, since he had studied the manuscripts more carefully than Mill, as the latter readily acknowledged. From the very beginning Mill had no influence upon the development of Ricardo's theoretical views. During the period of the discussion of Bentham's manuscript, Ricardo himself was finishing the *Reply to Bosanquet*, and Mill did not read his manuscript. His suggestion that it should contain a table of contents was simply gratuitous. Second, Mill was acting as an agent for his mentor, Bentham, and apparently arranged the meeting with Ricardo to aid Dumont's efforts on behalf of the great philosopher. As an experienced editor and writer in his own way, Mill recognized the Bentham manuscripts were imperfect, and not publishable in their present form. As to the theoretical content, he deferred to someone more skilled. Third, Mill made no mention of Dumont's presence in London until after Ricardo had submitted his opinions, even though he must have known that Dumont was either in town, or soon would be there. Fourth, Mill arranged for he and Dumont to be the overnight guests at Ricardo's home, for the purpose of resolving the contrasting views, rather than invite Ricardo to his residence. Ricardo, after all, was the outsider, but then this may have been a matter of expediency, since space in the Mill household was limited. As Mill put it:

Now as you see I have used no ceremony with you in this matter—I only beg you will have no hesitation saying immediately and plainly whether the arrangement is agreeable to you or not. If it is agreeable I think you should send immediately (for fear of his

being engaged) a note to Dumont (19 Hay Market) to invite him to a Family dinner, and to a conversation of ourselves three on the subject of his papers.

*(Works, Vol. VI, p. 20; James Mill to David Ricardo,
4 January 1811)*

Mill already was playing his manipulative role, one which would continue over the course of the ongoing friendship with Ricardo.

Turning to Robert Malthus (1766-1834),⁹ he was born on a large farm in central Surrey, near the village of Dorking. His father, Daniel, was known as "a gentleman of good family and independent fortune." The economist's biographer claimed she probably could trace the Malthuses back to Edward the Confessor (1042), while later in the lineage they were apothecaries to Queen Anne and the first three Georges. But despite the advantages of his long heritage Robert Malthus was a victim of a restrictive culture, one which seriously frustrated his aspirations. He was a second son in the age of primogeniture, and had the misfortune to be born with a disfiguring deformity, a hare-lip and cleft palate. The first limitation meant he had to earn a living, while the second closed numerous careers, such as law and politics.

A hare-lip is of little importance nowadays and is usually dealt with in the first months of infancy, but at that period it was a serious disability. The lip was sutured, but no operation could be performed on the palate itself. Moustaches were completely out of fashion, so that there was nothing to conceal the immediately obvious disfigurement of the lop-sided upper lip and distorted nostril. Malthus must always have talked like someone with a very bad cold. Eating would have been difficult, although it is possible that he wore a silver plate to make an artificial roof to his mouth.

(James 1979, pp. 2-3)

Afflictions and physical handicaps make personal achievement unusually difficult in any age, and for the low born there is a life of begging, poverty and half-way houses. For the more fortunate there is some opportunity to overcome the obstacles and prejudices which society imposes. In the case of Malthus, there is seldom a trace of a mention of his deformity in the voluminous correspondence which passed between his contemporaries and friends, and even Cobbett did not stoop that low. He wrote of Ricardo "the Jew", but never Malthus "the hair lip". But Malthus's deformity was the subject of gossip for some people.

Maria Edgeworth, who gossiped about the Ricardos when she was their house guest, did the same about Malthus's handicap, where she was even more unkind.

⁹ Much of the biographical background of Malthus is taken from James 1979.

Supposedly, Edgeworth admired both Ricardo and Malthus, but about the latter she wrote that he

is as kind as kind can be to me and mine I *do* wish that hair lip were away and that he could speak more like a human creature for if I were a child and had heard of his being an Ogre I should run away if he were to come near me and begin to speak.

(Edgeworth 1971, p. 331; Maria Edgeworth to Frances Anne Edgeworth; italics in original)

Robert's father, Daniel, while a man of some wealth, was also eccentric. He attended Oxford, but did not take a degree, entered Lincoln's Inn, but abandoned the law, and sold his farm and wandered with his wife and children for nineteen years. His great grandfather was a minister, but Daniel Malthus would allow his children to read only the New Testament, never the Old. He corresponded with Rousseau. Daniel Malthus claimed that if he ever became famous, it would be because he had known the French essayist and naturalist. Apparently Rousseau did not feel so inclined toward Daniel Malthus, and ignored him on several occasions (James 1979, pp. 11-13). It was said of Daniel Malthus, that although he possessed

a highly cultivated mind and very fascinating manners, he was cold and reserved in his own family, except towards his eldest daughter, of whom he was very fond, and his youngest son . . .

(James 1979, p. 13)

Beginning with his father, Robert Malthus learned his Greek, Latin and mathematics from a succession of private tutors; from about 1775 to 1782 with the Rev. Richard Graves in Claverton, near Bath; from 1782 to 1784 with the Unitarian minister Gilbert Wakefield (1756-1801) at Warrington, half way between Liverpool and Manchester. His biographer says it was from living near Bath and Warrington that Malthus developed his dislike for towns, as distinguished from his fond memories of Dorking. In 1784, Malthus became a pensioner of Jesus College, Cambridge. On the banks of the Cam River, Malthus found an atmosphere conducive to his intellectual maturity.

At this time the University was just stirring from a long sleep, and Jesus, which had been among the sleepest, was becoming a centre of intellectual ferment. Malthus probably owes as much to the intellectual company he kept during his years at Jesus as to the influence and sympathy of his father. His tutor, William Friend, who had been a pupil of Paley's and was an intimate of Priestley's, became in Malthus's third year (1787) the centre of one of the most famous of University controversies, through his secession from the Church of England and his advocacy of Unitarianism, freedom of thought, and pacifism.

Paley himself had left Cambridge in 1775, but his *Principles of Moral and Political Philosophy*, or, as it was originally called, the *Principles of Morality and Politics*, was published in Malthus's first year (1785) at Cambridge, and must be placed high, I think, amongst the intellectual influences on the author of the *Essay on Population*. Moreover, he found himself in a small group of brilliant undergraduates of whom Bishop Otter, his biographer, and E.D. Clarke, traveller, Cambridge eccentric, and professor, may be chiefly named.

(Keynes 1933, pp. 107-109)

Malthus was ninth Wrangler, despite his handicap, received his B.A. degree in 1788, and was ordained an Anglican minister shortly thereafter. There was some question about his ordination, because of the speech problem, but through friends and family connections he was able to become a curate at Oakwood, even though the curate assigned to the small rectory was not allowed to perform marriages. Malthus lived at Oakwood for a decade, supporting himself with the stipend and a £300 fellowship from Jesus College. Over the decade following his degree, nothing much seems to be known about him, but with the first edition of the *Essay on Population* (1798) he emerged from hibernation and moved to London.

The first edition of the *Essay* contained little that could be called the theory of political economy in any of its several versions. The *Essay* simply was an attack upon the basic philosophical tenet of the Enlightenment, that the human condition could be improved. It had been written following the discussions between Robert and Daniel Malthus on the effects of "avarice and profusion." As a follower of Rousseau, the father was dubious of his son's pessimistic outlook as to the possibility of progress, especially as projected by Godwin and Condorcet.

. . . the Author at first sat down with an intention of merely stating his thoughts to his friend, upon paper, in a clearer manner than he thought he could do, in conversation. But as the subject opened upon him, some ideas occurred, which he did not recollect to have met with before; and as he conceived, that every, the least light, on a topic so generally interesting, might be received with candour, he determined to put his thoughts in a form for publication.

([Malthus] 1798, p. 1)

Malthus's argument was summed up in two postulates:

First, that food is necessary to the existence of man.
Secondly, that the passion between the sexes is necessary, and will remain nearly in its present state.

([Malthus] 1798, p. 11)

As Keynes noted:

Malthus' *Essay* is a work of youthful genius. The author was fully conscious of the ideas he was expressing. He believed that he had found the clue to human misery. The importance of the *Essay* consisted not in the novelty of his facts but in the smashing emphasis he placed on a simple generalization rising out of them. Indeed his leading idea had been largely anticipated in a clumsier way by other eighteenth-century writers without attracting attention.

(Keynes 1933, pp. 119-120)

What made the *Essay* popular was its pessimism, as it demonstrated that improvement and change were not the panacea which radical reformers envisioned. The Almighty, which the Enlightenment had pushed to the background, was suddenly brought to the front of the stage. Although they might deny His influence, they could not deny the forces of evil which He periodically let loose, as the four horsemen of the apocalypse rode out of each man's hearth. Combined with the claims of a revengeful God, there was the economics of scarcity, as Malthus added a new dimension to the old argument of the conservatives. The law of diminishing returns was not in any detail developed in the *Essay*, but the ingredients were there, since food could not be increased in sufficient quantities to match the growth of population. The simplicity of the several hypotheses was emphasized by the arithmetic-geometric analogy.

Whatever one may say about Malthus's *Essay*, there is no denying that it was an ingenious contribution which called into serious question the essence of the Enlightenment. The idea that progress was limited was not new, as misery and deprivation had always caused man to hope that beyond death there was happiness.

As expressed in the *Essay*, Malthus's views on the human condition were in sharp opposition to the progressive optimism which had come out of the Enlightenment during the seventeenth and eighteenth centuries. The conclusion that flowed from his analysis was that man was living in a fool's paradise, a paradise not lost, but one that never had been feasible in the first place. His pessimistic views were accepted so quickly due to skepticism over the aims of the French Revolution; when that series of events produced violence, it was clear that radical social change was wrought with dangerous consequences. The evil had started with the few dribbles of blood falling from the guillotine, then became the torrent which flooded the streets of Paris, and threatened the existence of Britain itself. The *Essay* was the theoretical proof that changing the status quo was a threat to the continuation of all society. What Malthus revealed was that attempts to change society, to advance the common welfare, were formulated upon a misconception about the possible perfectibility of mankind. The ideas of the philosophers of the French Revolution, such as Rousseau, Voltaire and Condorcet, were contrary to the realities of an excessive and expanding population. In the

second edition of the *Essay* (1803), Malthus explained why society could not make room for all men at nature's great feast:

A man who is born into a world already possessed, if he cannot get subsistence from his parents on whom he has a just demand, and if the society do not want his labour, has no claim of *right* to the smallest portion of food, and, in fact, has no business to be where he is. At nature's mighty feast there is no vacant cover for him. She tells him to be gone, and will quickly execute her own orders, if he does not work upon the compassion of some of her guests. If these guests get up and make room for him, other intruders immediately appear demanding the same favour. The report of a provision for all that come, fills the hall with numerous claimants. The order and harmony of the feast is disturbed, the plenty that before reigned is changed into scarcity; and the happiness of the guests is destroyed by the spectacle of misery and dependence in every part of the hall, and by the clamorous importunity of those, who are justly enraged at not finding the provision which they had been taught to expect. The guests learn too late their error, in counteracting those strict orders to all intruders, issued by the great mistress of the feast, who, wishing that all her guests should have plenty, and knowing that she could not provide for unlimited numbers, humanely refused to admit fresh comers when her table was already full.

(Malthus 1803, pp. 531-532; italics in original; the paragraph was deleted from subsequent editions of the *Essay*, apparently because it was so critically quoted)

In his second edition, the quarto version of 1803, Malthus introduced many revisions. In terms of pagination, for example, the second edition was more than double that of the 1798 tract. He also dropped the original anonymity, in order to benefit from the *Essay's* popularity and acceptance. The first *Essay* had brought numerous suggestions and innuendoes that it was plagiarized, and Malthus in his new preface sought to set the record straight:

In the course of . . . inquiry I found that much more had been done than I had been aware of, when I first published the *Essay*. The poverty and misery arising from a too rapid increase of population had been distinctly seen, and the most violent remedies proposed, so long ago as the times of Plato and Aristotle. And of late years the subject had been treated in such a manner by some of the French Economists, occasionally by Montesquieu, and, amongst our own writers, by Dr. [Benjamin] Franklin, Sir James Steuart, Mr. Arthur young, and Mr. [Joseph] Townsend, as to

create a natural surprise that it had not excited more of the public attention.

(Malthus 1803, p. 1)

The quarto edition was a more scholarly sketch of the pressure of population upon a limited food supply, and explained in detail how the earlier writers differed in their views from his own analysis. The argument was highly repetitive, and some critics said it was full of "verbiage." The geometric-arithmetic analogy, of the rates of increase in population and the food supply, was deleted, as were similar untestable hypotheses.

In between the dates of publication of the first two versions of the *Essay*, Malthus had thrown together his first pamphlet on political economy, *An Investigation of the Cause of the High Price of Provisions* (1800).¹⁰ He addressed the issue from the standpoint of an excess demand for a scarce food supply. He acknowledged that in 1799 there had been a bad harvest, and that speculators probably withheld their grain in anticipation of higher prices in the future. But the speculators were only doing what was in their self-interest and society's:

The man who refuses to send his corn to market when it is twenty pounds a load, because he thinks that in two months time it will be thirty, if he be right in his judgment, and succeed in his speculation, is a positive and decided benefactor to the state; because he keeps his supply to that period when the state is much more in want of it; and if he and others did not keep it back in this manner, instead of it being thirty in two months, it would be forty or fifty.

(Malthus 1970, p. 14)

Scarcity and speculation would, Malthus assumed, produce a grain price of £20 to £25 a load, but since the price was £40 a load, he attributed the 60 to 100 percent excess to the excess demand which resulted from the increase in parish relief, a cause that "has hitherto escaped detection." Assuming there were fifty people, but only enough corn for forty, the natural price would be established by the income of the fortieth man, say at 2 shillings. With an unequal distribution of income, the thirty-nine above the fortieth man would have income in excess of two shillings to spend on corn, while the bottom ten would have but a shilling, which as Adam Smith correctly stated would exclude them from the market. When the poor relief Justices gave the last ten men an additional shilling, they would now possess the same purchasing power as the fortieth, and the new natural price of corn would rise, since there would still be only enough for forty. Malthus wrote that

¹⁰ The pamphlet was published anonymously, but listed as written by the Author of the *Essay on the Principle of Population*. London, 1800; reprinted in Malthus 1970, p. 21.

. . . I am most strongly inclined to suspect, that the attempt in most parts of the kingdom to increase the parish allowances in proportion to the price of corn, combined with the riches of the country, which have enabled it to proceed as far as it has done in this attempt, is, comparatively speaking, the sole cause, which has occasioned the price of provisions in this country to rise so much higher than the degree of scarcity would seem to warrant, so much higher than it would do in any other country where this cause did not operate.

(Malthus 1970, pp. 7-8)

By "sole cause" Malthus said he meant the price which exceeded that due to scarcity and speculation, and this was the result of the attempt on the part of the state to resolve a problem that could not be resolved. Society should bear the shortages "with composure," not aggravate it with "impatience and irritation." The solution could only come by reducing the population:

of late years, even in the best seasons, we have not grown corn sufficient for our own consumption; whereas, twenty years ago, we were in the constant habit of exporting grain to a very considerable amount. Though we may suppose that the agriculture of the country has not been increasing, as it ought to have done, during this period; yet we cannot well imagine that it has gone backwards. To what then can we attribute the present inability in the country to support its inhabitants, but to the increase of population? I own that I cannot but consider the late severe pressures of distress on every deficiency in our crops, as a very strong exemplification of a principle which I endeavoured to explain in an essay published about two years ago, entitled, *An Essay on the Principle of Population, as it affects the future Improvement of Society*. It was considered by many who read it, merely as a specious argument, inapplicable to the present state of society; because it contradicted some preconceived opinions on these subjects. Two years reflection have, however, served strongly to convince me of the truth of the principle there advanced, and of its being the real cause of the continued depression and poverty of the lower classes of society, of the total inadequacy of all the present establishments in their favour to relieve them, and of the periodical returns of such seasons of distress as we have of late experienced.

(Malthus 1970, pp. 24-25)

Malthus did not consider the source that provided the funds for the increase in parish relief, namely the increase in the money supply, which in 1799-1800 would have been a new issue of bank notes, either in the countryside or London. Since the

bullion controversy did not commence until a year later, it is understandable why the monetary policy which permitted the increase in parish relief was ignored. Malthus's "sole cause" was excess demand, while Ricardo's "sole cause" was the redundancy of bank notes. Nor did Malthus discuss the benefits which accrued to the landlord class from the increase in parish relief, and the rise in the price of grain. He stressed that the corn trade could not be monopolized, because of its great dispersion, and he did not consider that a particular class benefited from the monetary policy pursued, as Ricardo stressed at a later date. So far as Malthus was concerned, the quantity of corn could not be increased, even in the long run, hence population had to decline.

The 1803 edition of Malthus's *Essay* incorporated the economics of scarcity which he had developed in the *High Price of Provisions*, and for this reason the second edition frequently has been referred to as a tract in political economy, as against the philosophical orientation of the first *Essay*. (Keynes 1933, p. 122)

The success of the first *Essay* marked Malthus as the most authoritative figure on the human condition, as well as England's most famous political economist. The same success also changed the direction of his life and aspirations. Following his years at Cambridge, Malthus had become almost a recluse, as he retired to his rectory in Oakwood. In addition to the annual £100 which he received for performing the limited duties of the small parish, he also had a Jesus College fellowship that brought him an additional £300. He had said during his years at Cambridge that his utmost wish "was a retired living in the country," something he achieved during his decade at Oakwood. But after the publication of the first *Essay* he moved to London and began to circulate amongst the evangelical Anglicans. Two years later, 1802, through family connections, he became rector of Walesby, with a stipend of £300. In 1804 he married Harriet Eckersall, his third cousin, a union which produced a son and two daughters. Because of his marriage, Malthus had to relinquish his fellowship, and for a brief time the newly married couple lived on the Walesby stipend, with some minimal income from the sale of copies of the *Essay*. As rector of Walesby he now was able to perform marriages, but again his deformity represented a frustration, due to the superstition that a pregnant bride's firstborn would carry any deformity of the minister performing the marriage ceremony.

Both the Walesby pairs Malthus married in May 1804 were illiterate. One couple left the parish, but one remained, so we can learn from the register that their first child was christened on 2 September; let us hope his mother did not spend a miserable summer expecting a baby with a hair-lip . . .

(James 1979, p. 164)

The frustrations of the Walesby experience did not last, as in late 1804 Malthus accepted an appointment as Professor of Political Economy at the new East India College, first located at Hertford and then Haileybury. The annual stipend was £500, and Malthus hired a succession of curates to attend to the duties of Walesby; as his correspondence reveals, he returned to Walesby only with the death

of one of his parishioners. Besides being the only English Professor of Political Economy, he also continued to be Parson Malthus.

In 1805, Cambridge and Oxford had not added political economy to their list of electives, and the Tripos was limited to the corners for Mathematics, Greek, and Latin. Outside of Oxbridge there was only the wasteland, one inhabited solely by Haileybury College, where the imperialist East India Company trained young men to go forth to rule Britannia, or its surrogate "the Company." Haileybury was undoubtedly the first "business school," the first educational institution whose primary purpose was to train future captains of industry. To this extent, Malthus was not a "professor" in the fullest meaning of the title, for that rank was reserved for the most successful dons at Oxbridge. At Cambridge and Oxford education was not geared to the teaching of pensioners so they might become successful in business. The "trade" schools, with Haileybury College as one of the earliest examples, did assume their purpose was to give a pecuniary orientation to education, a role described by that most critical writer on higher education, Thorstein Veblen. Veblen was discussing "schools of commerce," during the first decade of the twentieth century in America, but his acerbic pen could have been describing Haileybury:

This incursion of pecuniary ideals in academic policy is seen at its broadest and baldest in the Schools of Commerce,— "commerce and Politics", "Business Training", "Commerce and Administration", "Commerce and Finance", or whatever may be the phrase selected to designate the supersession of learning by worldly wisdom. Facility in competitive business is to take the place of scholarship, as the goal of university training, because, it is alleged, the former is the more useful. The ruling interest of Christendom, in this view, is pecuniary gain. And training for commercial management stands to this ruling interest of the modern community in a relation analogous to that in which theology and homiletics stood to the ruling interest in those earlier times when the salvation of men's souls was the prime object of solicitude. Such a seminary of business has something of a sacerdotal dignity. It is the appointed keeper of the higher business animus. Such a school, with its corps of instructors and its equipment, stands in the university on a tenure similar to that of the divinity school. Both schools are equally extraneous to that "intellectual enterprise" in behalf of which, ostensibly, the university is maintained. But while the divinity school belongs to the old order and is losing its preferential hold on the corporation of learning, the school of commerce belongs to the new order and is gaining ground. The primacy among pragmatic interests has passed from religion to business, and the school of commerce is the exponent and expositor of this primacy. It is the perfect flower of the secularization of the universities. And . . . there is

also a wide-sweeping movement afoot to bend the ordinary curriculum of the higher schools to the service of this cult of business principles, and so to make the ordinary instruction converge to the advancement of business enterprise, very much as it was once dutifully arranged that the higher instruction should be subservient to religious teaching and consonant with the demands of devout observances and creeds.

(Veblen 1957, pp. 149-150)

Veblen might notice irony in that Malthus turned to teaching in a "business school," as a means of supplementing his income as a parson.

Something regarding the nature of Haileybury was described by Maria Edgeworth:

There are eight professors—two for classical literature—three Oriental languages—one law and one political Economy and one Mathematics. The pupils stay two years. Mr. Malthus would advise three but India directors and parents are impatient. A vast deal he says has been usually accomplished in these two years. They have sent out from thirty to forty [to] India each year since they have been established and they have been established seventeen years [since 1805]. So this may account for the improvement in East Indian conduct and society.

(Edgeworth 1971, letter #50, p. 334)

From James's description of the college, it must have been another frustration for Malthus. The students were frequently in revolt, as he frequently told Ricardo, and on more than one occasion police had to quell the rioting. Being adolescents, they did not look forward to years in India, since their parents were the ones who believed that service with the company was the route to a fortune. Nor did the students have sympathy with the curriculum, given the emphasis upon strange languages (Arabic and Persian), the study of Indian culture, and practical subjects such as "reasoning," "composition," and political economy. The Company Proprietors and the independent college were often in conflict. The practice of the students wearing academic gowns (as at Oxbridge) frequently was ridiculed in the press, as was "the absurdity of a master and ushers calling themselves Principal and Professors." The East India College was a product of the Clapham sect of evangelical Anglicans, where students were trained to go to India to do Christian good, while they did well.

The college was the product of the endeavors of Charles Grant (1746-1823), who had served in India for over twenty years. Besides an officer of the East India Company, he had engaged privately in the silk trade, and in this activity he made his fortune (James 1979, pp. 168-184). Following the death of two young daughters from smallpox, Grant converted to evangelical Anglicanism, and played a prominent role in the founding of the British and Foreign Bible Society, the Church

Missionary Society, and the Church of England in India. Upon his return to London in 1790, he became one of thirty Company Directors, and pushed his scheme for the establishment of the East India College, in the tradition of John Bull. The idealized purpose was that the students "should be imbued with reverence and love for the Religion, the Constitution, and Laws of their own Country." (James 1979, p. 171)

The practical purpose was to train fifteen-year olds for service as apprentice Writers in the service of the Company in India. Writers transcribed reports to the Home Office, where they were read by Correspondents, such as James Mill, and later John Stuart Mill. After their apprenticeship in India, the graduates of the College rose in the ranks and most became financially successful, if they survived the hazards of life abroad. The appointment to the post of apprentice Writer was considered so potentially lucrative that initially only the sons of Company officers were selected, but it was Grant's plan that such selection should be based upon examination and the completion of two years at the College. He fought to abolish the old patronage system and substitute a system of specialized training. Grant selected the faculty, and was particularly partial to evangelical Anglican ministers. Supposedly the faculty was composed of experienced teachers, which Malthus was not, and he owed his appointment largely to his reputation as the author of the *Essay on Population*, and his position in the Church of England.

Malthus brought out a third edition of the *Essay* (1806), a fourth (1807), and a fifth (1817). He summarized his basic thesis in an article for the *Britannica* (1823), and reprinted the summary in a separate pamphlet (1830). In each of these subsequent editions he added new material in an effort to support his initial proposition that population had a tendency to rise at a faster rate than any feasible rise in the output of food. Each edition became more global, as he found supporting statistical examples; as with the first *Essay*, he leaned heavily upon data showing the rate of population expansion in the United States. In one sense, Malthus spent a lifetime defending his youthful speculation that there were tendencies which meant mankind could not improve upon its future well-being, because of the conflict between procreation and nature's niggardliness. Meanwhile he pursued other aspects of political economy, as they were initially set out in the *Edinburgh Review*. The two themes which proved to be of special importance in his later writings, were the underconsumption views of the Spence article, and the controversy over the bullion debates. It was because of the second theme that he met Ricardo, a meeting that was crucial for the careers of both men.

By the spring of 1811 Horner had become a close friend of both Malthus and Ricardo, and it was he who probably suggested the two should meet together. In April 1811, Ricardo had published his *Appendix* to the fourth edition of the *Bullion* pamphlet, in which he attacked the arguments advanced by Malthus in his *Edinburgh Review* article. Malthus read the *Appendix* almost immediately, and wrote to Horner:

I have this moment been reading Mr. Ricardo's observations on the Review, but remain quite unconvinced—indeed there is no

point on which I feel more sure than of the incorrectness of attributing the variations of the exchange exclusively to redundancy or deficiency of currency. I was sorry to find a small monosyllable put into the article either by Jeffrey, or by accident, which made a considerable alteration in the sense, and may have offended Mr. Ricardo in some degree justly. I had said "We do not think these facts are all satisfactorily explicable upon the principles of M Ricardo alone["],—it is printed *at all*, which makes a good deal of difference.

(*Works*, Vol. III, p. 12; Malthus to Horner,
7 April 1811; italics in original)

If Ricardo was offended no one will ever know, since the question was never raised in any correspondence which passed between them. The disputed passage occurred quite late in Malthus's *Edinburgh Review* article, where he was discussing Ricardo's *Reply to Bosanquet*, which he believed had very adequately dealt with the criticisms raised against the *Bullion Report* (Malthus 1811a, p. 359). Bosanquet had argued that the *Report* was contrary to the facts of the monetary situation, and Ricardo had demonstrated the theory of the *Report* actually were consistent with these facts. Now it does make a difference to deny the "facts are all" explained, rather than that they are not "at all" explained by the principles of Ricardo. As was the case in many instances, Malthus was overly sensitive about his review of Ricardo (James 1979, p. 206). But did the difference between Malthus and Ricardo really turn on a "monosyllable", as everyone seemed to believe? Horner, for example, in answering Malthus's letter of 7 April, wrote that

Ricardo's reply to your objections is not so well written, in point of clearness, as his usual style. I suspect that upon that dispute the truth lies between you, and that a mode of expressing and stating what takes place might be hit upon to which you would both assent.

(*Works*, Vol. III, p. 12)

Even Malthus and Ricardo themselves thought there was only a shade of difference between them, and simultaneously they initiated a correspondence so that they might meet. On 16 June 1811, Malthus wrote Ricardo:

One of my principal reasons for taking the liberty of introducing myself to you, next to the pleasure of making your acquaintance, was, that as we are *mainly* on the same side of the question, we might supersede the necessity of a long controversy in print respecting the points in which we differ, by an amicable discussion in private. I have certainly been for some time of opinion that many of the modern writers in political economy in their zeal to correct the absurd notions of the mercantile classes

about the balance of trade have overlooked the real differences that exist between the precious metals and other commodities, from the circumstance of their having been adopted as a medium of exchange; and I have intended to take some opportunity of expressing this opinion in print. But if you in any degree prefer it, I will state this opinion without a specific reference to your name, though if I do mention it, it will undoubtedly be with that respect and approbation which the talents and information which you have shewn on this subject so richly merit. Having entered upon the question, my sole view in prosecuting it is to arrive at, and circulate the truth, and I had rather make any concessions to the other side, than defend any position which does not appear to me to accord with the Just principles of political economy.

(Works, Vol. VI, pp. 21-22; Malthus to Ricardo, 16 June 1811; italics in original)

Previously, Ricardo had drafted a letter to Malthus but before it would be copied from pencil and posted he had Malthus's letter. Ricardo had first written:

As we are so nearly agreed in the principles which regulate the value of money in the countries which have constant commercial intercourse with each other, I am desirous that we should endeavor, by amicable discussion in private, to remove the few objections which prevent us from being precisely of the same opinion.

(Works, Vol. VI, p. 24, n.1)

The similarity in the two opening paragraphs is uncanny. As might be expected, when Ricardo received Malthus's letter he changed his opening paragraph:

I lose no time in answering your obliging letter and endeavoring as far as lies in my power to remove the very few objections which prevent us from being precisely of the same opinion on the subject of money, and the laws which regulate its value in the countries which have constant commercial intercourse with each other. I have no view in this discussion but that which you have avowed, the circulation of truth, if therefore I should fail to convince you, and you should express your opinions in print it is immaterial to me whether you mention my name or not. I trust you will do that which shall most fully tend to establish the just principles of the science.

(Works, Vol. VI, pp. 23-24; Ricardo to Malthus, 18 June 1811)

Even though Malthus lived a relatively short distance north of London, in Hertfordshire, arranging a meeting with Ricardo proved somewhat difficult, giving

an indication that in the future most of their interaction would have to be through correspondence. Initially writing on a Saturday, Malthus had suggested that Ricardo should come to Hertford seven days later, and that perhaps Horner would accompany him for the journey. Ricardo apparently accepted the invitation, but on Thursday Malthus wrote that he would not be home until about five in the afternoon on Saturday, because of the unexpected arrival of a sister in London whom he would have to arrange to meet on Friday. Harriet Malthus was not available on Sunday or Monday, and dinner at five on Saturday, followed by two or three hours of conversation, would have required that Ricardo spend the night at Haileybury. Accordingly the meeting was set for a Saturday breakfast at Ricardo's house, when Malthus would still be in town. Horner must not have been available, since on Thursday Malthus was proposing he and Ricardo be joined by Ricard Sharp (1759-1835). The latter was an M.P., a member of the Bullion Committee, an influential Whig and literary critic. Known as "Conversation Sharp," in time he became a close personal friend to both Malthus and Ricardo.

In addition to the complications surrounding the final session for breakfast, it seems interesting that Malthus was the instigator of the idea there should be a third party present, first Horner, and then Sharp. Was he fearful that the speech impediment would be a problem between them, and that friends such as Horner and Sharp would be available to bridge any possible gap in conversation? Or was Malthus looking for theoretical support, since neither Horner nor Sharp agreed with Ricardo's extreme views? A member of the Bullion Committee would be a formidable ally. Whatever the reason, it seems clear that Malthus sought company at the time of his first meeting with Ricardo. Another possible explanation is that Ricardo, in his first letter to Malthus, gave evidence of being an awesome opponent. As a quantity theorist he claimed that an unfavorable balance of trade was caused by redundant currency in one of two trading nations. In the country with the unfavorable balance, the redundancy could be the result of a diminution in the quantity of goods, or more likely by an increase in the quantity of money and/or velocity. *Pari passu*, the redundancy in country A could occur because of an increase in the quantity of goods in country B, or a decrease in that country's money supply. Prices in country A, in either instance, would rise, while they would fall in country B, leading to the export of bullion from A to B. Ricardo had written Malthus that

I do not deny that temporary fluctuations do occur in the value of the precious metals;—on the contrary I maintain that these fluctuations never cease, but I attribute them all to one cause, namely, a redundancy of currency produced in one of the ways above mentioned, and not to the demand for particular commodities. These demands are in my opinion regulated by the relative state of the currency,—they are not causes but effects. You appear to me not sufficiently to consider the circumstances which induce one country to contract a debt to another. In all the cases you bring forward you always suppose the debt already

contracted, forgetting that I uniformly contend that it is the relative state of the currency which is the motive to the contract itself. The corn, I say, will not be bought unless money be relatively abundant; you answer me by supposing it already bought and the question to be only concerning the payment. A merchant will not contract a debt for corn to a foreign country unless he is fully convinced that he shall obtain for that corn more money than he contracts to pay for it, and if the commerce of the two countries were limited to these transactions it would as satisfactorily prove to me that money was redundant in one country as that corn was redundant in the other. It would prove too that nothing but money was redundant.

(*Works*, Vol. VI, pp. 26-27, Ricardo to Malthus,
18 June 1811)

It was against this background that Malthus went to Ricardo's home in New Grove for breakfast on a Saturday morning in June of 1811. Whether Horner or Sharp was present is not known, but for the next thirteen years the controversies and debates between the two would be pursued, both in the private and public forums.

The Private Debate, 1811-1815

By far the most significant of Ricardo's activities, between 1811-1815, in the development of his theory was his correspondence with Malthus. For two years their intercourse was primarily concerned with the role of money, but eventually they turned to the problem of the functional distribution of income and the repercussions of the accumulation of capital upon output and employment. These private discussions, which Keynes called the "most important literary correspondence in the whole development of Political Economy" (Keynes 1937, p. 137), provided the beginnings not only of his theory of profits, wages and rents, but of a theory of value that later played such an important role in Ricardo's schema.

At first they believed only minor differences prevented them, as Ricardo put it, "from being precisely of the same opinion on the subject of money, and the laws which regulate its value" (*Works*, Vol. VI, p. 24). They had hoped to settle these few objections privately and to agree upon the question of monetary reform and the establishment of a procedure for the redemption of specie payments by the Bank of England. However, the differences proved to be more pronounced than first supposed, and the gulf widened as their controversy depended to encompass what Malthus called, "points relating to the metaphysics of Political Economy" (*Works*, Vol. VI, p. 139; Malthus to Ricardo, 9 October 1814).

To some extent their differences were methodological. They disagreed with respect to both the means and the purposes of political economy, and found themselves further opposed, since Malthus tended to stress the particular and

transitory aspects of economic activity, while Ricardo consistently was concerned with the more general and permanent influences in the system. But the most interesting aspect of the controversies was the manner in which the development of their respective theories always emerged when their disputes were fully aired. The various theories that each set forth had a fundamental unity of economic orientation, reflected in all their subsequent pamphleteering, including the *Principles of Political Economy*. Malthus and Ricardo were representative of the basic conflict of their time, since Malthus's theories always led to policy formulations which protected agriculture, while Ricardo consistently supported the trends toward further industrialization. This conflict in basic viewpoint led ultimately to opposing theories of value, first evident in their disagreement over the origin of profits.

Ricardo consistently used the tenets of political economy to justify policy, such as the redemption of specie payments by the Bank of England, the nationalization of the Bank, the defeat of the Corn Law, and even his Ingot Plan. It was this constant application of his theories to questions of policy which put him at cross purposes with Malthus, who advocated theories which would not change any of the existing institutional or economic parameters of the system. Ricardo continually attempted to use theory as an instrument of policy. The concern with policy, and the use of economic theory to justify policy, was what Schumpeter called the "Ricardian Vice." Two elements constituted the "vice": (1) "the habit of establishing simple relations between aggregates that then acquired a spurious halo of causal importance, whereas all the really important (and, unfortunately, complicated) things are being bundled away in or behind these aggregates," and (2) the habit of applying the results of this type of theorizing "to the solution of practical problems." It was in terms of this "vice" that Schumpeter argued that Keynes and Ricardo were "brothers in spirit" since both dealt with aggregates and both based policy recommendations upon theory by "piling a heavy load of practical conclusions upon a tenuous groundwork, which was unequal to it yet seemed in its simplicity not only attractive but also convincing" (Schumpeter 1954, pp. 668, 473, 1171 and *passim*).

Malthus, in contrast, reflected a conservative bias toward resolving all contingencies prior to the implementation of policy, defining, refining, and defining once again the economic consequences. The difference in the heretic's urgency to bring about change and the conservative's desire to maintain the status quo constituted an important aspect of the gap which separated Ricardo and Malthus on the issues of economic theory.

Ricardo was quick to reach for the tentative generalizations and to ignore the exceptions. During their discussions of monetary reform, he wrote to Malthus:

The definition which you give of the word redundant . . . is not satisfactory to me. Though it should be allowed that the rise in the price of one commodity, in the case of a scarcity of corn, should be accompanied with a fall in the prices of all others, why should a redundancy of currency be impossible under such circumstances? The currency must, I apprehend, be considered

as a whole and as such must be compared with the whole of the commodities which it circulates. If then, it be in a greater proportion to commodities after than before the scarce harvest, whilst no such alteration has taken place in the proportions between money and commodities abroad, it appears to me that no expression can more correctly describe such a state of things than a "relative redundancy of currency." . . . If however I thought that the difference between us was as to the correct use of a word, I should immediately yield the point in dispute, but I am persuaded that we do not agree in the principle.

(17 July 1811, *Works*, Vol. VI, pp. 35-37)

The dispute involved one of Ricardo's implicit but most frequent assumptions: one should be concerned with the "real" forces at work and "put money out of the system." Ricardo looked upon money as a *numeraire*, and could not fathom Malthus's reasoning that changes in a single market (corn) could affect the relationship of money to the total output of goods. Since Malthus conceded that a rise in the price of one commodity would cause a fall in the price of all other goods, for Ricardo it followed that money would remain in the same relationship to total output as before. But granting the quantity theory of money, Malthus questioned whether changes in single markets might not cause the import or export of specie even though, in the aggregate, the relationship of money to goods had not changed. Ricardo argued, on the other hand, that the amount of money employed in any country was regulated by its value, and that the shipment of specie to settle international accounts was proof of redundancy in the exporting country. But Malthus could not accept the principle that the export of specie was evidence that the money supply was redundant relevant to the output of commodities. He maintained that a bad harvest would decrease the value of money, relative to corn, while rendering money more valuable relative to all, other commodities, and that under these conditions money might be exported even though the commodities made cheaper by the alteration in relative values might be retained. The two could not agree because Ricardo's emphasis on aggregates led him to stress the constancy of the relationship of money to the total system, while Malthus's concern with the movement of particular markets led him to seek causal relations between particular alterations and the movement of the system as a whole.

Another methodological difference was that Ricardo had but one purpose in the lengthy discussion of the "redundancy" of currency: to prove that if nations truly understood their own interest they would never export money but for reasons of redundancy (*Works*, Vol. VI, p. 63). The issues to be resolved were what individuals in nations should do, and what in fact they did do. He was not greatly concerned about the latter, saying that

it is sufficient for my purpose if I can clearly demonstrate that the interest of the public is as I have stated it. It would be no answer to me to say that men were ignorant of the best and cheapest mode

of conducting their business and paying their debts, because that is a question of fact not of science, and might be urged against almost every proposition of Political Economy. It rests with you therefore to prove that a case can exist where it may become the *interest* of a nation to pay a debt by the transmission of money rather than in any other mode, when money is not the cheapest exportable commodity . . .

(*Works*, Vol. VI, p. 64; italics in original)

Malthus's appeals to the facts, as related to Jamaican exchange, fell on deaf ears, since Ricardo insisted that only an alternative theoretical formulation of the general principle could provide the disproof of correct science.

Malthus, attempting to prove that the export of specie was not necessarily a reflection of "a general redundancy of currency," an excess of the money supply over the quantity of commodities, contended:

In the case of a *real* redundancy of currency all commodities are affected, and are rendered dearer at home and comparatively cheaper abroad; whereas in the *other cases* the prices of particular commodities alone are affected, which I hold to be a most important difference.

(*Works*, Vol. VI, p. 78; italics added)¹¹

The following month, February 1812, he wrote:

though the effects of a redundancy of currency upon the exchange are *sure*, they are slow compared with the effects of those mercantile or political transactions, not connected with the question of currency and while the former of these causes is proceeding with a steady and generally uniform pace, the more rapid movements of the latter are opposing, aggravating or modifying their operations in various ways, and producing all those complex and seemingly inconsistent appearances which are to be found in the computed exchange.

(*Works*, Vol. VI, p. 82; italics in original)

Whether the more permanent influences of a general redundancy or the transitory and passing political and mercantile changes dominated the market for foreign exchange was essentially the problem of whether general or particular

¹¹ Malthus's stress upon particulars contrasted with Ricardo's repeated emphasis upon the general aspects of analysis. In the case at point, Malthus could have been correct, when he said that only particular products were affected by changes in particular markets, if the products in question had both supply and demand functions of unitary elasticity. Otherwise a change in one market must have repercussions in other markets. Ricardo's box of tools did not contain one labelled "elasticity," and all he could say was that a fall or rise in value in one market had to be accompanied by alternate changes in other markets.

markets were more significant to the understanding of the system. Ricardo believed that if changes in a particular market, or the fact that bullion was being exported for reasons other than general inflation, could not disprove the theoretical generalizations, then the generalizations should dominate in the determination of policy. He looked upon Malthus's factual data as evidence of the everyday machinations of the basic tenets of the science of political economy. From his own experience in the business world he had learned that businessmen seldom knew anything about the science of political economy, and to formulate the principles of the science based upon what they did would be a mistake. When Malthus suggested they ask bullion merchants why they imported or exported specie, to find whether temporary or permanent influences were more important, Ricardo was dubious about the results one might come up with:

I have been making enquiries concerning a bullion merchant. I find that the trade is mostly carried on by a class of people not particularly scrupulous in their modes of getting money, and I am told that they would not be very communicative, particularly on the subject of their *exports*.

(Ricardo to Malthus, 22 March 1813,
Works, Vol. VI, p. 90; italics in original)¹²

"Men of affairs" were typically ignorant of the rudiments of science and would add little to the solution of theoretical propositions, just as glass makers were not experts on the general principles of chemistry.

The controversy between Malthus and Ricardo moved from redundancy to other topics, but the same methodological differences persisted. The discussion of the significance of particular markets and, more important, of the influence of changes in the demand for particular commodities upon general profits, retained the methodological differences. This new topic eventually pushed the disputants to an analysis of the regulator of profits.

As was the case with almost their entire correspondence, the character of the letters between Malthus and Ricardo in the early years was very formal, with little discussion of anything other than their contrasting theoretical views. After brief salutatory remarks, each correspondent quickly picked up the current discussion. There were two exceptions to this practice. One concerned the logistics of visiting each other, Ricardo going up to Hertford or Malthus coming into London. The second exception involved the numerous plans so their wives might meet one another, but the efforts always seemed to collapse for some domestic reason;

¹² When Sir John Sinclair (1754-1835) requested a list of Stock Exchange members who might supply information on recent stock market fluctuations and the repercussions, Ricardo replied: "The Stock Exchange is chiefly attended by persons who are unremittingly attentive to their business, and are well acquainted with its details; but there are very few in number who have much knowledge of political economy, and consequently they pay little attention to finance, as a subject of science. They consider more, the immediate effect of passing events, rather than their distant consequences." (*Works*, Vol. VI, pp. 150-151)

The contrast between what Ricardo believed, and the way the majority of his fellow brokers behaved, was one of the reasons he was such a successful broker, as discussed in Chapter VI.

Harriett and Priscilla finally got together when their husbands met at the Ricardos' home for dinner in 1814. Both men were very involved in their respective careers, Malthus at the College and his Walesby parish, Ricardo at the Exchange. Ricardo's London circle of economists widened, as he became friends with Mushet, Sharp, Horner and Thornton. Whenever Malthus came to town, Ricardo would invite several others to join in the discussion, especially if any of Malthus's friends from his Cambridge days were available, such as Smithson Tennant (1761-1815) and John Whishaw (1764-1840). Tennant was a member of the Council of the Geological Society and Cambridge Professor of Chemistry, while Whishaw was a Commissioner of Audit, a prominent Whig, and a graduate of Jesus College.

In contrast to the character of Ricardo's relation with Malthus, there were his more informal contacts with Mill. They seldom discussed political economy, mainly because Mill was not as sophisticated in the subject as Ricardo and Malthus. Illustrative of this deficiency was their reaction to a manuscript that Mill wrote on money. The reason for Mill's work was that Bentham apparently continued to want to do something in the area, so his circle continued to discuss monetary matters. With Bentham in Surrey were Mill, Dumont and other disciples, and from their collective views Mill prepared a manuscript which he forwarded to Ricardo for comment (*Works*, Vol. VI, pp. 49-50; Mill to Ricardo, 22 September 1811). Ricardo's response was not negative but there were problems, primarily because Mill was not very careful in defining his terms, especially not being clear about the differences between the "value" and "price" of bullion in the trading countries. Also:

You observe that the *demand* for corn is unlimited. It is clear that you attach a different meaning to the word demand to what I do. I should not call the mere desire of possessing a thing a demand for it, such desires are undoubtedly unlimited,—but by demand I should understand a desire to possess with the power of purchasing. If so demand is limited.—There are one or two other points which I shall discuss with you when we meet.

(*Works*, Vol. VI, p. 56; Ricardo to Mill, 26 September 1811;
italics in original)

While desiring anonymity, Mill asked Ricardo if he might have Sharp or Malthus read the manuscript, and accordingly the material was sent to Malthus, whose views were much the same as Ricardo's.

From the introduction I concluded that I should find very accurate definitions of the words money value currency and exchange; but I did not observe any explanations of these terms calculated to give greater precision to the discussion . . .

On the subject of the level of the precious metals all over the world, I cannot by any means agree with him, in the mode in which he has stated it; and on many minor points he does not

appear to me to be right. I should not therefore upon the whole expect that it will silence many adversaries, and I had rather see something more from your pen the effect of which I have no doubt would be considerably greater.

(*Works*, Vol. VI, pp. 61-62; Malthus to Ricardo, 20 October 1811)

Ricardo initially told Malthus the manuscript was written by a friend, and so probably the latter knew Mill was the author, though nothing was said about identifying the person. The Mill manuscript died for want a second, as it was never published and disappeared. Horner once had suggested that Mill was "guilty of deplorable heresies" when it came to monetary theory, and apparently the latest effort had not overcome the problem. Neither Bentham nor Mill ever again tried their hand at writing on monetary theory.

As to more personal matters, Mill was presumptuous in his correspondence with Ricardo. On one occasion, for example, he inquired:

There is a family of Ricardos, too, at Islington, whom I hate very much—if you can tell me that any mischief has befallen them, it will be very satisfactory.

(*Works*, Vol. VI, p. 49; Mill to Ricardo, 22 September 1811)

The Ricardos of Islington were the seventy-nine year old Abraham and those of his ten unmarried children who were living with him at the time. The son, David, replied:

I have not seen but a small part of the Ricardos of Islington,—those whom I have seen entertain sentiments for you no way differing from those which you feel towards them, so take care of yourself. Consider how they unite when attacked. All the Mills in the world would not be a match for them when fairly roused.

(*Works*, Vol. VI, p. 56; Ricardo to Mill, 26 September 1811)

On another occasion Mill lectured his friend on the folly of his move to Grosvenor Square:

I know not what to say about your removal to the West end of the town. I like not to live there myself. I hope you mean not to set forward in the career of fashionable life; which is a source of misery not of happiness even to those who pursue it; which is gone into by one half of its votaries to escape from *ennui*, by another half in the wretched contest of who shall appear to be richest, to have most to spend; and some are dragged into it from mere listlessness and indolence, from an unwillingness to take the

trouble of resisting the torrent. One consequence of such a course of life, which in your case I should tremble to think of, is so general as to be almost unavoidable, that the children are brought up with minds thoroughly incapable of happiness, without resources in themselves, and totally dependent on the accidents which govern the sort of life to which they have been habituated. This however is preaching—and I hate preaching, which was never more useless than it is on the present occasion—As for its impertinence, preachers have a title to be impertinent. If I were in a pulpit you would love me the better, the worse I should tell you that I thought of you. Moreover, in regard to the training of children to the best chance of happiness, as I have much attended to it, I hold myself a little entitled to speak, and yours are children who deserve attention to be bestowed upon them, and will repay it.

*(Works, Vol. VI, pp. 59-60; Mill to Ricardo,
15 October 1811, italics in original)*

In the meanwhile, Malthus and Ricardo continued their discussions on a higher plane. Much of this interchange occurred over dinner, or at tea time, since the correspondence for the years 1812 and 1813 is very sparse, compared with that of 1811. Other reasons for the period of brief correspondence were occasioned by Ricardo's move to the West end, and his travels to find a suitable country estate for his approaching retirement. Malthus himself was busy defending the continuation of the East India College, and even published a pamphlet on the topic in May of 1813 (James 1979, pp. 216-232). On the issue of whether a redundancy of currency was responsible for the unfavorable balance of exchange, Ricardo wrote in December, 1812:

On many points connected with our old question we are I believe agreed,—though there is yet some difference between us. I have not lately given it so much consideration as you have,—and I always regret that I do not put down in writing, for I have a very treacherous memory the chief points of difference that occur in our discussions. I cannot help thinking that there is no unfavourable exchange which may not be corrected by a diminution in the amount of the currency, and I consider this to afford a proof that the currency must be redundant for a time at least. Whilst the exchange is unfavourable it is always accompanied though not always caused by an excess of currency.

*(Works, Vol. VI, pp. 87-88; Ricardo to Malthus,
17 December 1813)*

By the summer of 1813 they were involved in a new topic, one which led to their greatest controversy. They agreed that since the wars with France had commenced, Britain had accumulated great wealth and prosperity. Given such a

rapid increase in accumulated capital, it should have shown "itself in a low rate of interest" in keeping with Adam Smith's premise that capital accumulation lowered the rates of profit and interest. But the rate of interest had not fallen, and about that fact Malthus and Ricardo also agreed. The disagreement centered on why accumulation had not produced lower profit and interest rates. So far as Ricardo was concerned, during the period there had been "decided improvements of agriculture both here and abroad," as "the French revolution was exceedingly favorable to the increased production of food" (*Works*, Vol. VI, p. 94; Ricardo to Malthus, 17 August 1813). For Malthus, apparently, the increase in accumulation was due to an increase in the demand for particular commodities. As Ricardo summarized their contrasting positions:

I quite agree, that an increased value of particular commodities occasioned by demand has a tendency to occasion an increased circulation, *but always in consequence of the cheapness of some other commodities*. It is therefore their cheapness which is the immediate *cause* of the introduction of additional money [for the commodities for which the demand has risen].

(*Works*, Vol. VI, p. 95; Ricardo to Malthus, 17 August 1813; italics added)

Ceteris paribus, an increase in the demand for one set of commodities could only come at the expense of a decrease in the demand for some other set, as the redistribution of demand would not increase the total quantity of resources in production. The latter could occur only when there was an increase in the facility of production of some set of goods, food, and that alteration would lead to increased wealth. Ricardo's position was an early general equilibrium argument, one that traced the *cause* of increased wealth to the facility of production.

Malthus wrote no letters to Ricardo in the last four or five months of 1813, but Ricardo was working on a manuscript which Trower referred to as "papers on the profits of Capital" (*Works*, Vol. VI, p. 102; Trower to Ricardo, 2 March 1814). Written some time during the last months of 1813, or early the next year, Ricardo sent the manuscript to Trower for his comments. It is interesting that he did not send it to Mill. As a matter of fact, there is no evidence Mill ever saw the manuscript until after it was published in 1815 as the *Essay on Profits*. When he read Ricardo's manuscript, Trower raised several questions, but commented he was not sure he understood the basis of the dispute. Ricardo replied within the week:

Without entering further into the question I will endeavor to state the question itself. When Capital increases in a country and the means of employing Capital already exists, or increases, in the same proportion, the rate of interest and of profits will not fall.

Interest rises only when the means of employment for Capital bears a greater proportion than before to the Capital itself, and falls when the Capital bears a greater proportion to the arena,

as Mr. Malthus has called it, for its employment. On these points I believe we are all agreed, but I contend that the arena for the employment of new Capital cannot increase in any country in the same or greater proportion than the Capital itself, unless there be improvements in husbandry—or new facilities be offered for the introduction of food from foreign countries—that in short it is the profits of the farmer which regulate the profits of all other trades—and as the profits of the farmer must necessarily decrease with every augmentation of Capital employed on the land, provided no improvements be at the same time made in husbandry, all other profits must diminish and therefore the rate of interest must fall. To this proposition Mr. Malthus does not agree. He thinks that the arena for the employment of Capital may increase, and consequently profits and interest may rise, altho' there should be no new facilities, either by importation, or improved tillage, for the production of food—that the profits of the farmer no more regulate the profits of other trades, than the profits of other trades regulate the profits of the farmer, and consequently if new markets are discovered, in which we can obtain a greater quantity of foreign commodities in exchange for our commodities, than before the discovery of such markets, profits will increase and interest will rise. . . .

Nothing, I say, can increase the profits permanently on trade, with the same or an increased Capital, but a really cheaper mode of obtaining food. A cheaper mode of obtaining food will undoubtedly increase profits says Mr. Malthus but there are many other circumstances which may also increase profits with an increase of Capital. The discovery of a new market where there will be a great demand for our manufactures is one.

(*Works*, Vol. VI, pp. 103-104; Ricardo to Trower,
8 March 1814)

Malthus initially had raised the point about the significance of an increase in the demand for particular commodities the previous summer, when he and Ricardo were still debating the causes behind an export of specie. He claimed a sudden increase in the domestic demand for particular foreign goods would necessitate an increase in the export of specie, independent of increases in the money supply. Ricardo countered with his proposition that any increase in the domestic demand for imports would be "at the expense of the consumption of some home commodity." Furthermore:

This would again swell the value of our exports and imports but does not prove a general increase of profits nor any material growth of prosperity.

I am of opinion that the increased value of commodities is always the effect of an increase either in the quantity of the circulating medium or in its power, by the improvements in economy in its use [velocity],—and is never the cause.

(*Works*, Vol. VI, p. 93; Ricardo to Malthus, 10 August 1813)

As the letter to Trower suggests, by 1814 Ricardo had shifted his emphasis away from concentrating upon increases in the money supply, and was stressing the crucial role of increasing agricultural productivity as a prerequisite for a rise in British wealth. Malthus's argument that an increase in wealth could be triggered by an increase in the foreign demand for British manufactures was invalid, because such an increase was only temporary, until such time as resources would be reallocated. Once the reallocation had occurred, total profits would be no greater than they were prior to the rise in the demand for particular commodities. There was but one way for total profits to rise, and that was through an increase in productivity in some sector, particularly food. For the case in point, the rise in British wealth over the period 1793-1813, Ricardo traced it exclusively to improvements in both French and British agriculture, and not because of the discovery of new markets for British manufactures. Nothing could permanently increase general profits but a "cheaper mode of obtaining food."

In explaining his formulation to Trower, Ricardo had sketched the outline of his corn model, wherein the profits of farmers regulated the profits of all other sectors. In the absence of improvements in the facility of producing agricultural goods, and the concurrent reductions in real cost, no temporary increase in the demand for manufactures could permanently increase general profits. In October of 1814, both Malthus and Ricardo recognized that their disagreement over what regulated profits centered on the role of demand, as against the significance of lower costs of production in agriculture. As Malthus explained in a long letter:

You seem to think that the state of production from the land, compared with the means necessary to make it produce, is almost the sole cause which regulates the profits of stock, and the means of advantageously employing capital. After what I have written on the subject of food and population I can hardly be supposed not to allow a very great effect to so very great a cause.

. . . It appears to me that nearly all which can be safely advanced respecting the dependence of profits on the state of the land is, that the facility of acquiring food, and particularly the possession of a great quantity of good land is the main cause of high profits . . . and that the difficulty of acquiring food is the main cause of low profits, and the ultimate check to the indefinite extension of capital population and demand. But that in the interval between the two extremes, considerable variations may take place; and that practically no country was ever in such a state as not to admit of

increase of profits on the land, for a period of some duration, from the advanced price of raw produce.

The Profits of stock . . . may be said to be accurately equal to the price of produce, *minus* the expence of production . . . whenever the price of produce keeps a head of the price of production the profits of stock must rise. And this has unquestionably been the case on the land in this country during the last 20 years. It is not the *quantity* of produce compared with the expence of production that determines profits, (which I think is your proposition) but the exchangeable value or money price of that produce, compared with the money price of production. And the exchangeable value of produce is not of course always proportioned to its quantity. . . . In stating the cause of high profits you seem to me to consider almost exclusively the expence of production, without attending sufficiently to the price of produce, and greatly to underrate the wants and tastes of mankind in affecting prices, and consequently in affecting the means of employing capital.

What is it I would ask that enables the foreign merchant to sell the tea sugar and tobacco which he imports at a higher price than the manufactures which he has sent out in exchange for them. Solely their being suited to the wants and tastes of society. There is no greater power to purchase them, but there is a greater will. And the *final cause* of the wealth which the country derives from these commodities, and of the means of profitably employing capital in their importation, is the existence of a taste for them. It is in considering merely of the proportions of commodities to one another, and not of their proportions to the wants and tastes of mankind that the error of Mr. Mill, in my opinion, consists.

(*Works*, Vol. VI, pp. 139-141; Malthus to Ricardo,
9 October 1814; italics in original)

The small difference between them, which Malthus and Ricardo originally believed existed, was by 1814 a wide chasm. Malthus was looking at the difference between the price and cost of particular goods, partial equilibrium, while Ricardo was analyzing the cause of general profits as a proportion of total output, a matter of general equilibrium. Thus:

I am not aware that I have under-rated the effect of the wants and tastes of mankind on profits,—they frequently occasion large profits on particular commodities for short periods,— but they do not I think often operate on general profits because they do not often influence the growth of raw produce. Adam Smith . . . concisely expresses what appears to me correct, of the effects of

demand on the prices of commodities.¹³ I go much further than you in ascribing effects to the wants and tastes of mankind,—I believe them to be unlimited. Give men but the means of purchasing and their wants are insatiable. Mr. Mill's theory is built on this assumption. It does not attempt to say what the proportions will be to one another, of the commodities which will be produced in consequence of the accumulation of capital, but presumes that those commodities only will be produced which will be suited to the wants and tastes of mankind, because none other will be demanded.

The very term accumulation of capital supposes a power somewhere to employ more labour,— it supposes the total income of the society to be increased and therefore to create a demand for more food and more commodities . . . You appear to think,— indeed you say "that you know of no other cause for the fall of profits which generally takes place from accumulation than that the price of produce falls compared with the expence of production, or in other words that the *effective* demand is diminished" and by what follows you seem to infer that commodities will not only be relatively lower but really lower, and this is in fact the foundation of our difference with regard to the theory of Mr. Mill.

(*Works*, Vol. VI, pp. 147-149; italics in original)

Methodologically, there was a great deal of affinity between Ricardo's monetary theory and his early views on profits. The sole cause of the high price of bullion was due to the excessive issue of notes by the Bank of England, as he denied any influence to demand on the imbalance of trade for the export of bullion. Likewise, the sole cause of accumulation (profits) was due to the improvements in the facility of producing food, as he pushed aside the argument that an increase in the foreign demand for particular British commodities had any influence. The single cause of inflation and the single cause of increased profits were to be found in the conditions of production, in the sources of supply as the demand conditions in individual sectors had no permanent effect upon the movement of the system as a whole. The condition of production in the food producing industry determined the level of profits not only in that sector, but in all sectors of the system, and there was no way that demand in a particular sector could raise the level of general profits.

¹³ "The increase of demand, besides, though in the beginning it may sometimes raise the price of goods, never fails to lower it in the long run. It encourages production, and thereby increases the competition of the producers, who, in order to undersell one another, have recourse to new divisions of labour and new improvements of art, which might otherwise not have been thought of. The miserable effects of which the company complained, were the cheapness of consumption and the encouragement given to production, precisely the two effects which it is the great business of political economy to promote." (Smith 1937, p. 706) The context of Smith's discussion is that of the East India Company, which restricted new producers and new divisions of labor.

Nor was it a matter of particular sectors alone, since the crucial role which food played in the determination of profits was for Ricardo the most significant factor that made this sector so all important. Malthus, on the other hand, argued that the "final cause" of profits was the existence of a "taste" for commodities, and "taste" or the "desire for goods" was not limited to any particular good, or group of goods, but could be a factor in any sector. While Malthus admitted there was a *tendency* for the fertility of the land to regulate wages, and that wages were the major determinants of profits, he also claimed that changes in individual demand ultimately determined profits. In November of 1814 he wrote:

I have never that I recollect doubted or denied the general *tendency* of the accumulation of capital upon the land to diminish profits. But the acknowledgment of this obvious truth appears to me to be very different from the general position that the state of the land *regulates* profits.

Nothing can be more certain . . . than that the state of the land is the main cause of high wages, or the most scanty wages, according as it is fertile and abundant, or comparatively poor and scarce. But still it would be most incorrect to say that the state of the land *regulates* wages; because there are numerous instances where land is fertile and abundant, and yet wages are very low and the population stationary or retrograde. The reason for this is that tho' fertile land and a great plenty of it are the main cause of high wages of labour, yet they are not the sole or regulating cause, and without the accumulation of capital, which may be prevented by extravagant habits or a bad government[,] are inefficient to produce such high wages. In the same manner though the state of the land—whether it is fresh and fertile, or comparatively at its utmost stretch of exertion, be the main cause of high profits, and of the final fall and almost ultimate extinction of profits, yet as the state of the land is by no means the sole cause which determines profits, but as they are powerfully influenced by the varying demands for product occasioned by the prosperous or adverse state of commerce and manufactures, and the constant tendency to a fall in the wages of labour, it neither accords with theory or experience to call the state of the land the *regulator* of general profits. It is of course by no means enough to say that from the state of production from the land, compared with the means necessary to make it produce, you can infer with certainty the state of general profits; as this is merely saying what everybody knows, that all profits must *caeteris paribus* be on a level. But the question is whether agriculture always takes the lead in the determination? and I should certainly say that it did not. When a new foreign commerce is opened, and new objects greatly in demand are brought into the market, the profits of such commerce

must be higher than usual; and you allow that in this case capital may be taken from the land. But to allow this is at once to allow that the profits of foreign commerce determine in this case the profits on the land and that whichever is the highest will take the lead of the other.

(Works, Vol. VI, pp. 152-153; italics in original)

Edward Gibbon, the famous historian, once remarked it was "more pleasant to build castles in the air than on the ground," but even philosophers seldom engage in such fantasies, since typically there are epistemological factors which are ultimately grounded in reality. Theorizing for theory's sake is a luxury engaged in by a very small minority of thinkers, especially in areas related to the human condition. As Dobb observed:

the history of political economy from its inception makes abundantly clear how closely (and even consciously) the formation of economic theory was linked with the formation and advocacy of policy.

(Dobb 1973, p. 22)

And so it was that the running private debate between Malthus and Ricardo, over the question of the reason for the rise in profits, was tied to the very practical problem of whether protection should be accorded to British agriculture. If Malthus had conceded to Ricardo's hypothesis that the ratio of input to output in agriculture determined the general level of profits, he would have been forced to agree that the free importation of corn would raise the rate of profits and stimulate capital accumulation. Instead, he argued that profits were not regulated exclusively by the rate of return on land, since an increase in the foreign demand for particular commodities could also lead to greater profits without any change in the conditions of domestic agricultural production. On the other hand, if Ricardo had relinquished his position, there was no longer a theoretical support for his policy recommendation *vis-à-vis* the new corn law, and it was with respect to the protection to agriculture that the controversy over the regulator of profits was started.

The first pamphlet of their corn law debate was published by Malthus in the spring of 1814, *Observations on the Effects of the Corn Laws and of a Rise or Fall in the Price of Corn on the Agriculture and General Wealth of the Country* (Malthus 1970, pp. 95-131).¹⁴ Whether Ricardo read the manuscript of Malthus's *Observations* there is no telling, and his first reference to the pamphlet was in late June. Meanwhile, Ricardo's "papers on the profits of Capital" had been circulating since February, with presumably Trower, Mill and Malthus as readers, an inference drawn from a letter of Trower to Ricardo (Works, Vol. VI, p. 102; Trower to

¹⁴ The reprint is that of the second edition, published a few weeks after the first, with only some slight alterations and corrections.

Ricardo, 2 March 1814). But the only person to correspond about the "papers" was Trower, as neither Malthus nor Mill ever mentioned the manuscript. The former was all too familiar with Ricardo's position, while the latter may have discussed the issues with the author in private.

The importance of Malthus's 1814 pamphlet and Ricardo's manuscript of the same period, lies in the fact that the two pieces represented the beginnings of their public corn law controversy of February 1815. In his *Observations*, Malthus took a very neutral position over the pros and cons of the economic consequences of the restrictions of grain imports, as he was proud of the fact his friends disagreed among themselves as to which side of the issue he supported. In February 1815, however, Malthus published his second corn law pamphlet and this time there was no question about his position, as he argued strongly for the restriction of the importation of foreign grain ("The Grounds of an Opinion on the Policy of Restricting the Importation of Foreign Corn intended as an Appendix to 'Observations on the Corn Laws,'" Malthus 1970, pp. 137-173). Ricardo, of course, could not have been surprised with Malthus's position in his *Grounds* pamphlet, given the extensive discussion over the preceding three to four years. Moreover, within two weeks Ricardo had rewritten his manuscript on the "profits of Capital," and published *An Essay on the Influence of a low Price of Corn on the Profits of Stock; shewing the Inexpediency of Restriction on Importations: with Remarks on Mr. Malthus' Two Last Publications: "An Inquiry into the Nature and Progress of Rent;" and "The Grounds of an Opinion on the Policy of restricting the Importation of Foreign Corn"* (*Works*, Vol. IV, pp. 9-41).

Ricardo's reference to Malthus's *Inquiry into the Nature and Progress of Rent* (Malthus 1970, pp. 179-225) was particularly significant in that he incorporated his friend's rent theory into his own theory of profits, thereby strengthening his argument that restrictions on corn imports was detrimental to the best interests of society. As suggested in Chapter I, Ricardo did not formulate a detailed theory of rent, but Malthus did, and the consequence of diminishing returns in agriculture was an addendum to Ricardo's theory of profits (see Sraffa, "Note on 'Essay on Profits,'" *Works*, Vol. IV, pp. 6-8)

Public Debate, 1815: Malthus and Ricardo on The Corn Law

One of the most fundamental problems that Britain faced during the early phase of the Napoleonic era grew out of the basic dependence of her expanding industrial economy upon domestic agriculture. The output of domestic agriculture which once had supplied the needs of the economy, and even allowed for an exportable surplus, was becoming increasingly deficient, and a major disproportionality between agricultural input and output was imminent. The proportion of the nation's total productive power going to agriculture was inadequate to feed the increasing population of the country. Between 1750 and 1800 the population of Britain increased about one-third, and the growing labor supply was taxing the country's agricultural foundation. At the same time, the wars

with France had cut off supplies from the Baltic, making importation so hazardous and unreliable that the country was almost exclusively dependent upon her own agrarian resources. It was symptomatic of these general changes that 1792 was the last year Britain had exportable corn surplus.

As the eighteenth century drew to a close, unprecedented increases in the price of corn brought forth an increased capital investment in agricultural areas which previously had been considered inefficient, as the land was inferior or unsuited to cultivation. The ever-rising cost of living during the French wars was fed by unrestricted issue of notes by the Bank, and the rise in the price of agricultural goods. The Bank provided the impetus for the inflationary increase in the money supply, while the agricultural sector added a "shock" component. The relative inelasticity of the demand for grain aided the inflationary pressures operating on all prices in a way that raised food prices disproportionately.

Between 1773 and 1790 the average price of corn had been 46s.3d. a quarter, but in 1801 it was 119s.6d. a quarter (Fay 1932, pp. 32-34; a quarter of grain equals eight bushels). For a fifty year period between 1715 and 1765, the price of corn had averaged 36s. a quarter; averaged 47s. until 1793, to 126s.6d. a quarter in 1812 (Lipson 1950, p. 130). Although high corn prices were a general phenomenon of the period of the wars, prices fluctuated wildly within the averages quoted. The severe winters of 1794-5 and 1800-1 produced such meager crops that prices skyrocketed and Britain was faced with near-famine conditions. To cope with the instability of prices and inadequacy of the food supply, a system of war-time food controls was established, corn imports were subsidized, restricted consumption of corn was encouraged by the government, and the enclosure movement, motivated almost exclusively by the desire for tillage, was extensively promoted (Mantoux 1928, p. 146).¹⁵

When the price of corn fell in 1802 and 1803, due to the extensive improvements in agriculture from increased investment and the Peace of Amiens, agricultural interests in Parliament were quick to act. A new corn law, designed to maintain prices at the 1801 level, was passed in 1804. The law stipulated that whenever foreign corn was less than 63s. a quarter, the import duty was to stand at 30s.3d., thus stabilizing the domestic price at 93s.3d. In the event of a bountiful domestic harvest, as a concession to the industrial sectors, the corn price was to fall to 54s., at which point corn exports would be encouraged. Despite the legislation, the 1804 Corn Law did not succeed in maintaining the 1801 price level. Protest from the industrial sector was sufficiently effective that the government set the price of corn at 89s.9d. a quarter in 1805, though subsequently it rose to the high of 126s.6d. a quarter in 1812.

¹⁵ "The changed situation is reflected in the attitude of writers who had hitherto decried the need for enclosures. Now that an increase in the productivity of the soil was recognized to be an economic necessity, the critics fastened upon the methods of enclosures and the failure to take adequate steps to alleviate the situation of those injuriously affected." (Lipson 1950, p. 130)

The number of enclosures in the first decade of the nineteenth century was double that of any decade in the eighteenth. Cf. Deane and Cole 1969, p. 95., n.1.

The corn laws were symptomatic of the attitude of the agricultural interests that controlled Parliament. Theoretical support for the protection of British agriculture came from the pens of those such as Spence and Cobbett who claimed the country's agriculture was the basis of its strength, and given the exigencies of the war-time conditions in the first decade of the century, corn imports were not a great threat to domestic markets. But conditions changed about 1811 and 1812, as imports rose and a series of excellent domestic harvests produced a drastic fall in the price of British corn, especially in 1813. As discussed above, Ricardo attributed the increase in profits to the improvements in agriculture, while Malthus looked to the increased foreign demand for British manufactures. A Parliamentary Committee on the Corn Trade was appointed in the spring of 1813. Prices in 1814 were even lower than they had been in 1813, again because of good harvest in 1813 and imports that flowed into the country with the peace of March 1814. The Committee Report, which called for new restrictions on imports, and a continuation of the Corn-Law philosophy which went back as far as Edward IV, was the subject of the Parliamentary debate of February 1815. The proposal was intended to maintain the British corn price at 80 shillings a quarter. The agitation surrounding the proposal included a flood of pamphlets and petitions, not unlike the extreme pamphleteering that had occurred at the time of the bullion *Report*. February 1815 may well have been one of the most important months in the history of political economy, as the following list of publications suggests:

- 3 February Malthus, *Inquiry Into Rent*
- 10 February Malthus, *Grounds of an Opinion*
- 13 February West, *Essay on the Application of Capital to Land*
- 24 February Torrens, *Essay on the External Corn Trade*
- 24 February Ricardo, *Essay on Profits*

In the years 1813 and 1814 Malthus had claimed the Ricardian strictures were subject to the many exceptions, before there could be agreement as to the influence upon general profits from a rise in the efficiency of agricultural production. Admitting the corn laws prevented the importation of foreign corn, he was not convinced this restriction had an adverse effect upon profits, for he looked to other causes for the regulator of profits. He was not sure of the effects of the corn laws upon British production and distribution. He had presented "both sides of the question" in his *Observations*, where he refrained from expressing a personal bias, and in February 1815, he published his *Inquiry into Rent*, which was intended to be an objective statement of the effect of rising supply price upon the cost of production. However, when he published his *Grounds of an Opinion*, Ricardo said, "you have quite thrown off the character of impartiality" (*Works*, Vol. VI, p. 177; Ricardo to Malthus, 13 February 1815.)

Malthus "Grounds" for his opinion that the corn laws should be retained were twofold. First, and least important, was that France recently had passed legislation to the effect "that the exportation of corn shall be free until the price rises to forty-nine shillings a quarter and that then it shall entirely cease" (*Grounds*, Malthus

1970, p. 145). This meant, Malthus argued, that Britain's chief source of foreign corn would be cut off in the event of a bad harvest or, more important, war. Consequently, even if Britain were to open her ports, existing legislation in the country of her chief supplier would deny the benefits of free trade (Malthus 1970, pp. 149-151).

Because this argument was not an economic refutation of the principle of free trade, Malthus turned to his major theoretical support for protection of domestic agriculture. The most immediate effect of opening British ports would be a drastic fall in the price of agricultural goods, which in turn would lead to a decrease in agricultural investment. However, and this was the significant point in Malthus's *Grounds*, the capital released from agriculture would not be reallocated to manufacturers. The decreased agricultural production would not be compensated for by an increase in manufacturing production.

Without offering any analysis to substantiate this claim, Malthus went on to describe the bleak future for the British working classes, agriculture, and even manufacturers, if free trade were to become the basic policy of the British economy.¹⁶ He claimed:

Nothing could counterbalance this [fall in the price of corn], but a much greater demand for labour; and such an increased demand, in consequence of the opening of our ports, is at best problematical . . . *In a country, the peculiar defects of which were already a deficiency of capital, and a redundancy of population, such a check to the means of employing labour must be attended with no common distress.* In Ireland, it is quite certain, that there are no mercantile capitals ready to take up those persons who are thus thrown out of work, and even in Great Britain the transfer will be slow and difficult.

(*Grounds*, Malthus 1970, pp. 155-156; italics added)

The cause of unemployment in Britain, as Malthus viewed the problem, was a shortage of capital, and/or an excess of population, not an excess of accumulated capital. So far as capital was concerned, Britain was an underdeveloped economy and not one reflecting the characteristics associated with unemployed resources from a redundancy of capital. It was an economy suffering from what Joan

¹⁶ Malthus had argued with Ricardo that "wants and tastes" were limited. This may account for his assumption that manufactures could not make up for the deficiency of demand for the labour of agricultural groups. However, he did not state this as one of his reasons, either in the *Grounds* or in his earlier *Observations*. In the latter he did say ". . . the situation and employment of a manufacturer and his family are even in their best state unfavorable to health and virtue, it cannot appear desirable that a very large proportion of the whole society should consist of manufacturing labourers. . . . With a view to the permanent happiness and security from great reverses of the lower classes of people of this country, I should have little hesitation in thinking it desirable that its agriculture should keep pace with its manufactures, *even* at the expense of retarding in some degree the growth of manufactures [italics added]; but it is a different question whether it is wise to break through a general rule, and interrupt the natural course of things, in order to produce and maintain such an equalization." (*Observations*, Malthus 1970, pp. 117-119)

Robinson later described as "Marxian unemployment." That is, it was an economy in which population was increasing and

the stock of capital will be growing more slowly than available labour, while the amount of employment associated with a given stock of capital is continually falling as technological progress takes place, so that there will be a progressive increase in unemployment.

(Robinson 1949, p. 245)

Rather than technological progress being responsible for the disproportionate growth of labor to capital, Britain's problem was that it faced the probability of an increase in productivity from the importation of corn produced upon more fertile foreign soil. Therefore, free trade would mean unemployment. The increasing returns was a function of the heterogeneity of foreign land, rather than an increase in productivity brought about by domestic technological progress. But the effects would be the same, whether the disproportionate growth between labor and capital was a function of foreign agricultural or domestic technological improvement.

The significance of the assumption that Britain was suffering from a deficiency of capital, rather than an overabundance of accumulated surplus, rested upon the fact that the policy recommendations appropriate in an economy suffering from Marxian unemployment were by no means appropriate to an economy suffering from Keynesian excesses. In the latter, the stress may well be upon the encouragement of unproductive consumption and a protection of the inefficient segments of the economy, while in the former, the emphasis must be upon an increase in the surplus. Malthus's policy recommendations, in the relatively underdeveloped economy of post-Napoleonic England, were directed at weakening the incentive for manufacturing capital, rather than strengthening the drive for a larger surplus. He called attention to the problem in his *Observations*.

The question, as applicable to this country, is not whether a manufacturing state is to be preferred to one merely agricultural, but whether a country the most manufacturing of any ever recorded in history, with an agriculture however as yet nearly keeping pace with it, would be improved in its happiness, by a great relative increase to its manufacturing population and relative check to its agricultural population.

(*Observations*, Malthus 1970, pp. 118-119)

The removal of the corn laws would have been a step toward improving the position of the manufacturing classes, and Malthus was opposed on both economic and ethical grounds. His economic argument rested on the assumption that the increase in employment in manufacturing was limited and that "even if the manufacturing towns should ultimately increase, in proportion to the losses of the country, of which there is great reason to doubt, the transfer of wealth and

population will be slow, painful and unfavorable to happiness" (*Grounds*, Malthus 1970, p. 162). He postulated that free trade would result in: (1) a fall in the price of corn, (2) a fall in the profits of British agriculture, and (3) a rise in unemployment. Since there was no "rational ground for expecting" an increased demand for labor from the manufacturing segments, all of the major classes would lose if British ports were open to the cheap corn of France.

The necessary and sufficient condition of Malthus's argument, that an increase in commerce and manufacturing production was "at best problematical," rested on a single assumption. Granted this assumption, all major classes would suffer as a consequence of unrestricted imports. The largest class in society, the laborers, would suffer a fall in wages and a rise in unemployment:

On the labouring classes, therefore, the effects of opening our ports for free importation of foreign corn, will be greatly to lower their wages, and to subject them to much greater fluctuations of price. And, in this state of things, it will require a much greater increase in the demand for labour, than there is any rational ground for expecting, to compensate to the labourer the advantages which he loses in the high money wages of labour, and the steadier and less fluctuating price of corn.

(*Grounds*, Malthus 1970, p. 158)

Little needed to be said for the effects of free trade upon farmers, since it was obvious that a lower domestic price would release many acres of cultivated land, and the plight of the farmer was also the plight of the landlord, since a fall in the price of corn would decrease rents.¹⁷

With landlords, farmers, and laborers all suffering from depleted money incomes, there would follow a diminution of demand for manufactured goods, since the "most steady demand for manufacturers of the country" came from those groups intimately tied to the productivity of the soil.¹⁸

Those who stood to gain the most from a free trade in corn were the manufacturers and commercial enterprises engaged in foreign trade. But even in their case the effects were debatable, as it was only "probable" that foreigners would be willing to absorb the increased manufacturing output that lower British wages

¹⁷ Malthus discussed the source of the landlord's income in his *Inquiry into Rent*. Both Malthus and Ricardo used it as a tool of analysis, but came to different conclusions as to its significance. For Ricardo, it proved that free trade was necessary; for Malthus, it proved protected trade was necessary. In 1818, Malthus rejected his theory of rent as an error, since he could not accept the conclusions which Ricardo claimed.

¹⁸ Ricardo was not the only one who looked upon agriculture as the regulator of profits, as Malthus approvingly quoted Smith that, "no equal quantity of productive labour employed in manufactures can ever occasion so great a reproduction as in agriculture" (*Grounds*, Malthus 1970, p. 163). This Physiocratic bias runs through Malthus's *Grounds* as well as the *Observations*, and in the former he says that "if we suppose the rents of land taken throughout the kingdom to be one-fourth of the gross produce, it is evident, that to purchase the same value of raw produce by means of manufactures, would require one-third more capital" (*Grounds*, Malthus 1970, p. 163). Malthus recognized the static nature of the Physiocratic analysis: "It was a fatal mistake in the system of the economists to consider merely production and reproduction, and not the provision for an increasing population" (*Observations*, Malthus 1970, p. 111).

and prices would allow. Initially foreign manufacturers would be at a disadvantage, because of the lower costs of British manufacturing, but the foreign producers would retaliate in order to compete. Accordingly, British manufacturers could not expect an unlimited increase in their exports, an argument which Malthus had first raised in his 1808 review of Spence. As for traders, "in whatever way the country may be affected by free trade in corn, those immediately engaged in foreign trade will benefit by it." Since merchants dependent upon foreign trade were "not probably above a seventh or eighth" of those who live on profits, "their interests cannot be allowed to weigh against the interests of so very large a majority" as the other classes of society (*Grounds*, Malthus 1970, pp. 160-171).

Those who stood to gain the most from free trade were persons with fixed incomes and/or the holders of national debt, as declining prices would increase their purchasing power. To indicate his personal objectivity in the matter, Malthus called attention to the fact that he was a member of this class of individuals, and his policy recommendation for restricted imports would work to his own disadvantage. In addition, even stockholders had to recognize they were not *guaranteed* prosperity, in the event that England should open her ports to foreign corn. Although the probability was large that prices would fall sufficiently to affect the ratio of the national debt to national income,¹⁹ the owners of the national debt should be aware that free trade in corn was for a nation with a large national debt, a "question fundamentally different from that of a simple question about a free or restricted trade; and, that to consider it merely in this light, and to draw our conclusions accordingly, is to expect the same results from premises which have essentially changed their nature" (*Grounds*, Malthus 1970, p. 168). In pointing out the dangers which free trade in corn represented to stockholders' equity in the national debt, Malthus was appealing to the self-interest he believed lay behind the policy for free trade. He sought to warn those who on the surface appeared to be the major beneficiaries from the adoption of free trade policies, that they should not "be captivated with the idea of cheapness, without reflecting that the term is merely relative, and that it is very possible for a people to be very miserably poor, and some of them starving in a country where the money price of corn is very low" (*Grounds*, Malthus 1970, p. 154). Malthus drew no analogies from his historical evidence to indicate that misery and poverty had at times gone hand in hand with *high* prices of corn, only that low prices had produced misery. He had, indeed, "thrown off the character of impartiality" that had been revealed in his *Observations*.

In addition to the politically strategic argument about the possible wartime inconveniences of an economy dependent upon foreign imports for its foodstuffs,

¹⁹ ". . . let us suppose that corn does not effectually regulate the prices of other commodities; and, making allowances on this account, let us take only 25, or even 20 percent [as the amount prices would fall if trade was free]. Twenty per cent. upon 40 millions amounts to at once 8 millions,—a sum which ought to go a considerable way towards a peace establishment; but which, in the present case, must go to pay the additional measure of value. And even if the price of corn is kept up by restrictions to 80 shillings a quarter, it is certain that the whole of the loans made during the war just terminated, will on an average, be paid at an interest very much higher than they were contracted for; which increased interest can, of course, only be furnished by the industrious classes of society." (*Grounds*, Malthus 1970, p. 168)

Malthus outlined an *economic* case against free trade, based upon the hypothesis that the accumulation of capital in manufacturing was, or should be, limited. Whether Malthus believed that the degree of accumulation in manufacturing should be limited, for moral or ethical reasons, or in fact it was limited by deficiencies in the wants and tastes for other manufactured goods, is not important at this point. What is significant is that in his correspondence with Ricardo he never made reference to the moral and ethical arguments against accumulation in manufacturing, but relied entirely upon the premise that the wants and tastes for manufactures were limited. He rejected Say's principle, because Say did not "properly distinguish between the necessaries of life [agricultural goods] and other commodities [manufactures]," as "the former create their own demand the latter not"²⁰ (*Works*, Vol. VI, p. 168; Malthus to Ricardo, 29 December 1814). His reason for assuming this asymmetrical pattern for demand had been discussed in the *Inquiry into Rent*, where he had noted that the necessary and sufficient reason for

²⁰ Say's law, that supply always creates its own demand, was identical with Mill's principle expressed in *Commerce Defended*. That the idea of the identity between aggregate supply and aggregate demand should be referred to as Say's Law, rather than Mill's principle, is one of the curiosities of the English history of economic theory. Until December 1814, Ricardo and Malthus always had discussed the implications of Mr. Mill's principle, but at that time Ricardo was reading Say's *Traite d' Economie Politique* (second edition, 1814), and called attention to Say's views in a letter to Malthus (*Works*, Vol. VI, pp. 163-164).

Say did have priority with respect to the concept, since in the first edition of the *Traite* (1803) he noted: "it is not abundance of money that makes sales easy, but the abundance of other products in general" (quoted in Dobb 1945, p. 41, n.1). Say's first brief statement on the relation between supply and demand was expressed as part of his refutation of the mercantilist principle that money was an active ingredient in the process of exchange, and not as Mill (in 1808) expressed it, as a refutation of the idea that output could exceed the total desire for the total product. Say, in other words, was refuting mercantilist doctrine, while Mill was attacking the idea that the wants and tastes for manufactures were limited. Ricardo relied upon Say in 1814 because he believed that Malthus differed with him fundamentally over the "consideration of money value," a Sayian formulation rather than a Millian conception of the problem (*Works*, Vol. VI, p. 164). Ricardo appears to have been in error in his understanding of the problem, for what Malthus was stressing was that the "tastes and wants" for manufactures were limited, an idea closer to Mill than to Say. Malthus's refutation of the idea that supply creates its own demand was not grounded in any mercantilist doctrine, where money is more than a medium of exchange, but in the notion that a man could not possibly have need for more than one hat. Once investment had reached the point where manufactures could produce a hat for every man, there was a saturation in the need for hat manufacturing and further capital accumulation. Contrariwise, there could never be an instance where the production of food was redundant, since the pressure of population would always provide a desire for any surplus food which might temporarily occur.

Dobb (Dobb 1945, p. 41, n.1) was in error when he claimed that "Ricardo . . . always attributed the doctrine [of the equality of aggregate supply to demand] to Say." Prior to December 1814 Ricardo had never read Say, and was totally dedicated to "Mr. Mill's principle," the context within which he and Malthus always discussed the possibility of the overproduction of manufactures. In December 1814 Say visited London, met Mill through Dumont, and at Mill's suggestion was invited by Ricardo to stay at Gatcomb Park. In anticipation of Say's visit, Ricardo read the author's *Traite*, finding a fuller statement of the idea of Mill's principle. Ricardo apparently was impressed enough with Say's formulation that he translated it and quoted it to Malthus.

Another reason "Mill's principle" gave way to "Say's Law" was that Mill never pursued the idea beyond his first brief formulation in *Commerce Defended* (1808), while for Say the concept became fundamental to his principles of political economy. In addition, Say became much more in tune with the participants in the discussion of political economy, while Mill retreated from the controversy. In part this was because Mill became so unpopular during the post-Ricardo era. Moreover, it might be assumed that Malthus would be more sympathetic to the ideas of a Frenchman than a Scot, especially if the latter was named Milne. After 1814 it was "Say's Law."

an increase in population was the availability of food. Any increase in the food supply automatically produced the necessary demand for the product. This simultaneous demand was a "quality peculiar to the necessaries of life" (*Inquiry into Rent*, Malthus 1970, p. 185). Malthus believed there was little basis for assuming that a decrease in the capital applied to land, would be compensated for by an increase in manufacturing because manufactures could not create their own demand.

There is a radical difference in the cause of a demand for those objects which are strictly necessary to the support of human life, and a demand for all other commodities. In all other commodities *the demand is exterior to, and independent of, the production itself.*

(Inquiry into Rent, Malthus 1970, p. 187; italics added)

Though he did not draw the analogy, Malthus assumed a biological connection between the supply of agricultural necessaries and their demand, as against a psychological link between the supply of manufactures and their demand. Because there always was excess population, any increase in the supply of food would have a ready made demand, and the market would be cleared. But the wants and tastes for manufacturing were subject to the whims of the consumer, and supply does not always create its own demand, the distinction he drew in his letter to Ricardo. The economic argument of the *Observations* was referred to in the *Grounds*, and it led to the policy recommendation that imports of corn should be restricted in order to maintain the level of employment in agriculture. There had already been too much displacement of agricultural labor, and Britain should not aggravate the problem, since it was "at best problematical" (*Grounds*, Malthus 1970, p. 155) that the demand for manufactures would even be sufficient to provide employment for the workers displaced in agriculture. His argument rested on the assumption that there was a deficiency in effective demand for manufactures. Only the consumption habits of the landlord class were adequate to maintain a high level of industrial output, and with lower domestic corn prices and rents, free trade would result in an excess supply of manufactures (*Grounds*, Malthus 1970, p. 163).

The publication of the three pamphlets on the corn trade established Malthus as the major proponent of agricultural protection, and being a political economist his arguments took on additional significance, for here was one of the teachers of the "new" science who did not favor the further expansion of industrialization. During the Parliamentary debates of February 1815, Malthus was cited frequently in support of the need for a new Corn Law, not just because it would favor the landlords and farmers, but because it was in the interest of the vast majority of Britishers, particularly the laboring class who would suffer from unemployment. The Corn Law of 1815 was passed easily on 10 March by a vote of 245 to 77, and Malthus was partially responsible for the continuation of agricultural protection.

Ricardo's *Essay on Profits* was published too late in February to have had much impact in Parliament, given the sizable majority that voted in the new law.

The minority read into the record a statement that closely resembled Ricardo's view. The minority claimed:

Monopoly is the parent of scarcity, of dearness and of uncertainty. To cut off any of the sources of supply can only tend to lessen its abundance; to close against ourselves the cheapest market for any commodity must enhance the price at which we purchase it; and to confine the consumer of corn to the produce of his own country, is to refuse to ourselves the benefit of that provision which Providence itself has made for equalizing to man the variations of season and climate.

(*Parliamentary Debates*, Vol. XXX (House of Lords),
13 March 1815, p. 150)

The concluding paragraph of Ricardo's *Essay* read:

I shall greatly regret that considerations for any particular class are allowed to check the progress of the wealth and population of the country. If the interests of the landlord be of sufficient consequence to determine us not to avail ourselves of all the benefits which would follow from importing corn at a cheap price, they should also influence us in rejecting all improvements in agriculture and in the implements of husbandry; for it is certain that corn is rendered cheap, rents are lowered, and the ability of the landlord to pay taxes, is for a time, at least, as much impaired by such improvements, as by the importation of corn. To be consistent then, let us by the same act arrest improvement, and prohibit importation.

(*Works*, Vol. IV, p. 41)

In his *Essay* Ricardo took up Malthus's concern over Britain being dependent upon French agriculture:

These dangers do not admit of being correctly estimated, they are in some degree matters of opinion and cannot, like the advantages on the other side, be reduced to accurate calculation.

(*Works*, Vol. IV, p. 27)

As to the concern that a poor harvest in France would deprive Britain of a continuous quantity of grain, Ricardo repeated Smith's theory of the "internal corn trade," wherein he had shown that bad harvests never occurred in all domestic markets simultaneously. If France, Britain, or the Baltic countries experienced a poor harvest, such deficiencies would be compensated by the good harvests in other countries. Although free trade notions normally had been based upon an assumption of open ports in all countries, Ricardo claimed that Britain's policy

should still be freer trade in corn, despite France's recent legislation. He considered free trade the correct policy for any nation, regardless of particular circumstances, because extension of the "internal corn trade" theory and expansion of the division of labor were sufficient economic arguments to offset the disadvantages of temporary "excrescencies." He admitted the possibility that during a war essential supplies might be cut off from a nation solely dependent upon free trade, but argued that the probability of such an event was a matter of opinion which could neither be confirmed nor refuted. He deemed the possibility was not a matter for economic theory to decide, but one that depended upon assumptions *vis-à-vis* strategy and warfare. Furthermore, England would not be the only country dependent on foreign trade, and the effects of war might be as adverse for France, the supplier, as for Britain, the demander.

If we become a regularly importing country, and foreigners could confidently rely on the demand of our market, much more land would be cultivated in the corn countries with a view to exportation. When we consider the value of even a few weeks consumption of corn in England, no interruption could be given to the export trade, if the continent supplied us with any considerable quantity of corn, without the most extensively ruinous commercial distress—distress which no sovereign, or combination of sovereigns, would be willing to inflict on their people; and, if willing, it would be a measure to which probably no people would submit. It was the endeavour of Bonaparte to prevent the exportation of the raw produce of Russia, more than [any] other cause which produced the astonishing efforts of the people of that country against the most powerful force perhaps ever assembled to subjugate a nation.

*(Works, Vol. IV, pp. 27-28)*²¹

So far as Malthus's argument that the capital withdrawn from land would not be employed in manufactures, Ricardo alleged that "the capital withdrawn would be employed in the manufacture of such commodities as would be exported in return for the corn" (*Works, Vol. IV, p. 32*). To lament the loss of agricultural capital was the same as arguing that "when the steam-engine, or Mr. Arkwright's cotton-machine, was brought to perfection, that it would be wrong to adopt the use of them because the value of the old clumsy machinery would be lost to us." (*Works, Vol. IV, p. 33*)

²¹ Smith's discussion of the "internal corn trade" is found in Smith 1937, pp. 490-510. The same day Ricardo published his *Essay*, Torrens published his pamphlet, *The External Corn Trade*, and the latter also relied upon Smith's formulation. There is no evidence that when their respective pamphlets were published Ricardo and Torrens knew one another. Because Torrens had first formulated the theory in his *Economist's Refuted*, he believed Ricardo slighted him, because he made no reference to Torrens in the *Essay on Profits*. Out of the external corn trade theory there developed the concept of comparative cost, and again Torrens always claimed priority, though Ricardo received the credit. As to the running controversy over who published first, see Robbins 1958, pp. 31-35.

Mr. Malthus thinks that a low money price of corn would not be favorable to the lower classes of society, because the real exchangeable value of labour; that is its power of commanding the necessaries, conveniences, and luxuries of life, would not be augmented, but diminished by a low money price. Some of his observations on this subject are certainly of great weight, but he does not sufficiently allow for the effects of a better distribution of the national capital on the situation of the lower classes. It would be beneficial to them because the same capital would employ more hands; besides that the greater profits would lead to further accumulation; and thus would a stimulus be given to population by really high wages, which could not but fail for a long time to ameliorate the condition of the labouring classes.

The effects on the interest of this class, would be nearly the same as the effects of improved machinery, which it is now no longer questioned, has a decided tendency to raise the real wages of labour.

(*Works*, Vol. IV, p. 35)

Rather than take issue with each of Malthus's arguments, Ricardo in the *Essay* formulated his own theoretical model to reveal the consequences for British profits if imports were restricted and the accumulation of capital in agriculture continued. It was a negative formulation, namely that there would be adverse consequences if Britain did not have freer trade, while Malthus had argued there would be adverse consequences if trade were freer. Ricardo's argument took the following form:

Assume (1) the input of capital, per unit of land, is of value of two hundred quarters of wheat, divided evenly between circulating and fixed capital; (2) the total output has the value of three hundred quarters of wheat; and (3) there is equilibrium between markets. The rate of profit per unit of land would be fifty per cent, and the rate of profit in manufacturing and commerce, for equal amounts of capital and risk, would also be fifty per cent.²² Assume further (4) the rates of growth of capital and population bear a constant proportion to one another so that no changes in profits can occur because of a disproportionality in the growth of capital and the labor force;²³ and (5) the state of technology in agriculture is a constant. The latter

²² "It is not meant," Ricardo said, "that strictly the rate of profits on agriculture and manufactures will be the same, but that they will bear some proportion to each other. . . . What the proportion may be, is of no importance to my argument as I am only desirous of proving that profits on agricultural capital cannot materially vary without occasioning a similar variation in the profits of capital employed on manufactures and commerce." (*Works*, Vol. IV, p. 12n.)

²³ "The rise or fall of wages is common to all states of society, whether it be the stationary, the advancing, or the retrograde state. In the stationary state, it is regulated wholly by the increase or falling off of the population. In the advancing state, it depends on whether capital or population advance at the more rapid course. In the retrograde state it depends on whether population or capital decrease with the greater rapidity. As experience demonstrates that capital and population alternately take the lead, and wages in consequence, are liberal or scanty, nothing positively can be laid down, respecting, profits, as far as wages are concerned." (*Works*, Vol. IV, pp. 22-23)

assumption was a simplifying statement, especially in view of the fact that improvements in husbandry did occur:

. . . but, with all those improvements, we have not overcome the natural impediments resulting from our increasing wealth and prosperity, which obliges us to cultivate at a disadvantage our poor lands, if the importation of corn is restricted or prohibited.

(*Works*, Vol. IV, p. 32)

Ricardo's model was conceptualized in his famous Table, "shewing the Progress of Rent and Profit under an assumed Augmentation of Capital," the results of which are summarized in Table VII-1.

**Table VII-1. Relationship of Total Input to Total Output
With An Assumed Capital Accumulation**

Period	Total Capital Invested	Total Output	Total Rents	Total Profits	Percent of Rent	Percent of Profit
1	200	100	0	100	0.0	50
2	410	190	14	176	3.5	43
3	630	270	42	228	6.75	36
4	860	340	81	259	9.5	30
5	1100	400	125	275	11.5	25
6	1350	450	180	270	13.25	20
7	1610	490	248.5	241.5	15.5	15
8	1880	520	314.5	205.5	16.5	11

All quantities are expressed in quarters of wheat.

As aggregate capital and the labor force increased, "more food would be required, and it could only be produced from land not so advantageously situated" (*Works*, Vol. IV, p. 13); so inferior plots would be cultivated. The heterogeneity of land units, the only nonhomogeneous unit in Ricardo's model, would require that the input necessary to yield an output of three hundred quarters of wheat per unit of land would be increased from a value of two hundred quarters of wheat to two hundred and ten, with the rate of profit falling to forty three per cent, as against the original fifty per cent. Results would follow *pari passu* with additional accumulation, and these phenomena in turn would lead to (1) further reduction in the rate of profit, and (2) a rise in the rate of rent. Or, as Ricardo said:

. . . by bringing successively land of a worse quality . . . into cultivation, rent would rise on the land previously cultivated, and

precisely in the same degree would profits fall; and if the smallness of profits do not check accumulations, there are hardly any limits to the rise of rent and the fail of profits.

(*Works*, Vol. IV, p. 14)

Ricardo's Table showed the inevitable consequences of disproportionate increases in total rent and profits, given (1) the heterogeneity of land, and (2) accumulation. The disproportionality would cause a fall in the rate of profit, from 50 to 11 per cent, and a rise in the rate of rent, from 0 to 16.5 per cent. Thus,

It will be seen that during the progress of a country the whole produce raised on its land will increase, and for a certain time that part of the produce which belongs to the profits of stock, as well as that part which belongs to rent will increase; but that at a later period [6th period], every accumulation of capital will be attended with an absolute, as well as a proportionate diminution of profits, — though rents will uniformly increase.

(*Works*, Vol. IV, pp. 15-16)

There was no disagreement that the price of corn had risen disproportionately during the war. Most authorities agreed that grains were high relative to other commodities, and the area of controversy was restricted to the causes and consequences of these changes. Some people ascribed the high price of grains to the corn laws, others blamed the monetary situation, and some even pointed to the heavy taxation imposed by military needs. Ricardo's analysis, however was unique in that he traced Britain's use of inferior inputs of natural resources as the single cause of the high price of corn. According to his analysis, the only factor responsible for the high price of corn was the use of inferior land under conditions of increasing population and the growth of accumulated capital. Given the institutional barrier of the corn laws, Britain had no alternative but to cultivate inferior soil, and this factor alone was sufficient to raise the price of agricultural goods disproportionately.

Ricardo believed the economic consequences of the high price of corn were clearly indicated in the fact that the disproportionate prices of grain were "accompanied by the high rents and the cultivation of inferior lands" (*Works*, Vol. VI, p. 181; Ricardo to Malthus). Given an equal rate of profits in all industries, the decreased profits in agriculture meant a fall in the rate of profits in industry and foreign trade as well. And since future growth was contingent upon high profits, the diminishing returns in British agriculture would inhibit accumulation and reduce the economy's rate of growth. Clearly these adverse effects upon accumulation made repeal of the corn laws a necessary condition for future progress.

The major difference between the theory of profits of the *Essay*, and the formulation of profits which Ricardo showed to Trower and Malthus in 1814, was the inclusion of Malthus's differential rent concept, for which Ricardo said he was "very much indebted." But in Malthus's *Inquiry into Rent* there was no table to show the consequences of the recourse to inferior soil, and it was Ricardo who sharpened the analytical tool and used it to refute the contentions of Malthus that agricultural protection was essential to British welfare. Some writers have claimed, even as diverse as Pasinetti (1974) and Hollander (1973) that Ricardo had no need to incorporate the Malthusian rent theory into his model, and that in a sense it was excess baggage. But such views fail to consider the social conditions of the times, and the great influence which Malthus exerted upon public opinion. It was, in fact, a *tour de force* for Ricardo to use the Malthusian rent concept to support freer trade, since he used a leading doctrine of the leading advocate for continued protection. On the other hand it must be recognized that in his earlier formulation he attached a key role to agriculture, without, perhaps, the niceties of diminishing returns. In essence, there is no difference between Ricardo's 1814 statement to Trower that

. . . the arena for the employment of new Capital cannot increase in any country in the same or greater proportion than the Capital itself, unless Capital be withdrawn from the land, unless there be improvement in husbandry, or new facilities be offered for the introduction of food from foreign countries.

(*Works*, Vol. VI, pp. 103-104; Ricardo to Trower,
8 March 1814)

and his argument in the *Essay* that

. . . profits on agricultural capital cannot materially vary, without occasioning a similar variation in the profits on capital, employed on manufactures and commerce . . . Profits of stock fall because land equally fertile cannot be obtained, and through the whole process of society, profits are regulated by the difficulty or facility of procuring food . . . Profits then depend on the price, or rather the value of food. Everything which gives facility to the production of food, however scarce, or however abundant commodities may become, will raise the rate of profits, whilst on the contrary, everything which shall augment the cost of production without augmenting the quantity of food, will, under every circumstance, lower the general rate of profits.

(*Works*, Vol. IV, pp. 12n, 13n, 26)²⁴

²⁴ As Simon Patten claimed, "The law of rent came into Ricardo's system, *not as a basis, but as a better proof of a theory already developed*" (Patten 1893, p. 329; italics in original). The degree to which Ricardo was dependent upon the theory of differential rent is open to controversy. That it provided a tighter argument for his theory of profits there can be little denial since the Table, showing the law of diminishing returns, used

Not only did Ricardo maintain that the profits in agriculture regulated the profits of capital in commerce and manufactures, but he also restated his claim that it was a general, aggregate, theory of profits that he was formulating.

Nothing is more common than to hear it asserted, that profits on agriculture no more regulate the profits of commerce, than that the profits of commerce regulate the profits on agriculture. It is contended [by Malthus], that they alternately take the lead; . . . I do not deny that the first discoverer of a new and better market may, for a time, before competition operates, obtain unusual profits . . . *But it is of the general rate of profit that we are speaking, and not of the profits of a few individuals*; and I cannot doubt that, in proportion as such trade shall be generally known and followed, there will be such a fall in the price of the foreign commodity in the importing country, in consequence of its increased abundance, and the greater facility with which it is procured, that its sale will afford only the common rate of profits—that so far from the high profits obtained by the few who first engaged in the new trade elevating the general rate of profits—those profits will themselves sink into the ordinary level.

(*Works*, Vol. IV, pp. 23-25; italics added)

Ricardo never mentioned the physiocratic notion of a net product, although Malthus referred a number of times to such a concept during the course of their debate in 1814 (*Works*, Vol. IV, p. 26). But because he relied upon Malthus's concept of rent, Ricardo implicitly showed an affinity for the physiocratic notion that the surplus output on land was the first regulator of profits. At this particular time in the formulation of his theory of profits Ricardo had not worked out the details of his theory of value, and his presentation was similar to that of the surplus theory of Quesnay in the *Tableau*. Ricardo claimed both in his correspondence with Malthus, and in the *Essay* that:

The facility of obtaining food is beneficial in two ways to the owners of capital, it at the same time raises profits and increases the amount of consumable commodities. The facility in obtaining all other things, only increases the amount of commodities.²⁵

(*Works*, Vol. IV, p.26)

in the *Essay* was of considerable importance in contributing support to his central thesis, that profits on land regulated profits in commerce and manufactures. In this respect it is perhaps not too far afield to claim that the marginal principle played about the same role in Ricardo's model as it did in the theoretical framework of the Keynesian analysis. In both treatises, the marginal principle is implicit in making the argument tighter and more formal, but also in both treatises it should not be given the place of honor, since it is a tool showing only rate of change and actually has nothing to do with the central propositions underlying either treatise. With regard to paradigm, it was of more importance to Keynes than to Ricardo.

²⁵ Ricardo also said: "A nation is rich, not according to the abundance of its money, nor to the high money value at which its commodities circulate, but according to the abundance of its commodities, contributing to its comforts and enjoyments . . . The exchange value of all commodities rises as the difficulties of their production increases." (*Works*, Vol. IV, pp. 16, 22)

In the same way that Marx described the Physiocrats, it can be said of Ricardo that,

Their [his] method of exposition is, of course, necessarily governed by their [his] general view of the nature of value, which to them [him] is not a definite social form of existence of human activity (labour), but consists of material things—land, nature, and the various modifications of these material things.

The difference between the *value* of labour power and the *value created by its use* . . . appears most tangibly, most incontrovertibly, of all branches of production, in agriculture, primary production. The sum total of the means of subsistence which the worker consumes from one year to another, or the mass of material substance which he consumes, is smaller than the sum total of means of subsistence which he produces . . . In agriculture . . . [this] shows itself directly in the surplus of use values produced over use values consumed by the worker, and can therefore be grasped without an analysis of value in general, or a clear understanding of the nature of value. This is true even when value is reduced to use value, and this latter to material substance in general. Agricultural labour is therefore for the Physiocrats [and Ricardo in the *Essay*] the only productive labour, because it is the only labour [Ricardo would say regulator] which creates surplus value, and *land rent is the only form of surplus value* which they [he] recognises.

(Marx 1951, p. 46; italics in original)

The adaptation of Marx's statement about the Physiocrats to the general outlines of Ricardo's thinking in 1815 was no longer possible in 1817 when the latter published the first edition of his *Principles*, since by that time his thinking had undergone modification and development. In the *Principles* he ceased to view agricultural profits as the regulator of profits because he had developed a general theory of value which recognized the implications of capital formation. However, at the time of the writing of the *Essay*, Ricardo's theory of value was in a very primitive, if not embryonic form and did not provide a clear basis for his propositions concerning profits. The *Essay's* major weakness was that it lacked any formalization of a theory of value which could trace out the repercussions of a fall in the price of corn upon the other segments of the economy. However, the *Essay* did reveal the general outlines of his theory of production, in opposition to Malthus's emphasis upon demand.

"Over Again More at Large"

Ricardo had misgivings about the clarity and effectiveness of his *Essay on Profits*. He told Malthus:

It is a matter of mortification to me that my execution has been so faulty,—I was too much in a hurry, and have not made my meaning intelligible even to those who are familiar with such subjects, much less to those who skim over these matters.

(Works, Vol. VI, p. 179; Ricardo to Malthus, 9 March 1815)

He also asked his friend and antagonist what the reaction had been to his pamphlet, as his "acquaintance lies so little amongst political economists that I have very few opportunities of knowing whether, what you consider as my peculiar opinions, have any supporters, or indeed whether they are read or attended to" (*Works, Vol. VI, pp. 178-179*). Did other political economists consider that the *Essay* had sufficiently disposed of Malthus's grounds in favor of the continuation of the corn law?

In answering, Malthus said:

Not having been in town I have seen no Political Economists, and cannot therefore say anything about the reception of your pamphlet. The only person at all conversant with the subject, that I have heard speak of it, is Sir James Mackintosh . . . He thought it rather difficult, and not sufficiently practical, to assist him in forming a parliamentary opinion or argument; but said that he would certainly study it if he was going to give lectures on the subject. The doctrines, he thought, wanted a more full development. From having talked with you so frequently on the subject, I made the same mistake with regard to my own on *Rents*, and fancied that things which were familiar to me would be readily intelligible to other people. I now see my error in both cases.

(Works, Vol. VI, p. 182: Malthus to Ricardo, 10 March 1815, italics in original)

James Mackintosh (1765-1832) was a philosopher and legal expert, not a political economist, and his opinion of Ricardo's pamphlet should not have carried much weight. He was, however, a member of Parliament and an influential Whig partyman. He served in the House of Commons for twenty-nine years, first representing the constituency of Nairn (1813-1818) and then Knaresborough (1819-1832). In 1818 Mackintosh was appointed Professor of Law and General Politics at the East India College (Haileybury) and became one of Malthus's closest colleagues. They had met initially in 1812, when Malthus became a member of the King of Clubs, a Whiggish dinner club founded by Mackintosh in 1798. Besides being an MP, Mackintosh was widely known as a lecturer on political issues, the reason Malthus noted that he said he would study Ricardo's pamphlet if he had to lecture

on the corn laws.²⁶ On the vote in the Commons when the Corn Law of 1815 was passed, Mackintosh was not listed among those in opposition. Members in support of a resolution were not recorded at the time, leaving the possibility that Mackintosh abstained, but that is not likely.

Ricardo received a letter, almost immediately, from one of the contributing authors to the February pamphleteering, namely Edward West. He had published anonymously but revealed his identity to Ricardo in order to express his agreement with the views of the *Essay on Profits*, but as Ricardo told Malthus that agreement came because the views of the *Essay* "are very similar to his own"²⁷ (*Works*, Vol. VI; Ricardo to Malthus, 9 March 1815, p. 179). West was a barrister and undoubtedly sought anonymity to protect his legal career from those who might take umbrage with his unpopular views. Ricardo had great respect for West and always credited him with the joint discovery of the "true doctrine of rent,"²⁸ (*Works*, Vol. VII; Ricardo to Trower, 18 September 1818, p. 298) together with Malthus, of course. Because of his active legal career West dropped out of the discussion of the corn laws, and in 1818 Ricardo reported to Trower that he believed West had given up the study of political economy, which apparently was not the case.²⁹

²⁶ In the ensuing years there were several circumstances which brought Mackintosh and Ricardo together. First of all, there was the Mackintosh-Malthus friendship, which meant whenever Ricardo visited Haileybury the three would dine together. After Ricardo entered Parliament, he and Mackintosh were frequently together in opposition to the Tory Administration, Mackintosh as a Whig, Ricardo an independent. In 1818, Ricardo became a member of Mackintosh's King of Clubs, and attended the monthly dinners when in London. Through these associations they knew one another quite well, though they took opposing views on most issues, especially the corn laws and the need for parliamentary reform. Mackintosh, despite his reputation as legal expert, was not a deep thinker.

Born in Scotland, on the banks of the Loch Ness, Mackintosh obtained a medical degree from Edinburgh (1787), despite an early interest in law and politics. He practiced medicine for about two years, and then took up law at Lincoln's Inn. While practicing law and lecturing extensively, Mackintosh ingratiated himself with the Fox faction of the Whig party in 1791, when he published a popular and well-written reply to Burke's *Reflections on the French Revolution*. Although initially he disagreed with Burke, Mackintosh later repudiated these views and became a great supporter of Burke. In 1803 he was knighted and appointed Recorder (Judge) in Bombay, where he served until 1812, when poor health forced him to return to Great Britain. The next year he commenced his parliamentary career. In Ricardo's circle, Mackintosh was considered somewhat eccentric, as suggested in a letter from Trower:

What think you of the last number of the *Edinburgh Review*. I was highly amused in hearing the circumstance which occasioned its late appearance. It contained a long and labored article written by Sr. James Mackintosh, abusing the confederacy against France most unmercifully, prognosticating the utter ruin and disgrace of the Allies, and the triumph of Bonaparte. This was ready printed, when lo! the accounts of the victory of Waterloo arrived; and it became necessary to suppress this article, and reprint the edition.

So much for these pseudo northern prophets from Brougham to Mackintosh—This rejected Edition will form a rare article in the libraries of Virtuosi!

(*Works*, Vol. VI, p. 280; Trower to Ricardo, 21 September 1815)

²⁷ West published his *Essay on the Application of Capital to Land* nine days prior to Ricardo's *Essay*.

²⁸ *Works*, Vol I, *Principles of Political Economy*, p. 5. Publicly Ricardo continued to respect West's desire for anonymity, and refers to him as a Fellow of University College, Oxford. In correspondence Ricardo identified West as the author of the pamphlet to Malthus and Trower.

²⁹ In 1822 West was knighted and appointed the Recorder of Bombay. In 1826 he published a pamphlet, *The Price of Corn and Wages of Labour, with Observations upon Dr. Smith's, Mr. Ricardo's, and Mr. Malthus's Doctrines Upon those Subjects*.

Nevertheless, Ricardo and West had no contact with one another after the brief exchange in March 1815.

The other pamphleteer of February was Torrens, who published his *Essay on the External Corn Trade* the same day as Ricardo's *Essay*. It is not quite correct to call Torrens's *Essay* a pamphlet, since it ran to some 348 pages, as opposed to the 40 to 50 page pamphlets of Malthus, Ricardo and West. The book had been some time in preparation, in part a rewrite of his *Economists Refuted*, but was hastily finished after Torrens read Malthus's *Grounds*. Although he had read neither Malthus's *Inquiry into Rent* nor West nor Ricardo, Torrens's *Essay* contained the basic ingredients of the theory of rent, tracing the wage and cost consequences of the cultivation of marginal land. As an avid free trader, he was particularly concerned with refuting Malthus's *Grounds*, and with defusing his authority as the leading political economist on the issue of the corn trade. In his preface Torrens claimed:

In the writings of the professor . . . he [Torrens] looked in vain either for a development of principles before undiscovered or for consistent deductions from those already established. It is a singular fact, and one which it is not improper to impress upon the public, that, in the leading questions of economical science, Mr. Malthus scarcely ever embraced a principle which he did not subsequently abandon.

(Torrens 1815, pp. viii-ix)

Malthus obviously was upset, and claimed Torrens "has treated me unjustly," and even if there were instances of inconsistency that could be substantiated, they would "by no means warrant his sweeping accusation" (*Works*, Vol. VI, p. 202; Malthus to Ricardo, 24 March 1815). His friend Ricardo consoled him, being of the opinion that Torrens had treated him "unjustly in his remarks in the preface," and furthermore, Malthus himself had acknowledged that between the writing of the *Essay on Population* and the *Observations* he had changed his opinion respecting the corn laws. Moreover, even if Torrens could point to inconsistencies, they were "too few to justify his severe observation" (*Works*, Vol. VI, p. 205; Ricardo to Malthus, 27 March 1815).

While proponents of opposing views on the corn law, Malthus and Ricardo consoled each other about the attacks which were made upon their respective theories. As Torrens tweaked Malthus, so Ricardo thought that William Jacob had handled him "roughly," and he was piqued that his critic would not meet to argue about the issue (Jacob 1815, p. 38). Jacob's criticisms were leveled not just at Ricardo, but included Torrens and West as well, but he was particularly harsh about Ricardo's "absurd views." The latter was later able to retaliate to some extent when, as a Member of the Agricultural Committee of the House of Commons, he had "persevered in my questions to him till I believe he thought me rude. I knew by his publications that he had taken a very prejudiced and unskillful view of the subject" (*Works*, Vol. IX, p.87; Ricardo to Trower, 4 October 1821).

So far as Malthus was concerned, with respect to the critical comments of Torrens, he considered publishing a reply, in which he would defend his views against the charges of inconsistency (*Works*, Vol. VI, pp. 185-186, 201, 211; Malthus to Ricardo, 12 March, 14 March and 5 April 1815). He inquired of Ricardo whether anybody actually read Torrens, and how well his theories were received. He was told:

At the Geological Club his book was spoken of the other day with great approbation. Mr. Blake and Mr. Greenough think that he has exhausted the subject and that his arguments cannot be controverted—I should think that he is very generally read.

(*Works*, Vol. VI, pp. 205-206; Ricardo to Malthus
27 March 1815)

For several reasons Malthus did not publish an answer to Torrens. In the first place, there were more petitions against the 1815 corn law presented to Parliament than ever before in history, and Malthus did not want to fan the flames. Secondly, Torrens was not the only one to attack Malthus (see Philaethes 1815), and thirdly, and perhaps most important, he found that he and Torrens did not really disagree about the effects of a rise in the price of corn upon profits and rents. It was on this point that Malthus and Ricardo had been in dispute, ever since the publication of their respective pamphlets, as the line was drawn with Ricardo on one side, and Adam Smith, Malthus and Torrens on the other. According to the traditional view, a rise in the price of corn would not affect the relation of wages to profits. The increase in the money price of corn would bring an increase in all prices, so both money wages and profits would be in the same nominal relation as they were before the cultivation of the inferior soil. But Ricardo was not thinking of wages and profits in terms of absolute nominal amounts, but as proportions of total output, as his Table in the *Essay* attempted to show. In April he wrote Malthus:

You, I think, agree with Mr. Torrens that a rise in the price of corn will be followed by a rise in the price of home commodities. . . I will however suppose that you and Mr. Torrens are correct, and that commodities do rise in price with every increased price of corn. The value of fixed capital employed on the land will then rise also, and altho' the money value of the produce should be increased on the old land it will still bear the same proportion to the money value of the capital employed, and as this produce will be divided in different proportions between the landlord and the farmer the rate of profits of the latter will fall . . . Your theory supposes too what is impossible that the demand for manufactures will increase in the same proportion as the demand for corn at the very time that more men are employed on the land to obtain a less proportion of produce. The whole appears to be a labyrinth of difficulties . . .

(*Works*, Vol. VI, pp. 212-214; Ricardo to Malthus, 17 April 1815)

By May Malthus had gotten past Torrens's uncomplimentary preface and was finding that indeed he did "agree with Mr. Torrens" as to the effects upon wages and profits when the price of corn changed, namely that the effects would be neutral (*Works*, Vol. VI, p. 223; Malthus to Ricardo, 5 May 1815). Whether it was due to his further study of Torrens, which showed they were really on the same side of the argument, with Smith as their common source, or the fact that the resumption of the war with France made the corn law debate somewhat moot, Malthus did not write to refute Torrens's accusations that he was inconsistent. Instead he set to work on the fifth edition of his *Essay on Population* (1817), a much revised and enlarged three-volume work that dealt with many of the issues related to the corn laws and poor laws.

So far as Ricardo's *Essay* was concerned, it fell far short of its objective of bringing about a major shift in British policy with respect to protecting domestic agriculture. Besides West, the only people who expressed agreement with the economic theory were Trower and Mill, and they did not matter very much, since neither one influenced any votes in Parliament. Torrens, of course, agreed with the policy conclusion in support of freer trade, but could not accept Ricardo's theoretical analysis. In mid-April 1815, Ricardo met Torrens for the first time³⁰ and found him to be "a very gentlemanly man." Although they discussed at length their differences, Ricardo said he had "no reason to think that I convinced him." More significantly, Torrens "finds it difficult to support his opinions and answer objections in conversation,—he says all such discussions should be carried on in writing" (*Works*, Vol. VI, p. 219; Ricardo to Malthus, 17 April and 21 April 1815).³¹ They did not see one another again until after Ricardo had published the first edition of his *Principles* (1817), when Torrens also met Malthus for the first time.

The first indication that Ricardo planned to rewrite his *Essay* is found in an August letter from Pascoe Grenfell (1761-1838), a leading critic of the Bank of England and one of the members of the House of Commons most conversant with financial affairs. Grenfell wrote urging Ricardo to write a short pamphlet on the Bank's mismanagement of the money supply and the need to return to partial specie convertibility. In the event Ricardo would not write the pamphlet, Grenfell said it would be sufficient to see the subject discussed "in the work which you have in Contemplation on the Corn Trade" (*Works*, Vol. VI, p. 242; Grenfell to Ricardo, 1 August 1815). Ricardo's new work on the corn trade was not even outlined at the time, and so he wrote the pamphlet, after additional prodding from Grenfell, publishing it in February 1816 under the title, *Proposals for an Economical and Secure Currency*. The theoretical content of the pamphlet is discussed in section 6, *infra*.

³⁰ They dined at the residence of William Phillips (1773-1828), a London bookseller, and one of the original members of the Geological Society, undoubtedly the source through which Ricardo and Phillips became acquainted. They were joined by Malthus's old friend William Smyth (1765-1849), Cambridge Professor of Modern History, and a former classmate at Cambridge.

³¹ Ricardo noted that Say had the same difficulty with arguing political economy in conversation, but in his instance there would have been a language barrier.

Later in August Ricardo wrote Say to thank him for the complementary copy of *Catechisme D'Economie Politique* (1815) which the author had sent him. Ricardo thought the book was "excellent", as all the "grand principles are perspicuously and forcibly laid down." The major point where he differed pertained to Say's claim that value was dependent upon utility, as Ricardo wrote that the "degree of utility can never be the measure by which to estimate value," a theme he reiterated time and time again with his French friend. As to his own *Essay on Profits*:

I should have been glad to have had your opinion of the particular doctrines which I hold respecting rent and profit in opposition to Mr. Malthus. Possibly you may think as I understand from Mr. Mill many able persons think here that I have not been sufficiently diffuse, and therefore do not understand me. Mr. Mill wishes me to write it over again more at large. I fear the undertaking exceeds my powers.

(*Works*, Vol. VI, p. 249; Ricardo to Say, 18 August 1815)

Mill told Ricardo that "as you have now made quite as much money for all your family, as will be conducive to their happiness . . . you will now have leisure for other pursuits." Mill suggested two such pursuits, to enter Parliament and to write political economy, saying

. . . you can very greatly improve a science on which the progress of human happiness to a singular degree depends; in fact that you can improve so important a science far more than any other man who is devoting his attention to it, or likely to do so, for Lord knows how many years—my friendship for you, for mankind, and for science, all prompt me to give you no rest, till you are plunged over head and ears in political economy.

(*Works*, Vol. VI, p. 252; Mill, to Ricardo, 23 August 1815)

So far as the "parliamentary scheme" was concerned, Ricardo said it was "unfit for me,—my inclination does not in the least point that way." As for political economy, the experiment would be tried, and he would devote as much time and effort as he could, and give himself a chance for success. If nothing came of the project, it would "have afforded me instruction and amusement" (*Works*, Vol. VI, p. 263; Ricardo to Mill, 30 August 1815). He also told Mill:

Mr. Malthus and I continue to write to each other but not actively as we sometimes do. We differ nearly as much as ever. There appears to be an astonishing mixture of truth and error in the opinions which he holds on the subject of rent, profit and wages. Oh that I were capable of writing a book! He is preparing

a new edition of his *Essay on Population* for the press. He ought candidly to confess that he has committed great errors in his chapters on the Agricultural and Mercantile systems, as well as in that on bounties.

(*Works*, Vol. VI, p. 314; Ricardo to Mill, 24 October 1815)

A few days later, the same feelings of frustration and inadequacy were expressed to Trower:

. . . I have no other encouragement to pursue the study of Political Economy than the pleasure which the study itself affords me, for never shall I be so fortunate however correct my opinions may become as to produce a work which shall procure me fame and distinction. I am determined however not to be daunted by common difficulties . . . Malthus and I continue to differ in our views of the principles of Rent, Profit and Wages. These principles are so linked and connected with every thing belonging to the science of Political Economy that I consider the just view of them as of the first importance. It is on this subject, where my opinions differ from the great authority of Adam Smith, Malthus, &c. [Torrens].

(*Works*, Vol. VI, pp. 315-316; Ricardo to Trower, 29 October 1815)

By December, Mill was referring to the rewriting of the *Essay* as Ricardo's "*opus magnum*," urging him to get to work as soon as possible. He said the rewriting should follow the procedure of carefully developing each point so as to leave no doubt as to any of the assumptions, conclusions or proofs. In detail Mill pointed to the need for theoretical proof of the basic principles of the *Essay*.

In anticipation of the M.S. which I expect soon to receive, as part of the great work, I have been reading once more your last pamphlet. And it has suggested this to be given to you, as an advice; which is that you should all along consider your readers, as people ignorant of the subject,³² and never set down any material proposition without its immediate proof, or a reference to the very page where the proof is given. You must never leave any such proposition to be inferred, through a number of steps, by

³² Mill's suggestion to consider his "readers as people ignorant of the subject" contradicts Marshall's interpretation that Ricardo was writing for "chiefly those statesmen and businessmen with whom he associated. So he purposely omitted many things which were necessary for the logical completeness of his argument but which they would regard as obvious." Mill's stricture to leave nothing to be "inferred" is also contrary to Marshall's view that Ricardo was just giving a rough sketch of the subject. Marshall had no authority for his claims as to what Ricardo meant to do, or did, and his allegations were based upon sheer speculation. (Marshall 1930, p. 813)

your readers themselves from some distant principles. It is this which has made the pamphlet, in question, to be reckoned obscure . . . I have resolved on this account to set you an exercise. You have stated repeatedly this proposition, that improvements in agriculture . . . raise the profits of stock, and produce immediately no other effects. But you have no where stated the proof. You have left it to be inferred from your general doctrine, as to rent. The additional produce cannot be received as rent, which is limited by another circumstance. And it cannot go as wages, because they too are otherwise limited. Therefore it must be received as profit. But what I wish you to do, is, not to content yourself with this inference—but to shew by what steps, in practice, the distribution would take place. As for example—By improvements, all the capital employed on the English soil becomes more productive—the same quantity of corn is consumed in cultivating the land; a greater quantity is returned: What, in their order, are the effects which follow? On this subject, I ordain you to perform an exercise—a school exercise: in other words, write me a letter . . . My meaning is that you should successively answer the question, What comes next? First of all is the improvement. What comes next? Ans. the increase of produce. What comes next? Ans. fall in the price of corn. What comes next?—and so on . . . For as you are already the best *thinker* on political economy, I am resolved you shall also be the best writer. It wants only capability, and industry,—of both which, in your case, I am assured.

(*Works*, Vol. VI, pp. 338-340; Mill to Ricardo, 22 December 1815; Italics in original)³³

Mill's instructions sounded almost as if he were guiding his nine year old son, John. Moreover, his orders were not restricted to the procedure for developing the logic of Ricardo's economic argument, but covered his work habits and living style, as well. In response to Ricardo's complaint, that after moving to Gatcomb Park there scarcely had been a day when he was not inundated with family, London friends and neighbors, with one dinner for forty-nine people, lasting until 4:00 a.m., Mill ordered that his novice must devote as many hours to writing political economy as he had previously given to the Stock Exchange. Advancing science, after all, was more important than making money, and Ricardo must remove himself from all social functions during the hours before breakfast and dinner, and excuse himself in

³³ Ricardo received much the same type of advice from Say: "Je pense bien, comme M. Mill, que si vous aviez développé chaque proposition abstraite, par quelques applications et par des exemples, vous auriez été plus facilement entendu. Mais je ne conçois pas pue vous puissiez croire cette tâche au dessus de vos forces, puisque ce que vous avez fait, j'entends l'établissement des principes, était précisément ce qu'il y avait de plus difficile et ce qui exigeait la plus grande exertion de ce que vous me permettez d'appeler un génie très profond." (*Works*, Vol. VI, p. 270; Say to Ricardo, 10 September 1815)

the early evening, "(N)ever mind a little shame at the thought of a little singularity" (*Works*, Vol. VI, p. 340, Mill to Ricardo, 22 December 1815).

Mill's influence on Ricardo's work habits was amazing, as he harnessed his new pupil, and Ricardo quickly returned to the rigid work schedule he had pursued in the Exchange. As to the theoretical development of Ricardo's argument, Mill was too far away to be of great assistance. He was not personally involved in the extensive debate with Malthus, and was not in a position to respond to the complicated points which were being raised against the argument of Ricardo's *Essay*. Some indication of Mill's isolation from the details of the debate was his suggestion in November that Ricardo should write sections on the first of the three subheads of his outline, namely rent, profit and wages (*Works*, Vol. VI, p. 321; Mill to Ricardo, 9 November 1815). By this time, however, Ricardo had come to the realization that his theory of the interconnection between rent, profit and wages was dependent upon a theory of value and price. This theoretical innovation was what differentiated his argument in the *Essay* from his *Principles*. He described the problem to Mill:

I know I shall soon be stopped by the word price, and then I must apply to you for advice and assistance. Before my readers can understand the proof I mean to offer, they must understand the theory of currency and of price. They must know that the prices of commodities are affected two ways one by the alteration in the relative value of money, which affects all commodities nearly at the same time,—the other by an alteration in the value of the particular commodity, and which affects the value of no other thing, excepting it enter into its composition.—*This invariability of the value of the precious metals*, but from particular causes relating to themselves only, such as supply and demand, *is the sheet anchor on which all my propositions are built*; for those who maintain that an alteration in the value of corn will alter the value of all other things, independently of its effects on the value of the raw material of which they are made, do in fact deny this doctrine of the cause of the variation in the value of gold and silver.

(*Works*, Vol. VI, pp. 348-349; Ricardo to Mill, 30 December 1815; italics added)

In such a system, the price of corn would rise because of the increased difficulty of its production, but the effect of the rise in price was limited. There would be no change in the facility of producing other commodities, except those where corn was an input; the change in cost was restricted to corn and there was no reason to assume that the price of other commodities would be altered. The only factor which would change the price of all commodities was a change in the value of money, and assuming its invariability, a change in wages had no effect upon prices, except in agriculture. However, a rise in the price of a wage good, such as corn, would reduce surplus produce, and the rate of profit. The fact that a rise in

the price of wage goods affected the general rate of profit, but not the prices of other goods, the "Ricardo effect," was apparent only at the aggregate level. If one looked to particular industries, as Malthus was wont to do, the "Ricardo effect" was not discernible.

Two assumptions were implicit in the Ricardian system at this stage. One was that costs were constant in all industries except agriculture, and second, the price of a commodity was influenced only by changes in the conditions of production. The details of the consequences of price changes in the facility of producing corn had emerged in the course of the debate between Malthus and Ricardo, in the months following the publication of the *Essay on Profits*.

The Facility of Production, Relative Prices and the Effects Upon Profits

As could be anticipated from his defense of the corn laws, Malthus denied that the cultivation of inferior land would cause a rise in the price of corn. He also denied there would be a fall in the rate of profit, and argued that Ricardo's analysis ignored "the alteration in the relative value of corn" which would occur. Given capital accumulation, the change in the relative value of corn would raise the rate of profit, and the rate of rent. The practical evidence in support of this principle, according to Malthus, was the prosperity of English farmers, despite the cultivation of inferior soil.

The ingenious theoretical proof Malthus offered for his claim that a rise in the relative value of corn would increase agricultural profits, was based upon a reformulation of Quesnay's *Tableau*. The proof was outlined to Horner:

The Economists calculate that one third of the raw produce obtained by the farmer is advanced to the sterile classes. On this supposition let the produce of an acre be represented by 8 of which $\frac{1}{4}$ goes to the landlord, and $\frac{3}{4}$ are received by the farmer, that is, 2 go to the landlord, and 6 to the farmer, out of which latter sum the farmer expends one third or 2 on the commodities above mentioned [capital equipment such as wagons and threshing machines]. The farmer therefore retains 4 for his raw produce-expenditure, and profits; that is, he retains the value of the half of the gross produce.

Let us now suppose the price of corn to double, while the price of manufactured and foreign commodities rises only one fourth. The whole produce will then be represented by 16, of which $\frac{1}{4}$, as before, or 4, will go to the land and only $2\frac{1}{2}$ instead of 4 go to the expenditure in manufactured and foreign commodities; the consequence of which will be that $9\frac{1}{2}$ out of 16 will remain to the farmer instead of 4 out of 8, that is about $\frac{3}{5}$

instead of $\frac{1}{2}$. Out of this increased produce the farmer will receive proportionably increased profits, or will divide them with the landlord and thus a rise in the price of [corn] appears to increase the productiveness of all the capital previously employed on the land.

(*Works*, Vol. VI, p. 187; Malthus to Horner, 14 March 1815)

"The fault of Mr. Ricardo's table," Malthus told Horner,

is that the advances of the farmer instead of being calculated in corn, should be calculated either in the actual materials of which the capital consists, or in money which is the best representative of a variety of commodities. The view I have taken of the subject would greatly alter his conclusions.

(*Works*, Vol. VI, pp. 187-188).

The conclusion was that disproportionate changes in the price of agricultural and manufactured goods would raise agricultural profits, and "more clear surplus will remain in the shape of rent and profits together (no matter which) for home demand."

Malthus's asymmetrical analysis of the theory of demand led him to assume that friction in the price system would impose limitations on the adjustment process, which would cause the rise in the price of corn to be greater than the rise in the price of manufactures. Despite the use of inferior land, price adjustments would raise the profits of agriculture because of the limited demand for manufactures.

Malthus refuted Ricardo's hypothesis that capital accumulation coupled with inferior resources decreased the general rate of profits, because of changes internal to the price mechanism. The aggregate approach of the *Essay* could not explain the change in profits and rents, because it failed to account for the changes in money, costs, and prices which occurred with accumulation and the use of inferior resources. The lacuna in Ricardo's argument was due to his failure to deal with the intricacies of relative prices.

It was this criticism which spurred Ricardo to begin his rewriting of the *Essay* with an analysis of price, as the basis for his discussion of wages and profits. Without an explanation of the determinants of value and price, he could not deal with Malthus's refutation. He outlined his general approach to the problem in a letter to Malthus:

I cannot hesitate in agreeing with you that if from a rise in the relative value of corn less is paid for fixed capital and wages,—more of the produce must remain for the landlord and farmer together,—*this is indeed self evident, but is really not the matter in dispute between us*, and I cannot help thinking that you overlook some of the circumstances most important connected with the question. My opinion is that corn can only permanently

rise in its exchangeable value when the real expenses of its production increase. . . . Observe that I do not question that *each individual labourer may receive a less corn price of labour* because I believe that would be the case, *but I question whether the whole corn amount of wages, &c paid for the cultivation of the land can be diminished with an increase of the exchangeable value of corn.* If no more labourers were employed and the price of corn rose your proposition could not be disputed, but the cause of the rise of the price of corn is solely on account of the increased expence of production.

(14 March 1815, *Works*, Vol. VI, p. 189; italics added)³⁴

This reaction to Malthus's criticism indicates several important inferences. The "real expenses" of production are the quarters of wheat necessary to produce a given volume of output. Ricardo conceded that each laborer would receive less, in corn price for his labor, as the price of corn rose disproportionately, but argued that the greater number of laborers required to produce a given output on inferior land would increase the ratio of total wages to total output.

Assume:³⁵

- (1) The economy requires an input of 2½ million workers to produce an output of 10 million quarters of wheat;
- (2) The price of wheat is £4 a quarter (10s. a bushel);
- (3) Agricultural labourers receive an annual wage of 2 quarters (16 bushels) of wheat.

Thus, the total wage outlay would be 5 million quarters of wheat, and the ratio of input to output 1 to 2, at a nominal cost of £20 million. For purposes of analysis, suppose the worker directly consumes one quarter of wheat, and uses the remaining quarter to barter for candles, tea, soap, house rent, and "other necessaries."

Assume further:

- (4) An increase in population which requires an additional output of 5 million quarters of wheat;
- (5) The cultivation of inferior land;
- (6) A necessary additional input of 2 million workers.

³⁴ James M. Cassels claimed that Ricardo was interested in "money cost" and had no concern with "real costs." (Cassels 1935, p. 532). Both the *Essay* and the correspondence deny Cassel's "Re-Interpretation" of what Ricardo "really meant." The article contains only two references to any of Ricardo's writings, hardly the basis for either verification or refutation. Nevertheless, the number of times that Ricardo turns to "real factor's" to explain a principle suggests he was concerned with real costs, and explains his suggestion to Malthus that they "put money out of the question." (*Works*, Vol. VI, pp. 175, 203)

³⁵ The details of the argument were outlined in several letters, the most important being in *Works*, Vol. VI, pp. 193-194; Ricardo to Malthus, 17 March 1815.

With a new total output of 15 million quarters, the total input would be $4\frac{1}{2}$ million workers, an input-output ratio of 3 to 5. The difficulty of producing corn would rise, and so there would be a disproportionate rise in the price of corn, *ceteris paribus*.

Assuming that the nominal price of corn rose in proportion to the greater number of workers required, the price of corn would be £4.16s a quarter, a 20 percent increase. Therefore, the worker's real standard of living could now be maintained at a lower corn wage. Since the barter price of corn had risen, other prices remaining constant,³⁶ 14 bushels would now yield the old real wage. The worker would continue to consume 8 bushels directly, and the additional 6 bushels would yield the barter value of the original 8 bushels necessary to procure "necessaries." The individual laborer's wage (measured in corn) would decrease from 2 to $1\frac{3}{4}$ quarters of wheat.

However, the original 10 million quarters of wheat now required an average input of 3 million laborers. Therefore, while labor originally received 5 million quarters of wheat, or one-half of total output, labor now received $5\frac{1}{4}$ million quarters for producing 10 million. In spite of the lower wage in corn for the individual laborer, aggregate real wages would have increased in proportion to aggregate output, and the input-output ratio was now 1.05 to 2, a decline in surplus.

In the analysis there were two forces at work, the effect of costs upon price, and the effect of price upon wages. Malthus had assumed that the second force superseded the first, but Ricardo argued that it was actually the increased cost of production that caused price to rise, aggregate wages to rise, and profits, or "surplus produce," as a proportion of total output to fall. To produce the given output of 10 million quarters of wheat, the cost of 3 million workers at 14 bushels was greater than the cost of $2\frac{1}{2}$ million workers at 16 bushels. The proportion of total output going to wages was higher, despite the price effect, and the "proportion of surplus produce was diminished."

While Malthus was correct in assuming that the individual cost of each laborer would fall, he had not recognized that the profits would be less affected by alterations in price than by the increase in the labor-to-land ratio.

Malthus's rebuttal to Ricardo was to deny that the use of inferior land at the margin changed the total productivity of labor. He claimed:

You seem to forget . . . that it is only the last 500,000 quarters of corn that . . . require for production a greater quantity of capital Consequently, when a rise in the price of corn takes place from an increasing population or restrictions upon importation, all the capital previously employed upon the land will become more productive, and it is only the new capital that will be less so; Under these circumstances it is quite clear to me that a rise in the

³⁶ Ricardo later (1817) recognized that a change in the price of corn would alter the production coefficients where corn was an input, but at this time he assumed, as did Malthus, that the secondary effects of the change were restricted to the wage-price relationship of the particular commodity.

relative value of corn will occasion the whole mass of corn to be raised at a less corn-expenditure; and consequently will leave a larger surplus for the maintenance and encouragement of the mercantile and manufacturing classes.

(*Works*, Vol. VI, pp. 190-191; Malthus to Ricardo,
15 March 1815)

Malthus claimed that since only the last unit of land required an additional input of labor, the productivity of the previous units would remain unaltered, and there would be a rise in total surplus. Only on the last unit added would the use of inferior land have any consequences. By denying that marginal land had an effect upon inter-marginal units, he argued that the effects of the cultivation of inferior land were limited to the marginal farmer and landlord; a peculiar argument for the author of the *Inquiry into Rent*. Obviously Malthus nodded, as Ricardo replied:

If your statement was correct this extravagant consequence would follow from it, that in proportion as population increased and worse land was brought under cultivation, the proportion of produce to the corn expenses of procuring it would increase. If we now had 20 millions of quarters with an expence of 5 millions of quarters, we should when we expended 10 millions of quarters obtain more than 40, notwithstanding that in the latter period many more than double the quantity of hands were employed in cultivation, in consequence of the poorer quality of the land. *If this be true the principle of population is false*, because the more you increase the people the greater surplus of abundance will appear. Your statement is however very ingenious, and carries a great deal of plausibility with it; but I think you err in supposing it possible that the proportion of the whole corn expenditure, to the produce obtained, can fall, with an increase of the price of corn. The two are incompatible,—either the whole corn expenses of production will be increased or not. If they be the price of corn will rise,—but if they be not I can see no reason for a rise in the price of corn. I admit that it is only the last portion of capital employed on the land which will be attended with an increased corn expence, but unless it renders the whole produce together at an increased expence the price of produce will not rise.

(*Works*, Vol. VI, pp. 192-193; Ricardo to Malthus,
17 March 1815; italics added)

Malthus had difficulty with Ricardo's concept of profits as the "proportion of surplus produce" to the total input and output. On the other hand, Ricardo did not understand the effect of a change in the relative value of corn; as he said, "on no subject that we have been lately discussing have we so materially differed as on the one now occupying our attention." (*Works*, Vol. VI, p. 196; Ricardo to Malthus, 21

March 1815) The idea that with the accumulation of capital both the total surplus and the rate of surplus would increase required not only that every additional laborer produce the same as any previous laborer, but that each should produce a "greater surplus." "More labourers," he claimed, "may then be employed without limit, and rent and profit together must not only increase, but increase in a geometrical progression" (*Works*, Vol. VI, p. 197; Ricardo to Malthus, 21 March 1815). If true, this formulation would overturn both the theory of rent and the theory of population, according to Ricardo.

Malthus replied that "you push my principle much too far; and do not recollect the limitations to which it must necessarily be subject." He was convinced that accumulation even with inferior inputs of land could still lead to a rise in profits. It all "depends upon the relation between corn and other commodities." Because "labour and corn enter into the price of all commodities, the difference between corn and other commodities cannot possibly increase in any proportion to the increase in the money price of corn." (*Works*, Vol. VI, p. 199; Malthus to Ricardo, 24 March 1815)

The reference to money price was the break in Malthus's argument, and Ricardo claimed that "to admit what you now contend for would not affect my theory." The aggregate money revenue going to landlord and tenant would increase, still "such a state of price is quite compatible with a greater proportion of men, as compared with the produce obtained, being employed on the land; but it is wholly irreconcilable with the net corn produce being a larger proportion to the gross corn produce,—which was the principle before contended for."

You before contended that in consequence of increasing wealth and the cultivation of poorer land, the whole *corn* cost of production on the land would bear a *less* proportion to the whole *corn* produce,—but now you say that the *money* cost of production on the land will bear a less proportion to the *money* value of the whole produce.

(*Works*, Vol. VI, p. 204; Ricardo to Malthus, 27 March 1815; italics in original)

Ricardo's analysis of profits was correctly calculated as the proportion of total output. Given an increase in production that necessitated the use of inferior land, "the whole corn cost of production" would be a larger proportion of the "whole corn produce." Malthus was correct in money terms, for the money price of corn could not possibly rise as fast as the increase in the money price of other commodities. One of the major differences between them, therefore, was whether analysis should be concerned with the money value of goods or with real value. Ricardo recognized the basis of the disagreement and queried,

I have observed in the bullion pamphlet that many who say they consider money only as a commodity . . . seldom proceed far in their reasoning about money without shewing that they really

consider money as something peculiar, varying from causes totally different from those which effect other commodities. Do you not fall into this error . . . ?

(Works, Vol. VI, p. 203; Ricardo to Malthus, 27 March 1815)

Malthus replied that money was not like other commodities, because of the existence of paper money, and the distance of the mines from the centers of distribution. The increase in the money supply would not proceed *pari passu* with either an increase or decrease in the price of other commodities. Therefore, prices had to be calculated in money terms to measure the effects of the utilization of superior or inferior resources upon profits.

Although Malthus did not go any further with his theory that money was more than a *numeraire*, he did follow an argument that turned on a theory of the exchange ratios between commodities. As accumulation proceeded, either with inferior or superior resources, it was incorrect to assume that the ratio between commodities would be constant. Analysis had to take into account the relative strength or weakness of effective demand for particular commodities. Exchange ratios were affected by demand as well as the facility of production, so there was not a single cause of the variation in profits, as Ricardo claimed.

Regarding this particular point, Malthus claimed the error in Ricardo's "neat simple and ingenious table" was that the principle was not applicable to all circumstances. The 50 percent profit the table showed in the first period was not necessarily the result of the fact that the corn price was low because only the best land was being cultivated, as Ricardo alleged. The high rate of profit could perhaps be due to

the small quantity of capital in the country compared with the means of employing it, and particularly to the small quantity of capital employed in manufactures, which unless furnished very sparingly could never bring such high profits as could be obtained from the land.

(Works, Vol. VI, p. 217; Malthus to Ricardo, 18 April 1815)

The table did not consider the relative price of corn to manufactures and the corresponding effect of that relation upon profits. Assume, for example, that agricultural production took place at Ricardo's sixth period, where agricultural profits were only 20 percent. Further assume that a "large tract of new land" became attached to the British Isles land which was superior to any currently in cultivation. Now according to Ricardo's theory, the price of corn would fall because of the improvement in cultivation, and the system would move toward the earlier periods of production, and profits in agriculture would rise toward 50 percent. While Malthus agreed the price of corn would fall, it was not because of the improvement in cultivation, but because of the price relation between corn and manufactures. He claimed:

Before any fall of price had taken place [from improved cultivation], capital would be removing fast both from the old land and from manufactures. There would be a real want of stock compared with the means of profitably employing it; manufactures would rise considerably in price, from higher profits, and corn not rising, on account of the abundance of rich land, the relative price of corn would become low; but as a *consequence* (remark) not as a *cause* of high profits.

(*Works*, Vol. VI, p. 218; Malthus to Ricardo, 18 April 1815; italics in original)

The existence of new land would cause a flight of capital from not only the old land, but from manufactures as well. With less capital employed in manufactures, the output of the sector would decline, concurrently with the increase in output of agriculture. Relative to corn, manufactures would rise in price, as would profits in the sector. The higher profits would occur not because of the low price of corn, but because the output of manufactures declined relative to that of agriculture. The purpose of Malthus's exercise was to prove to Ricardo that the profits of manufactures were affected by events other than the facility of production, and the key to his argument was the assumption that the output changes in the two sectors preceded the fall in the price of corn from the improved cultivation.

In rebuttal, Ricardo said that both his line of reasoning and that of Malthus led to a rise in the rate of profit on the land, and a decline in rent. "Though we agree in the conclusion we differ materially" as to the means by which the new tract of land would affect profits. Why would the new land cause a capital flight from manufactures? That was the issue, as Ricardo wrote his friend:

—I think that capital would go from the old land to manufactures, because a given quantity of food only being required, that quantity could be raised on the rich land added to the Island, with much less capital than was employed on the old, and consequently all the surplus would go to manufactures to procure other enjoyments for the society, and profits on the land would rise at the expence of the landlord, whilst the cheaper price of corn would raise the profits on all manufacturing capital. I confess it appears to me impossible that under the circumstances you have supposed the relative value of corn would fall, not from the facility of procuring it, but from a rise in the value of manufactures. You suppose that corn would remain at the same price whilst manufactures rose in price,—I on the contrary think that the price of manufactures would continue nearly stationary whilst the price of corn would fall. Is not this the natural consequences of more capital being employed on manufactures and less on agriculture? Have you not too uniformly supported the opinion that a fall in the price of corn will occasion a fall in the price of commodities? If they act on

each other as you think but which I do not agree, how can manufactures rise in price with a stationary price of corn? I should have thought that on your principles such an effect would be impossible.

(*Works*, Vol. VI, pp. 220-221; Ricardo to Malthus, 21 April 1815)

Since there was no change in the difficulty of producing manufactures there was no reason for a change in the price of that sector, though wages in the sector would fall because of cheaper food, and profits would rise. In relying solely upon changes in the facility of production as the cause of a change in price, and by assuming that the distribution between wages and profits also would not effect price, Ricardo was told he was ignoring the fundamentals of supply and demand.

Under the circumstances that you suppose it is contrary to every principle of supply and demand that your manufactures should keep up their price. At the old prices and in such quantities it is not in the nature of things that there should be a demand for them.

(*Works*, Vol. VI, p. 222; Malthus to Ricardo, 23 April 1815)

And again:

I only want to make you allow, according to the same great principle of supply and demand, that any causes which tend to make *capital* less in demand will lower *profits*; but you appear to me to except profits from the laws which operate upon all other commodities, and will not allow that they will be low for the same reasons that the rents of land and the wages of labour are low.

(*Works*, Vol. VI, p. 296; Malthus to Ricardo 11 October 1815, italics in original)

The value of any commodity, as Adam Smith had shown, was a function of its scarcity *vis-à-vis* other goods. Accordingly, Malthus claimed that if the price of a commodity rose, profits must also rise. It made no difference about the commodity's facility of production, since this was not always the cause of relative scarcity.³⁷ All of which left Ricardo confused:

³⁷ "I cannot help thinking," wrote Malthus, "that you are fundamentally wrong in measuring the rate of profits by the facility of production . . . Facility of production . . . mainly affects the real wages of labour, and not the rate of profits . . . profits do not depend upon facility of production, although they may be often high when the facility of production is great; because capital is often scarce, and generally so indeed at the time the land is most productive." (*Works*, Vol. VI, pp. 224-225; Malthus to Ricardo, 23 April 1815). Also, ". . . the less I find I can agree with you in the new view which you have taken of capital as depending with respect to profits, on facility of production rather than as was formerly supposed on quantity and competition." (*Works*, Vol. VI, p. 289; Malthus to Ricardo, 11 October 1815).

All I mean to contend is that profits depend on wages, wages, under common circumstances, on the price of food and necessaries, and the price of food and necessaries on the fertility of the last cultivated land

I do not understand the expression that profits depend upon the demand compared with the supply of capital.

(Works, Vol. VII, p. 78; Ricardo to Malthus,
11 October 1816)

Intermingled with Malthus's emphasis upon scarcity as a cause of a change in profits, was his repeated underscoring of the requirement that demand and supply had to change in proportion to one another. An analysis of the supply conditions alone was not sufficient, because prices and profits could fall from a deficiency in the demand for manufactures. Malthus pointed to the "inevitable glut of manufactures," a glut attributable to the satiability of the "will to consume." It was this discontinuity between the demand and supply for manufactures which had led to the predictions of dire poverty, if the economy was subjected to free trade in corn, and the argument continued to be raised.

In support of this proposition, Malthus pointed to a number of instances where there were "limits to demand." One of the more important is a disproportionality in the demand for capital and labor as accumulation progressed. Out of the discussion of the interdependence of these two variables, the dispute over Say's law arose once again.

Say's law was true, Malthus said, as long as "each sort of commodity is in proper proportions" and so long as the population increases sufficiently to keep up the aggregate effective demand. But the latter condition was

not true when population cannot be made to increase proportionally. If it be supposed stationary, capital may very easily increase beyond the powers of employing it productively.

(Works, Vol. VI, p. 225; Malthus to Ricardo, 5 May 1815)

Although he agreed that "the progress of capital and population, while they can go on together uninterrupted by the difficulty of procuring subsistence, is absolutely unlimited," Malthus said that Ricardo's assumption with respect to this constancy was erroneous. Malthus thought Ricardo denied "that the demand for capital is limited" even with a limited population. But what Ricardo denied was the proposition that population and capital would not increase *pari passu*:

. . . I contend that there are no causes which will for any length of time make capital less in demand, however abundant it may become, but a comparatively high price of food and labour;—that profits do not *necessarily* fall with the increase of the quantity of capital because the demand for capital is infinite and is governed by the same law as population itself. They are both checked by

the rise in the price of food, and the consequent increase in the value of labour. If there were no such rise what could prevent population and capital from increasing without limit? I acknowledge the effects of the great principle of supply and demand in every instance, but in this it appears to me that the demand will enlarge at the same rate as the supply, if there be no difficulty on the score of food and raw produce.

(*Works*, Vol. VI, p. 301; Ricardo to Malthus, 17 October 1815; italics in original)

From this statement it is clear that Ricardo assumed only one cause of a fall in the rate of profit, namely a decline in the facility of the producing wage goods. However, a year later in October 1816, he was willing to concede, at least on theoretical grounds, that there was an additional cause for a fall in the rate of profit. He wrote Malthus:

You say that you think I have sometimes conceded that if population were miraculously stopped, while the most fertile land remained uncultivated, profits would fall upon the supposition of an increase of capital still going on. I concede it now . . . In the case you put wages would have a tendency to keep stationary as far as the supply of food was concerned, but they would have a tendency to rise in consequence of the demand for labour increasing, whilst the supply continued the same. Under such circumstances profits would of course fall. You must allow that this is an extraordinary case, and out of the common course of events, for the tendency of the population to increase is, in our state of society, more than equal to that of the capital to increase.

(*Works*, Vol. VII, p. 72; Ricardo to Malthus,
8 September 1816)

There were, accordingly, two factors that could produce a rise in wages. First, from "the demand for labourers being great in proportion to the supply," given a stationary population and capital accumulation, and second, from "a fall in the facility of the production" of wage goods (*Works*, Vol. VII, p. 57; Ricardo to Malthus, 9 August 1816). But these two forces could never occur simultaneously, since if the population were stationary there would be no need to cultivate less fertile land. So far as Ricardo was concerned, the contemporary issue was whether Britain was experiencing a fall in profits due to the necessity to cultivate inferior land, or from a stationary population. He found himself in the strange circumstance of trying to convince the author of the *Essay on Population* that the latter was not stationary.

To explain that profits were not dependent upon an abundant facility of production, Malthus brought up the example of Tahiti,³⁸ a country he claimed had the most fertile land known, and yet the whole of the island's income was distributed between rent and wages, since there was no demand for capital.

Your doctrine that high profits depend upon the low money price of corn appears to me still more objectionable and still more uniformly contradicted by experience, than the dependence of profits upon facility of production. Facility of production on land does not *necessarily* occasion a cheap money price, the high profits often counterbalancing such facility; and in a similar manner low profits will often counterbalance in price, difficulty of production [as in Tahiti].

(*Works*, Vol. VI, p. 291; Malthus to Ricardo, 1 October 1815; italics in original)

Ricardo rejected the Tahitian example, because the facility of agricultural production was not just a question of the soil, but when it was combined with skilled labor and efficient machinery. The Tahitians possessed only one of the necessary ingredients for high profits, namely good soil, but they lacked the skill and machinery of Europe, and if those ingredients were transferred to Tahiti, or if the land of Tahiti were transferred to Europe, then profits would rise because of the decline in the cost of producing corn. As Ricardo observed:

If I am too theoretical which I really believe is the case,—you I think are too practical. There are so many combinations,—so many operating causes in Political Economy, that there is great danger in appealing to experience in favor of a particular doctrine, unless we are sure that all the causes of variation are seen and their effects duly estimated.

(*Works*, Vol. VI, p. 295; Ricardo to Malthus, 7 October 1815)

Throughout their discussions in 1815 and 1816, Ricardo's tenacity, with respect to the supply conditions alone being the controlling force over price, led Malthus on numerous occasions to protest. In opposition he pushed for a Marshallian scissors analysis, namely that supply and demand both had to be considered in order to arrive at any meaningful consideration of prices, profits or wages. Thus:

the rate of profits of stock depends mainly on the demand and supply of stock compared with the demand and supply of labour,

³⁸ The early nineteenth century spelling was Otaheite or, as Ricardo wrote, Othaeite. Tahiti was also called "King George III land."

and very little (directly) on facility or difficulty of production, properly so called.

(*Works*, Vol. VII, p. 52; Malthus to Ricardo, 6 August 1816)

And, again:

what is the main cause which determines the rate of profits under the varying degrees of productiveness? and I have no hesitation in answering distinctly that it is the proportion which capital bears to labour, or the plenty or scarcity of capital compared with the plenty or scarcity of labour, and what I mean by the demand for capital is a scarcity of capital compared with labour.

(*Works*, Vol. VII, p. 80; Malthus to Ricardo,
13 October 1816)

Moreover, demand was more susceptible and vulnerable to variation than supply, since the latter was not subject to the whims of human nature.

With regard to demand in general I cannot help thinking that in all our discussions,—in bullion, as well as corn—&c: you have greatly underrated the effect of the wants and tastes of mankind, on which, after all every exertion of human industry depends; and so far is it from being true that they may be considered as always ready for the supply, they are really very difficult to generate. Two alternatives are always ready to check their growth as far as the employment of capital is concerned. Among the higher classes the luxury of menial service, and among the lower classes the luxury of idleness, may always be preferred to commodities, and if this were to take place when labour and capital were thrown out of employment in equal proportions, would not capital become more abundant than labour and profits fall?

(*Works*, Vol. VII, p. 70; Malthus to Ricardo,
8 September 1816)

Besides their differences as to the role to be assigned to demand, there was also the question of money price versus real price, or money wages versus real wages. For Malthus it was not possible that money prices would rise while real prices fell, and he asked for one good reason "why the money price of labour should rise because it is necessary to cultivate poorer land, and the *real* price of labour must fall" (*Works*, Vol. VII, p. 8; Malthus to Ricardo, 8 January 1816). Ricardo answered:

I cannot think it inconsistent, to suppose that the money price of labour may rise when it is necessary to cultivate poorer

land, whilst the real price may at the same time fall. Two opposite causes are influencing the price of labour, one the enhanced price of some of the things on which wages are expended,—the other the fewer enjoyments which the labourer will have the power to command,—you think these may balance each other, or rather that the latter will prevail, I on the contrary think the former the most powerful in its effects. *I must write a book to convince you.*

(*Works*, Vol. VII, p. 10; Ricardo to Malthus,
10 January 1816; italics added)

The first chapter in the book was "On Value." Meanwhile, Ricardo had returned to his first area of expertise in political economy, namely an analysis of the need for central banking and monetary reform.

Bank of England Profits and A Partial Return to Specie Payment

Ricardo had two reasons for adding an *Appendix* to the fourth edition of his bullion pamphlet (1811). In the first place he wanted to answer the criticisms of his pamphlet raised by the author (Malthus) of the article in the *Edinburgh Review*. The *Appendix* dealt almost exclusively with this issue, but Ricardo also used the occasion to outline his suggestion for a partial return to specie payment, his ingot proposal. By far the greatest number of Bank of England notes in circulation were in small denomination, £1, £2 and £5 issue. If the Bank were required to redeem its small notes, a run to convert to gold undoubtedly would have ensued, and no one was prepared to suggest establishing a procedure to precipitate such a chaotic state of affairs. But Ricardo was in favor of a policy of partial redemption, so as to check any further depreciation in the value of money. While it was the Bank's own "indiscretion" which had created the problem of a redundant currency, whereby it could not possibly switch to full convertibility, it was desirable to protect the institution against dire consequences. Therefore:

If the same benefits to the public,—the same security against the depreciation of the currency, can be obtained by more gentle means, it is to be hoped that all parties, who agree in principle, will concur in the expediency of adopting them. Let the Bank of England be required by Parliament to pay (if demanded) all notes above 20*l.*—and no other, at their option, either in specie, in gold standard bars, or in foreign coin (allowance being made for the difference in its purity) at the English mint value of gold bullion, viz. 3*l.* 17*s.* 10½*d.* per oz., such payments to commence at the period recommended by the [Bullion] Committee.

This privilege of paying their notes as above described might be extended to the Bank for three or four years after such payments commenced, and if found advantageous, might be continued as a permanent measure. Under such a system the currency could never be depreciated below its standard price, as an ounce of gold and 3*l.* 17*s.* 10½*d.* would be uniformly of the same value. By such regulations we should effectually prevent the amount of small notes necessary for the smaller payments from being withdrawn from circulation, as no one who did not possess to the amount of 20*l.* at least of such small notes could exchange them at the Bank, and even then bullion, and not specie, could be obtained for them. Guineas might indeed be procured at the Mint for such bullion, but not till after the delay of some weeks or months, the loss of interest for which time would be considered as an actual expence; an expence which no one would incur, whilst the small notes could purchase as much of every commodity as the guineas which they represented. Another advantage attending the establishment of this plan would be to prevent the useless labour, which, under our system previously to 1797, was so unprofitably expended on the coinage of guineas, which on every occasion of an unfavourable exchange (we will not enquire by what caused) were consigned to the melting pot, and in spite of all prohibitions exported as bullion. It is agreed by all parties that such prohibitions were ineffectual, and that whatever obstacles were opposed to the exportation of the coin they were with facility evaded.

(*Works*, Vol. III, pp. 124-125)

By limiting redemption to notes of £20 or more, Ricardo believed the amount of conversion would be both minimal and not very costly. Apparently he believed that people with enough wealth to possess notes of £20 or more were not apt to be running to the Bank demanding gold, but the mere fact that Bank Directors knew such conversion was possible, if Ricardo's plan were adopted, would prevent them from continuing to issue more paper money. Men of wealth were not in the practice of engaging in illegal exportation of bullion, nor would they wish to carry ingots around in their purses, because of the weight.

Several months after he published the *Appendix*, Ricardo sent a copy to the Prime Minister, Spencer Perceval (1762-1812), just as he had sent him a copy of the first edition of his bullion pamphlet. Receipt of the latter only had been perfunctorily acknowledged, but Ricardo now had some reason to believe Perceval might be receptive to the idea of partial conversion to specie. Perceval, speaking in the House of Commons, said he was sympathetic with those who wished to diminish the amount of Bank paper, since such a reduction would be favorable to the balance of payments. What Perceval feared, however, were the "calamities" of a run on the Bank, which such a conversion to specie payment might bring about (*Parliamentary*

Debates, Vol. XIX, 8 May 1811, pp. 1063-1075), the very chaos which Ricardo's plan was designed to prevent. He wrote the Prime Minister:

I will not trouble you, Sir, with my opinions on this subject; they are already before the public; but beg leave to suggest, for your consideration a measure, which, if adopted, I cannot help thinking would greatly tranquilise the public mind respecting the further depreciation of Bank notes. This measure appears to me to be in strict accordance with those principles to the truth of which you have given your sanction. Let the Bank be obliged to sell gold bullion, for their own notes, to any purchaser that shall apply for a quantity not less than 5 ounces, at the rate of £4 15p^r. oz for standard bullion, and whatever the bullion so delivered by the Bank may arise from, whether from foreign coin, or from light guineas, let it be freely exportable at the will of the purchaser.

An enactment to this effect would secure the public against any depreciation of the currency beyond that to which it has already reached. The Bank would be at full liberty, at their leisure, and after the most mature consideration, to adopt such other means as might be necessary, when no danger should appear even to the most timid, gradually to reduce the amount of their paper within such limits, as should raise it to the actual value of the standard of the coin. If such a regulation were to take place much of the alarm which at present exists, and which cannot fail to increase, would subside; and though we should have to deplore that the denomination of the coin, had in effect, for a time at least, been raised from £3.17.10½ to £4.15 yet we should feel confidence as to the future, and should no longer be justly apprehensive that we were about to tread the same ruinous course that had involved the finances of other countries in irretrievable distress and difficulties.

(*Works*, Vol. VI, pp. 43-44; Ricardo to Perceval, 17 July 1811; italics in original)

A few days later Ricardo received a polite reply from Perceval's secretary, informing him that since Parliament was not in session his plan could not be proposed at the time. But moreover the suggestion was so contrary to the Prime Minister's own views, "he should not be disposed to adopt the remedies" (*Works*, Vol. VI, p. 46; Rosenhagen to Ricardo, 2 August 1811).

Having failed to find sympathetic support in the Administration, Ricardo turned to the opposition, or at least that portion of the opposition where Ricardo had some contact. Through the intervention of Richard Sharp (1759-1835), whom he knew as a member of the Bullion Committee, Ricardo sought the assistance of George Tierney (1761-1830). Both Sharp and Tierney were of mercantile origins, and while influential in Whig circles, they were not members of the inner circle of

Foxites, or the evangelical Anglicans like Wilberforce. Tierney had a good knowledge of business affairs and finance, and was one of the more enlightened members of the House of Commons. With Tierney, Ricardo could be much more outspoken in his attack upon the Bank of England, and its policies. The essence of his proposal to Tierney, however, was the same as he had suggested to Perceval:

I am encouraged by my friend Mr. Sharp, to submit to your consideration some remarks on the means which might be advantageously adopted, first, to arrest the progress of the depreciation of our currency, and secondly to restore it to its standard value.

. . . oblige the Bank to sell gold bullion to any purchaser of not less than 50, 100, or 200 ounces at a fixed price somewhere about the present market price,—such regulation to continue for six months. . . .

This would secure the public against any further depreciation of Bank notes, as the Bank would be obliged for their own safety to keep the amount of their circulation within the present limits whilst commerce and credit continued in its present state, to prevent such a rise in the price of bullion as would make it profitable to individuals to purchase it of them for exportation;—and if a greater circulation were required from the operation either of increased commerce, or of embarrassed credit, the bank might augment their issues without producing any effect whatever on the price of bullion, and consequently without exposing the Bank to any inconvenience, or depriving the merchants of that increased accommodation, which might be essential to their operations.

If no further measures were taken to approximate the currency to our ancient standard, the adoption of the one here recommended would alone give complete security as to the future:—the depreciation of our currency would be effectually checked, and the bank deprived of *the alarming power which they at present possess, of diminishing, at their pleasure, the value of the monied property of every man in the kingdom*. It would afford leisure too for the consideration of such further measures as might be necessary, without pledging Parliament to any particular course of proceeding. And if it should be thought expedient to make bank notes a legal tender, the knowledge which the public would have that though already depreciated more than 20 per cent., the depreciation of Bank notes would go no further, and that their value would no longer depend on the caprice or false theory of *Bank Directors*, would deprive that measure of all the alarm which without such security it is so much calculated to produce.

(Works, Vol. VI, pp. 67-68; Ricardo to Tierney,
11 December 1811; italics added)

Tierney replied he would study the materials Ricardo had sent him, but nothing more was said about the ingot proposal at the time. The exchanges with Perceval and Tierney indicate the degree to which Ricardo was concerned with influencing monetary policy once he commenced writing on the subject. It is not surprising, therefore, that when Pascoe Grenfell suggested to Ricardo that he write a pamphlet attacking the Bank of England, the latter was receptive to the idea. When the pamphlet finally was published in February 1816, under the title *Proposals for an Economical and Secure Currency*, it was more than just an attack upon the Bank of England and the large profits it made because of its monopoly position, but also a reformulation of the ingot proposal. Ricardo described his scheme to Mill:

I have endeavored to shew that a well regulated paper currency is less variable in its value than a metallic currency, and therefore more desirable. I have recommended a simple plan to obviate the scarcity of money, which, to the distress of the mercantile world, always takes place before the payment of the national dividends. I have again pointed out the advantages which would result from making a paper convertible into bullion and not into specie.

(*Works*, Vol. VI, pp. 312-313; Ricardo to Mill,
24 October 1815)

The pamphlet that Grenfell first proposed was quite different than the one Ricardo actually wrote. To be sure the pamphlet did discuss the profits of the Bank of England, as Ricardo calculated the profits of the Bank from 1797 up through January 1816 (*Works*, Vol. IV, *Secure Currency*, pp. 119-135). Grenfell referred to Ricardo's calculation as being "ingenious", but noted that any correct calculation was impossible, because the necessary accounts were Bank secrets, which they would never divulge. Ricardo included his calculation in an Appendix to *Secure Currency*, making the pamphlet the most empirical piece of research he ever published.

Like Sharp and Tierney, Pascoe Grenfell was a wealthy merchant, a dealer in tin and copper. He acquired the estate of Taplow Court, and this led to his election to the House of Commons in 1802. He represented Great Marlow, Buckinghamshire, for eighteen years, and was best known for his opposition to slavery and the Bank of England's dealings with the Government. It was because of Grenfell's speeches that in 1812 the Bank of England finally commenced publishing a record of its accounts, and notes in circulation (*Parliamentary Debates*, Vol. XXII, Appendix, pp. lxii-lxix, 1812). By the summer of 1815 Grenfell apparently had solicited sufficient information on Bank affairs to force a reconsideration of the 1808 arrangement which Perceval had made with the Bank to handle the mechanics of the National Debt. It was Grenfell's view that the arrangement was detrimental to the public interest, and he sought out Ricardo to write a pamphlet which would expose the issue. The reason Grenfell did not write the pamphlet himself was that he said "writing is a painfull operation to me," and he always employed an amanuensis. How he and Ricardo came together is unknown, but in July they met

frequently while they were both in London, and then when Ricardo returned to Gatcomb Park there was a very active correspondence during August and September. Grenfell sent numerous packets of Parliamentary Accounts of the Banks activities, his own calculation of Bank profits, and several volumes, such as Allardyce (1798 and 1801) and letters by an "Old Proprietor."³⁹ Grenfell supplied so much of the materials that Ricardo claimed in *Secure Currency* he had done little more than repeat Grenfell's "arguments and statements" on Bank profits (*Works*, Vol. IV, p. 54). What Grenfell desired was a more favorable arrangement between the Bank and the Government (*Works*, Vol. VI, p. 186; Grenfell to Ricardo 28 September 1815), not necessarily a severance of the agreement. Ricardo, on the other hand was way ahead of Grenfell.

I am quite of his opinion, and indeed I go much further. I think the Bank an unnecessary establishment getting rich by those profits which fairly belong to the public. I cannot help considering the issuing of paper money as a privilege which belongs exclusively to the state.—I regard it as a sort of seignorage, and I am convinced, if the principles of currency were rightly understood, that Commissioners might be appointed independent of all ministerial controul who should be the sole issuers of paper money,—by which I think a profit of from two to three millions might be secured to the public, at the same time that we should be protected from the abuses of the country Banks, who are the cause of much mischief all over the Kingdom. These Commissioners should also have the management of the public debt, and should act as Bankers to all the different public departments. They might invest the 11 millions which is the average of public deposits in Exchequer Bills, a part of which might be sold whenever occasion required. This, of course (at least all of it) could not be effected till the expiration of the Bank Charter in 1833, but it is never too soon to give due consideration to important principles, which might be recognized tho' not yet acted on. In looking over the papers which have from time to time been laid before Parliament I think it might clearly be proved that the profits of the Bank have been enormous,—I should think they must have a hoard nearly equal to their Capital. By their Charter they are bound to make an annual division of their profits, and to lay a statement of their accounts before the Proprietors,—but they appear to set all law at defiance. I always enjoy any attack upon the Bank and if I had sufficient courage I would be a party to it.

(*Works*, Vol. VI, pp. 268-269; Ricardo to Malthus,
10 September 1815)

³⁹ In 1815 a series of letters to the Editor, signed "An Old Proprietor," revealed calculations of Bank expenses and profits.

By the end of September the manuscript was in such shape that it was sent to Grenfell for his reaction. Reading it through the same day he received it, he was pleased with the results and wrote that the manuscript was excellent. He had some comment to the effect he thought Ricardo underestimated the Bank's profits, and suggested some slight changes on that aspect of the paper. What was particularly new to him was Ricardo's scheme for conversion to bullion rather than coin, and now that he understood the plan it was "admirable" (*Works*, Vol. VI, p. 286; Grenfell to Ricardo, 28 September 1815). Obviously Grenfell was not familiar with Ricardo's *Appendix* to his bullion pamphlet, or otherwise he would have recognized the restatement of the ingot scheme. But then Grenfell was more interested in the Bank's profits than he was in rearranging the monetary system, though in later years he gave his Parliamentary support to Ricardo's proposal.

Though the manuscript was satisfactory to Grenfell, Ricardo himself was not happy with the results, and had doubts about it being publishable. "Mr. Grenfell," he wrote Malthus, "is I think anxious that something should be said about the Bank before the meeting of Parliament, and I too wish some able hand would undertake it" (*Works*, Vol. VI, p. 295; Ricardo to Malthus, 7 October 1815). A few days later, in order to satisfy himself about his misgivings, Ricardo sent his manuscript to Malthus, and asked his opinion. His friend replied:

I have read your manuscript with attention, and think it important and well worthy the attention of the public; but I doubt whether it is so well written in point of style and arrangement, as your two first pamphlets. With regard to the matter I agree almost entirely with you, except that I do not think you have considered all the variations to which such a currency as you propose must be subject, particularly the great variation that is likely to arise from a sudden demand for bullion operating upon the scanty supply which is likely to take place upon your plan.

(*Works*, Vol. VI, p. 298; Malthus to Ricardo,
15 October 1815)

Ricardo said the deficiencies in style and arrangement were faults he would conquer, but Malthus was wrong in believing that a sudden increase in the foreign demand for bullion would place a burden upon a domestic paper money system. He wrote:

The fact is however against you for we have supplied large sums when the metals have been absolutely banished from circulation. This has been the case during the whole Peninsular war [Wellington campaign]. If indeed on my system the Bank could keep a less quantity of bullion in their coffers to answer the demands of the public, the objection would be well founded, but the only difference would be that in one case their hoards would consist wholly of coined gold and silver,—in the other they would

consist of the uncoined metals,—but on both systems, if the Bank paid their notes on demand, the currency must be equally reduced in quantity if gold and silver should become more valuable.

(*Works*, Vol. VI, pp. 300-301; Ricardo to Malthus,
17 October 1815)

Following the quoted passage, Ricardo returned to their continuing discussion about profits in Tahiti, and sent Malthus's letter to Grenfell. Being a politician, Grenfell was not overly impressed with Malthus's comments, and since the latter had said he agreed almost entirely with the contents of the manuscript, Grenfell viewed the letter as an endorsement of Ricardo's manuscript, and urged its immediate publication (*Works*, Vol. VI, p. 305; ". . . what he says will I trust decide you to print and give the public the Benefit of your Reflexions on Currency and Bank affairs . . ."; Grenfell to Ricardo, 17 October 1815). But Ricardo had one more wicket to take, so he sent the manuscript to Mill. On the status of the manuscript, he wrote:

I have shewn it to Mr. Grenfell and to Mr. Malthus. The former urges me to publish it. The latter agrees with almost all my matter, but thinks, as I think myself, that the performance is inferior *even* to my first two pamphlets. I am not much inclined for this reason to publish it, but before I finally determine I should like to have your candid opinion about it, and I am sure you will give me no other, and I will if possible send it to you from Bath, the latter end of this or beginning of next week with all its imperfections and before I attempt to make it better which I think I can do.

(*Works*, Vol. VI, p. 313; Ricardo to Mill, 24 October 1815;
italics in original)

With Ricardo at Gatcomb Park, Grenfell in London, Malthus at Haileybury, and Mill at Ford Abbey, Somersetshire, it is not surprising that the circulation of the manuscript was a problem. On two separate occasions it was lost in transit. The first time was when Malthus placed the packet on the wrong London coach, and there were several days of scurrying around until finally it was located. Then in late October, when Ricardo sent the manuscript to Mill, it was missing for almost a month and there was considerable anxiety among all concerned. Mill finally found the paper, and by the first of December returned it to the author with his suggestions. As was typical of Mill's reaction to Ricardo's economic ideas, unlike the case on political matters, there were no substantive comments about the manuscript. All of Mill's suggestions concerned the question of the organization of the material, the necessity for inserting section headings, and a request for a rewriting of the introduction. In addition, Mill wrote a summary of each paragraph in the margin, to show how the paragraphs were related to each other, a practice he had picked up from Bentham (*Works*, Vol. VI, p. 329 n.2; Mill to Ricardo, 1

December 1815). The paragraph summaries would allow Ricardo to see if the argument flowed as he intended. As to the section titles, Mill suggested they be long and detailed, as he saw nothing wrong with section headings being equal in length with the substantive discussion, and called attention to the practices of Voltaire and Montesquieu in their writings. Mill said he would give any assistance which Ricardo might want, but believed he could be most useful when the manuscript

is in the proofs; because I can then definitively take cognisance of the punctuation, which is of considerable importance—and was badly done by the printer in your last publication. I am satisfied that any thing else to which I should chuse to put my hand, for fear of doing more harm than good, is so trifling that it can be easily done in the proofs, with hardly any additional expence of production, to which I shall not grudge to submit you. I am sure the matter will be all good—and that at most there will be but a few expressions in which I may fancy that I can alter a word or two for the better. In this case, the best thing for you will be to send the manuscript to the press immediately; and to tell Murray to send the proofs to me.

(*Works*, Vol. VII, p. 4; Mill to Ricardo, 3 January 1816)

This passage should dispel the myth that Ricardo's economic thought was a legacy from James Mill, whose self-described role was not even that of an editor, but rather that of a copy reader whose contribution could be made on printer's proofs. Ricardo, moreover, did not avail himself of Mill's assistance, as he wished to publish *Secure Currency* as quickly as possible, so as to have some influence prior to the session of Parliament which was due to commence in April. To send the proofs to Mill, who was still in Somerset, might take weeks, an undesired delay. By 2 February 1816, Ricardo returned the proofs to the printer, and four days later the pamphlet was in circulation.

Although he did not utilize Mill's proof-reading assistance, Ricardo followed the suggestion that the manuscript of *Secure Currency* should be set out in sections, of which there were seven, preceded by an introduction. There was also the aforementioned statistical appendix, containing Ricardo's calculation of the Bank's annual profits, running from 1797 through early 1816.

Ricardo wrote in the introduction that there were three issues which Parliament should consider in its next session:

1st. Whether the Bank shall be obligated to pay their notes in specie at the demand of the holders?

2dly. Whether any alteration shall be made in the terms agreed upon in 1808, between Government and the Bank, for the management of the national debt?

And, 3rdly, what compensation the public shall receive for the large amount of public deposits from which the Bank derive profit?

(*Works*, Vol. IV, p. 51)

In each instance Ricardo's answer to the question was in the affirmative, but he considered the first issue of primary importance. Accordingly he devoted the first four sections of the pamphlet to the discussion of his proposal for an economical and secure currency. After some apology for retracing the requisite principles for a country's circulating medium of exchange, where primary emphasis had to be given to the need for as little variability in the value of money as possible, he summarized the issues of the earlier bullion controversy. After discussing the pros and cons of gold, silver and copper being used as the medium of exchange, he concluded that a paper money was superior, if it was properly managed. No system could be devised where there would be no change in the value of money, since even if the quantity were a constant amount there would still be changes in the efficiency of the use of money (velocity) from the seasonal and accidental changes in the channels of commerce. "The value of money," he said, "does not wholly depend upon its absolute quantity, but on its quantity relative to the payments which it has to accomplish" (*Works*, Vol. IV, p. 56).

The problem with a paper money system, including the use of checks on bankers, was the necessity for control upon the quantity of notes in circulation, and ever since the 1797 suspension of the requirement that the Bank pay in specie, the country had suffered the consequences of an unregulated supply of bank notes. Although the suspension presumably had been war related, the problems could have been averted if the Bank had behaved properly. "If the Bank had continued paying in cash, probably the panic would have subsided before their coin had been exhausted" (*Works*, Vol. IV, p. 68). But the Bank and the Pitt Administration both panicked, leading to a series of events which produced the current adverse situation.

In the present state of the law, they [the Bank Directors] have the power, without any control whatever, of increasing or reducing the circulation in any degree they may think proper: a power which should neither be intrusted to the state itself, nor to any body in it; as there can be no security for the uniformity in the value of the currency, when its augmentation or diminution depends solely on the will of the issuers . . . Though I am fully assured, that it is both against the interest and wish of the Bank to exercise this power to the detriment of the public, yet when I contemplate the evil consequences which might ensue from a sudden and great reduction of the circulation, as well as from a great addition to it, I cannot but deprecate the facility with which the state has armed the Bank with so formidable a prerogative.

(*Works*, Vol. IV, p. 69)

Although he expressed great respect for the advances that were being made to bring about more liberty and freedom of trade, so every man could be free to pursue any activity in the employment of his talents and capital, the interference of government was always necessary in two instances: the prevention of fraud, and the certification of authenticity. In these instances, as J.B. Say had shown (Ricardo cited Say, *Economie Politique*, Livre i, Chapter 17), the public needed protection, since purchasers were not able to "acquire sufficient knowledge to guard them against deception." (*Works*, Vol IV, p. 72) Ricardo cited three examples where the government should violate the general rule of freedom of trade: the certification of medical practitioners, apothecaries and the stamp placed upon metallic money. If government intervention was necessary to prevent fraud in the case of metallic money, there was even more justification for government certification to prevent fraud when a country was on a paper currency. "Is it not inconsistent, that government should use its power to prevent the community from the loss of one shilling in a guinea, but does not interfere to protect them from the loss of the whole twenty shillings in a one pound note?" (*Works*, Vol. IV, p. 72). The obvious need was for the country to return to a system whereby the quantity of notes was tied to the price of bullion, wherein the mint and market price, in equilibrium, would limit the quantity of paper money.

Having made the case for the necessity for a return to the gold standard, Ricardo again set forth his ingot proposal, repeating the addendum argument of the *Appendix* to his bullion pamphlet, and one outlined in his private correspondence with Perceval and Tierney. This time, however, the ingot proposal was given primary emphasis in a pamphlet calling for a complete overhaul of the relation between the Government of Great Britain and the Bank of England.

There was no desire, on Ricardo's part, to return to the pre-1797 system, whereby Bank notes were convertible into specie. That had been a costly process, as guineas were minted whenever the pound fell relative to other currencies, and the melting boiled when the pound rose in value on the international exchange. That process had led to unnecessary coinage, and volatile disruptions in the circulation of specie and Bank notes. Ricardo suggested an "economical" plan for a return to the gold standard:

To secure the public against any other variations in the value of the currency than those to which the standard itself is subject, and, at the same time, to carry on the circulation with a medium the least expensive, is to attain the most perfect state to which a currency can be brought, and we should possess all these advantages by subjecting the Bank to the delivery of uncoined gold or silver at the mint standard and price, in exchange for their notes, instead of the delivery of guineas; by which means paper would never fall below the value of bullion without being followed by a reduction of its quantity. To prevent the rise of paper above the value of bullion, the Bank should be also obliged to give their paper in exchange for standard gold at the price of 3*l.* 17*s* per

ounce. Not to give too much trouble to the Bank, the quantity of gold to be demanded in exchange for the paper at the mint price of 3*l.* 17*s* 10½*d.*, or the quantity to be sold to the Bank at 3*l.* 17*s.*, should never be less than twenty ounces, at 3*l.* 17*s* per ounce, and to sell any quantity that might be demanded at 3*l.* 17*s* 10½*d.* While they have the power of regulating the quantity of their paper, there is no possible inconvenience that could result to them from such a regulation.

The most perfect liberty should be given, at the same time, to export or import every description of bullion. These transactions in bullion would be very few in number, if the Bank regulated their loans and issues of paper by the criterion which I have so often mentioned, namely, the price of standard bullion, without attending to the absolute quantity of paper in circulation.

(*Works*, Vol. IV, pp. 66-67)

Having disposed of what he considered to be the most critical monetary question,⁴⁰ Ricardo turned in Section VI to the analysis of the excessive profits which he and Grenfell believed accrued to the Bank because of past agreements made with the Government. The Bank benefited in two ways from its relation with the Government: one, from its holding of Treasury deposits, on which it paid no interest, and two, the fees it received for managing the National Debt.

As a result of Grenfell's speeches in Parliament, the Bank finally revealed in 1814 that for some years it held Treasury deposits of £11 millions, on which Ricardo claimed they had earned five percent interest, a total of £5,500,000 over ten

⁴⁰ Section V of Ricardo's pamphlet outlined his proposal for the alleviation of a problem associated with the quarterly disruption in the money supply, caused by the payment of the dividend on the national debt. With a debt of £830 millions, assuming a three percent coupon, the annual dividend came to better than £25 million, or £6 million each quarter. Due in January, April, July and October of each year, the funds necessary for the payment of the dividend required that the tax collectors acquire a hoard over the several weeks prior to the due date of the payment. This practice produced a volatile change in the normal money supply, as the Treasury temporarily took funds out of circulation, only to replenish the flow when the dividends were paid. "Exchequer bills, which normally sell at a premium of five shillings per 100*l.* are at such times at so great a discount, that by the purchase of them then, and the re-sale when the dividends are paid, a profit may often be made equal to the rate of fifteen to twenty per cent interest for money. At these times, too, the difference between the price of stock for ready money, and the price for a week or two to come, affords a profit, to those who can advance money, even greater than can be made by employing money in the purchase of exchequer bills. This great distress for money is frequently, after the dividends are paid, followed by as great a plenty, so that little use can for some time be made for it." (*Works*, Vol. IV, pp. 74-75)

Ricardo suggested that the Bank of England issue negotiable warrants to the dividend recipients a few days prior to the collection of the taxes necessary to pay the dividends. The warrants, not due until the specific date, would circulate as a subsidiary money supply, and would be accepted by the tax collectors at a discount. "Thus then would a great part of the payments to government, and the payments from government to the public creditor, be effected without the intervention of either bank notes or money; and the demands for such purposes, which are now so severely felt by the mercantile classes, would be effectively prevented" (p. 76).

Among those who read the manuscript prior to publication, only Grenfell mentioned Ricardo's proposal, and he found "no practical objection" (*Works*, Vol. VI, p. 286). The Bank never instituted the plan, nor is there any evidence of it being considered as a feasible proposition.

years. In return for the Bank holding its deposits, the Government had received a three percent loan of three million pounds, for the years 1806 to 1814. For this eight year period, Ricardo calculated the Bank lost £480,000, the two percent difference on £11 million they could have earned at five percent and the three percent paid by the Government. From 1808 to 1816 the Bank loaned the Government another £3 million at no interest and therefore lost the interest equivalent of £1,200,000. Subtracting the £1,680,000 (£480,000 plus £1,200,000) from £5.5 million left a net gain of £3,820,000 to the Bank, from holding the Treasury deposit, an annual amount of £382,000.

In 1808, when the Bank loaned the Government the £3 million at no interest, Perceval, as Prime Minister, had made an agreement whereby the Bank would be paid annually for managing the National Debt on a graduated scale. In 1816, with the debt now totaling £830 millions, Ricardo calculated the annual cost to the public of approximately £300,000. The £382,000 income for holding Treasury deposits, plus the £300,000 for managing the debt, meant that £682,000 was far in excess "of the just compensation which the public ought to pay to the Bank" (*Works*, Vol. IV, p. 82). He also wrote that

moreover the Bank have been enjoying, ever since the renewal of their charter [1800], immense additional profits, from the substitution of paper money in lieu of a currency consisting partly of metallic and partly of paper money, which additional profits were not in contemplation . . . when the bargain was made in 1800; . . . Under these circumstances it must, I think, be allowed that in 1808 Mr. Perceval by no means obtained for the public what they had a right to expect; and it is to be hoped that . . . terms more consonant with the public interest will now be insisted on.⁴¹

(*Works*, Vol. IV, pp. 82-83)

The annual £682,000, which Ricardo showed was transferred to the Bank from the public coffer, was not all profit, of course, since there were costs to the Bank for providing the various services. Making allowances for an estimated 500 clerks to handle the public business; some portion of the salaries of the Bank officers; and expenses to cover fraud, legal fees and insurance, Ricardo estimated the Bank's annual cost at £150,000, leaving a net profit of something in excess of £520,000.

Based upon his own calculation of the Bank's profits, accruing from managing the national debt and acting as public depository, Ricardo said he agreed with Grenfell the benefits were indeed excessive. But what was even more alarming was the position being currently taken by the Bank Directors, namely that the Bank had the "right" to hold the deposits, and to manage the debt, and nothing could be

⁴¹ The Bank's charter was due to expire in 1812, but in 1800 in return for agreeing to hold Treasury deposits the charter was extended to 1833. Ricardo's suggestion, that all the services which the Bank performed for the public could be performed by public servants, was not possible until 1833, when the Bank did become a public institution.

changed until 1833. Ricardo pointed out that Perceval's 1808 agreement contained the phrase that the allowance for such duties "*applies to present circumstances, or to such as can be expected to occur within any short period*" (quoted with italics added by Ricardo, *Works*, Vol. IV, p. 54). It was now 1816, the circumstances had changed and eight years was not a short period.

Is it not lamentable to view a great and opulent body like the Bank of England, exhibiting a wish to augment their hoards by undue gains wrested from the hands of an overburdened people? Ought it not rather to have been expected that gratitude for their charter, and the unlooked for advantages with which it has been attended; for the bonuses and increased dividends which they have already shared, and for the great undivided treasure which it has further enabled them to accumulate, would have induced the Bank voluntarily to relinquish to the state, the whole benefit which is derived from the employment of eleven millions of the public money, instead of manifesting a wish to deprive them of the small portion of it which they have for a few years enjoyed?

When the rate of charge for the management of the national debt was under discussion, in 1807, Mr. Thornton said, "that in a matter between the public and the Bank, he was sure nothing but a fair compensation for trouble, risk, and actual losses, and the great responsibility that attaches to the office, would be required."

How comes it that the language of the directors of the present day is so much changed? Instead of expecting only a fair compensation for trouble, risk, and actual losses, they endeavour to deprive the public even of the inadequate compensation which they have hitherto received; and appeal, now for the first time, to their charter, for their right to hold the public money, and to enjoy all the profit which can be derived from its use, without allowing the least remuneration to the public.

If the charter were as binding as the Bank contend for, a great public company, possessing so advantageous a monopoly, and so intimately connected with the state, might be expected to act on a more liberal policy towards its generous benefactors.

(*Works*, Vol. IV, pp. 93-94)

In the last section of his pamphlet (VII), Ricardo attacked the Bank Directors for the manner in which they had violated the charter with respect to the Bank's proprietors, since the latter had not been paid higher dividends. The profits of the Bank, under the Charter of 1708, were to be distributed from "time to time" to all the members of the corporation, in proportion to each member's share (see *Works*, Vol. IV, p. 110 and *passim*). But one of the problems the proprietors had was they never knew the amount of the Bank's profits. That issue had been the reason behind Allardyce's two works, which he published in 1798 and 1801. Using Allardyce's

original figures, and the ingenious calculations of William Morgan (1750-1833) (*Works*, Vol. IV, pp. 415-416, Sraffa, "The Ingenious Calculator"), Ricardo estimated the Bank's total profits; not only the profits accruing from the public sector, but also the profits on its notes in circulation in the private sector. He concluded that "the profits of the Bank for every year, since 1801, have exceeded the annual dividend paid to the proprietors" (*Works*, Vol. IV, p. 103). For the eighteen years from 1797 to 1814 the average annual dividend paid proprietors was 9.9 percent, at a constant rate of 10 percent from 1807 forward. The accumulated retained surplus, by Ricardo's calculation, came to £1,066,625. If the dividend rate continued at 10 percent, and the Bank surplus accumulated at current trends, it would exceed £120 million in forty years.

Two criticisms were levied against the Bank Directors. They were in defiance of the conditions of Parliament's charter, and not open in their dealing with their own proprietors.

. . . the proprietors should have accounts laid before them of the amount of their accumulated fund, and should be consulted on the expediency of such disposition of it . . .

The Bank, however, have waited for none of these conditions,—they have been, in fact, for years adding the annual surplus profits to their capital, without defining the amounts added, or to be added; they do it without laying any accounts before the proprietors—without consulting them; and not only without the sanction of Parliament, but in defiance of the express law on the subject.

(*Works*, Vol. IV, p. 107)

The question of the need for the proprietors to know the status of their corporation was not a new one, as evidenced by Allardyce and the "Old Proprietor," but when Ricardo raised the issue at a meeting of Bank Proprietors, of which he was one,⁴² the Directors took umbrage and claimed the passing of a resolution to them to reveal the Bank's profits was "betraying a want of confidence in them, and as a censure on their proceedings." After relating the opinion of the Directors that their integrity was in question, Ricardo wrote:

The publication of accounts, besides being necessary as a check against the *corrupt* administration of the Directors, is also

⁴² On 21 December, while in the final stages of preparing his manuscript for the printer, Ricardo attended a meeting of the proprietors of the Bank, and spoke for some ten minutes "with considerable inward agitation." His speech was reported in all the papers, as Malthus noted, but the writers did not distinguish between Ricardo's objection to the system and his questioning of the integrity of the Directors themselves, or their actions. He claimed that if there was corruption it was not the fault of the Directors but of the system which "has armed the Directors with the power of doing mischief." (*Works*, Vol. VI, p. 336; Ricardo to Malthus, 24 December 1815)

necessary to give assurance to the proprietors, that their affairs are *ably* administered. Since 1797, no statement has been made of the condition of the Bank; and, even in that year, it was made to Parliament, on a particular exigence, and not to the proprietors of Bank stock. How then, can the proprietors know whether, in the favourable circumstances in which the Bank have been placed, the directors have availed themselves of all the opportunities which have offered, of employing the funds entrusted to their charge to the best advantage? Would it not be desirable, that from time to time the proprietors should be able to ascertain whether their just expectations had been realised, and whether their affairs had been ably as well as honourably administered? If the practice of laying all accounts before the proprietors had been always followed, perhaps the Directors of 1793, 1794, and 1795, might have been admonished for so badly managing the affairs of the Bank, as to keep permanently in their coffers a sum of cash and bullion, generally more than three-fourths, and seldom less than one-half the whole amount of their notes in circulation. They might possibly have been told, that such a waste of the resources of the Bank shewed a very limited knowledge of the principles by which a paper currency should be regulated.

(*Works*, Vol. IV, pp. 111-112; italics in original)

In the last paragraph of the *Essay on Profits*, Ricardo had lashed out at the monopoly protection afforded to landlords, and claimed that to be consistent society should have a check upon all progress, not just the corn trade. In his last paragraph of *Secure Currency*, Ricardo attacked the sacred institution of the Bank of England, writing that

the Bank are secure of their charter for seventeen years to come; and the public cannot, during that time, deprive them of the most profitable part of their trade. If indeed the charter were about to expire, the public might question the policy of permitting a company of merchants to enjoy all the advantages which attend the supplying of a great country with paper money; and although they would naturally look with jealousy, after the experience furnished by other states, to allowing that power to be in the hands of government, they might probably think that in a free country means might be found by which so considerable an advantage might be obtained for the state, independently of all control of ministers. Paper money may be considered as affording a seignorage equal to its whole exchangeable value,—but seignorage in all countries belongs to the state, and with the security of convertibility as proposed in the former part of this work, and the appointment of commissioners responsible to

parliament only, the state, by becoming the sole issuer of paper money, in town as well as in the country, might secure a net revenue to the public of no less than two millions sterling. Against this danger, however, the Bank is secure till 1833, and therefore on every ground publicity is expedient.

(*Works*, Vol. IV, p. 114)

In several respects Ricardo's pamphlet on *Secure Currency* was the most fascinating of his publications. Here was the great stockjobber showing his adroitness in examining the finances of the Bank of England. He knew the institution well, and was an expert at financial analysis. One can almost envision him sitting in his office on Threadneedle Street, watching the hundreds and hundreds of Bank clerks as they trudged daily to their desks at 7:00 a.m. to keep the government accounts, for the profit of the Bank and not the public. The secrecy with which the Directors shrouded themselves was something which came in conflict with his own open manner, and his insistence upon integrity in the business world, something his father had taught him. The pamphlet reflected a knowledge of business, accounting and above all banking activities, but it also reflected the critical view of a man who believed in the public interest. There were very few political economists of Ricardo's day who could have written *Secure Currency*. In the first place there were not many who possessed the necessary knowledge of business accounts who could have estimated the Bank's Profits, and still fewer who would be willing to confront the Bank Directors. In the latter instance, his personal wealth provided him the luxury of independence, and his heritage the concern for the public interest. In the end, David Ricardo was very instrumental in bringing down the independence of the Bank of England, the first stone with his pamphlet on bullion, the second with *Secure Currency*. The third and last stone was cast posthumously, *The Plan for the Establishment of a National Bank* (1824). But all three came from the same philosophical and economic fulcrum.

The author of *Secure Currency* had doubts about whether the pamphlet would sell in sufficient quantity to cover the costs of publication. Accordingly, he wrote his publisher, John Murray (1778-1843), that he would be relieved if it was agreed he would bear the costs of the publication, should that be necessary (*Works*, Vol. VII, p. 14; Ricardo to Murray, 2 February 1816). (In part, Ricardo was concerned about the excessive number of complimentary copies (21) of *Secure Currency* which he asked Murray to distribute.) There was no necessity for any subsidy from the author, as the first edition was exhausted in two weeks, and on 23 February a second edition appeared, an event the author claimed was "very unexpectedly to me" (*Works*, Vol. VII, p. 25; Ricardo to Malthus, 9 March 1816).

John Murray was the publisher of all of Ricardo's pamphlets and books. He performed the same services for Malthus and any number of other writers, being the most important publisher of his day. Mallet claimed that Ricardo gave his works to Murray and never received any royalties (*Works*, Vol. VIII, p. 152 n.2). Whatever royalties Ricardo had coming probably would have been minimal, too small for him to bother with, given his wealth. There was also the personality characteristic

which fostered the practice of giving money away, and Murray may have benefited from the trait, as did others. The relation between Murray and Ricardo is difficult to decipher, since only Ricardo's letters are extant. Ricardo not only received no royalties on his publication but, also unsolicited, offered Murray a share of the 1815 loan, for which he was one of the contractors (*Works*, Vol. VI, p. 230; Ricardo to Murray, 12 June 1815). The two volumes of Murray's *Memoir and Correspondence* (Smiles 1891) are strangely silent *vis-à-vis* Ricardo, whose name is never mentioned, nor are any of his numerous works which Murray published. One explanation for the failure of Murray's correspondence to reveal any reference to Ricardo is that the work is mainly devoted to literary figures, such as Scott, Byron, Canning, and the Disraelis. Malthus is mentioned but not extensively. If a second opinion is warranted it is to the effect that Ricardo was too radical a reformer for Murray, and while he published his works he did not have any desire to be associated with a man holding such views. Murray and Scott founded the *Quarterly Review* (1809), for example, to counter what they considered to be the error-ridden views of the *Edinburgh Review*, and the publisher always hewed to the Tory position. For one of his authors to take such radical positions as expressed in the *Essay on Profits and Secure Currency* probably was an anathema to Murray, and he purposely avoided any references to one David Ricardo. That Murray published Ricardo's works nevertheless was to his credit, and expressed the increasing openness of the British literary and intellectual arena.

Chapter VIII

RICARDO'S *PRINCIPLES* AND THE QUESTION OF VALUE

The meeting was well attended, and we stated our plans, by which the money deposited in the [City of London] bank was to be invested in the public Stocks, and the amount of the deposits returned to the depositors whenever called for with interest at 4 per cent. When the resolutions came to be put, a gentlemen whom I did not know, and who proved to be Mr. Ricardo, expressed his entire approbation of the object . . . but conceived that the Directors of the Bank should only engage to return to depositors the value of Stock which had been purchased with their money, because if any considerable fall in the Stocks should take place, . . . [or] a great run came at the same time upon the bank, the institution would either be obliged to fail . . . or the Trustees to make good the deficiency. The objection was obvious and insuperable . . .

J.L. Mallet (July 1816)

As an individual stockjobber it was a relatively easy matter for David to dissolve his business, lock the door of his office at 16 Throgmorton Street and leave Babylon. There were no customer's accounts to transfer to other brokers, for whenever David bought or sold for someone else, such as his friend Malthus, he traded the stock in his own account. As a matter of fact, there is no evidence that Ricardo traded stock for anyone other than Malthus. So far as his activities as a

Loan Contractor were concerned, David had led the list of subscribers for the highly successful Loan of 14 June 1815, but it marked the end of his career in that arena. He was, of course, along with his brothers, Francis and Ralph, among the leaders of an unsuccessful list of subscribers to the Loan of 9 June 1819. David by that date, however, was a Member of Parliament, and although he negotiated with the Chancellor of the Exchequer on the day the Loan was contracted, he undoubtedly had had little to do with drawing up the list of subscribers, leaving such responsibilities to his brothers. The Loan of 1819, as reported earlier, marked both the commencement of Nathan Rothschild's building of a great financial empire and the end of Ricardo's financial career. Very quickly Rothschild became one of the most influential members of the London Stock Exchange, as the Ashkenazim eclipsed the financial role of the early Sephardim.

David did have one entangling relationship upon leaving the Stock Exchange, and that involved the question of what to do about his single employee, his clerk and nephew-in-law William Arthur Wilkinson. In March of 1815, as David was in the process of closing out his business, partially delayed by the 100 Days War, Wilkinson had just turned 20, having been employed by his uncle-in-law since 1811. In March 1815, David wrote to his brother-in-law, Henry Wilkinson, to outline the plans he had made for the boy's future.

David observed that for some many months his clerk, William, had been little engaged because of his own withdrawal from the Exchange, and if those plans continued, as he anticipated, there would be even less activity for Wilkinson in the future. David said he had planned to retain William in his employ until the boy's 21st birthday, which would be about a full year. After the year, David suggested that with a "little assistance of Stock in trade he must endeavor as other young men do, to get his livelihood and push his own fortunes" (*Works*, Vol. X, p. 116; Ricardo to J. H. Wilkinson, 31 March 1815). The "little assistance of Stock" would undoubtedly have come from David, in the tradition of the guilds, wherein an individual who had served out his apprenticeship was supplied by his master with a sum sufficient to buy the necessary raw materials to commence his own activities as a craftsman.

David's initial thoughts as to William's future prospects were altered, following a conversation with his brother Frank (Daniel). Frank, who had been David's first clerk, doubted if William had the ability to make it in the business world, as he was "so timid." As an alternative, Frank suggested that he had a number of small commissions that together yielded some £160 per annum, and he would be willing to give William half if he would take over the responsibilities and trouble "which they occasioned." As David described the plan:

[Frank] observed too that he could have no particular personal motive for this proposal as he could easily get a young man to give him the necessary assistance at that, or at a less salary, but he proposed it for William because he might keep it or relinquish it accordingly as he found himself equal to carrying on a little

business for himself, and which he might do at the same time that he assisted him.

(*Works*, Vol. X, p. 116; Ricardo to J. H. Wilkinson,
31 March 1815)

One aspect of the agreement between the two brothers was that David would continue to pay William a salary for a year, which would be in addition to the £80 in commissions paid by Frank. Having worked out their plan, David approached William for the first time to explain his and Frank's proposal. William relented about being paid a salary when he would be performing no services for David, but "it was finally settled as Frank and I had agreed." (*Works*, Vol. X, p. 117; Ricardo to J.H. Wilkinson, 31 March 1815)

Since William was a minor, he was under some constraint to adhere to his father's advice on financial matters, and that was the reason for David's letter to Henry Wilkinson. As David said:

Now it appears to me that we all three have behaved very civilly to each other: — I am sure we all three thought so.— Priscilla [David's wife and William's aunt], however, persuades herself that Frank has imposed upon me and made me consent to an arrangement which is not agreeable to me, and has worked herself up to write, unknown to me at the time, to William. She has told me the substance of her letter, and of her consent that you should see it. I write therefore to give you a true statement of the case, that you may not be induced from any other considerations than those of William's interests to withhold your consent from the above arrangement.

(*Works*, Vol. X, p. 117; Ricardo to J. H. Wilkinson,
31 March 1815)

That David was upset because of his wife's intervention, there is little doubt. As he told his brother-in-law:

Much as I am sometimes surprised at Priscilla's warmth and energy on trifling occasions, on the present occasion I have been more than usually puzzled to account for her thinking it necessary either to feel strongly or to interfere in a business which I tell her is wholly out of her department.

(*Works*, Vol. X, p. 116; Ricardo to J. H. Wilkinson,
31 March 1815)

There is an old adage to the effect that one should not engage with in-laws in business affairs, and despite David's deep devotion to the Wilkinson family, in March of 1815 he probably had some second thoughts about having William as his employee. As David suggested, his wife's involvement stemmed from her mistaken

belief that her husband was being taken advantage of, whereas in fact he was merely demonstrating once again his great generosity, particularly with respect to the Wilkinsons. One can only speculate as to what Priscilla's reaction might have been if she had known of all the stock trading that David did gratis upon Malthus's behalf, or that he took no royalties from Murray for any of his publications. That she interceded in the Wilkinson matter was because, after all, she herself was a Wilkinson.

The most dramatic and overwhelming concern, associated with David's withdrawal from the business world was the transfer of his accumulated wealth out of the volatile government Funds market into more fixed and stable assets. He accomplished the transfer over the course of some three years, beginning in 1814 when he first made known his decision to leave the Stock Exchange. There is nothing in the early correspondence to indicate that he had developed a plan of personal disintermediation, but no occasion arose until 1817, when he had any reason to explain his actions, and by that time the process had been completed.

In December 1817, Ricardo received a request from J.B. Say for a loan of some 30 to 40 thousand francs (*Works*, Vol. VII, p. 225; Say to Ricardo, 8 December 1817); Say was the only individual who ever asked to borrow money from Ricardo.¹ Say frequently engaged in speculative ventures, and this time he was interested in joining his brother in speculating in the futures market for potato flour. His letter outlined the lively prospects for a good potato crop in France, and the growing market for potato flour.² Say, however, lacked the necessary funds, and left it to Ricardo to determine the rate of interest on the loan, but asked that the transfer of funds be made in such a way as to avoid his having to pay a commission to his bank in Paris.³

¹ It is perhaps not quite correct to allege that Say was the only individual who attempted to borrow money from Ricardo, for there is a letter from Joseph Lancaster, the radical educator, asking for "a little pecuniary assistance" (*Works*, Vol. X, p. 388; Lancaster to Ricardo, 22 February 1818). Lancaster's request, of course, was not for a loan, but a donation or contribution to further his educational scheme.

² "Il en est résulté que le prix des féculés se maintient au dessous de celui des farines de blé 1^{re} qualité. Les farines valent actuellement 27^f. le quintal de 100 levres, et la fecule se vend environ 20^f. Tous les boulangers de Paris en melent dans leur pain qui est tres beau et très bon à present.

Les renseignements qui arrivent des diverses parties de la France sur les subsistances, s'accordent tous en ce point que la demiere récolte ne surfira pas pour atteindre la recolte prochaine. Il y a donc grande apparence de hausse dans les grains et farines, d'ici au mois de septembre prochain.

Cette hausse est encore plus probable sur les féculés de pommes de terre, car en avril on cesse d'en fabriquer à cause de la difficulté de garder les pommes de terre plus longtems sans germination." (*Works*, Vol. VII, pp. 224-225)

Say had first raised the question of his speculation in potato flour in July, but had not asked for a loan at that time. (*Works*, Vol. VII, p. 166; Say to Ricardo, 21 July 1817)

³ "Vous fixerez vous même le taux de l'interet et la forme que devrai donner à mon engagement envers vous. Je voudrais s'il etait possible, avoir un credit ouvert chez un de nos banquiers et n'etre chargé des interets que de la somme que je prendrais et pour le tems que je la garderais; car ce sont les prix de la fécule qui me determineront, soit pour le moment, soit pour la quotité de ventes et des achats. Si pour éviter les frais de commission du banquier de Paris, vous me fesiez des remises sur Paris à un ou deux mois d'échéance, je les escompterais au moment du besoin; et s'il survenait des variations qui m'ôtassent route idée de spéculation, je vous demanderais la permission d'appliquer vos fonds a l'emploi que vous m'indiqueriez, ou de vous en faire les retours au mieux de votre avantage." (*Works*, Vol. VII, p. 226; Say to Ricardo, 8 December 1817)

David quickly replied to Say, regretting that he was not in a position to lend the requested funds. He explained his reason:

Since you were in England [1815] I have been gradually withdrawing myself from business, and as our debt is so enormously large, and the price of our funds appeared to me to be high, I have from time to time withdrawn my money from the funds, and have invested a large portion of it in landed property. When I was in France [July 1817], and since I left it, I have been tempted by the low relative price of the French Funds to invest another portion of my money in the French 5 pc^{ts} and Bank Actions, so that at present I have really the command of comparatively a small sum of money from which it would be exceedingly inconvenient for me to part.

(*Works*, Vol. VII, p. 230; Ricardo to Say,
18 December 1817)

Moreover, it is clear from David's letter that his motivation for disinvestment was not only to get out of the overpriced British Funds, where the price of Consols had risen 33% between January and July of 1817 (*Works*, Vol. X, p. 95, Sraffa's calculations). To some extent he sought the peace of mind in which he would not have to worry about price fluctuations.

My life has been one of success, *but of anxiety*, and I am endeavouring so to arrange my affairs, *that I shall have no cares for the future, respecting pecuniary matters.*

(Ricardo to Say, 18 December 1822, *Works*, Vol. VII, p. 230; italics added)

At the time he wrote to Say, Ricardo was indeed heavily invested in English landed estates and loans on mortgages. But about a seventh of his total assets were invested in the French Funds, and while he may not have intended to make puts and calls in response to the fluctuations in the price of these securities, beginning in July 1818 that in fact was what he did, as later discussion reveals. To be sure, by 1817 he had sold out all of his British Funds, but he still reserved some £140,000 with which to speculate in the French Funds. As he said, he was "tempted by the low relative price of the French Funds," which he bought in 1817 at 67½ francs, as well as the five percent dividend they paid. The instincts of the stockjobber were still a motivation for David's behavior. Although he frequently bought and sold French Funds, between 1818 and 1822 he continuously held a large number of such securities, and never was completely out of the market as he was for English funds. In response to an 1822 letter from Maria Edgeworth, in which she had requested advice about her own investments, Ricardo outlined the pros and cons of holding the French Funds, as against British Funds. He concluded:

I will only add that I am the holder of French Stock, and at present have no thought of parting with it. If it rose to 100 [it was selling at about 80]—I might probably be tempted to bring the money to this country, and employ it in the purchase of land or on mortgages . . .

(*Works*, Vol. IX, p. 204; Ricardo to Maria Edgeworth, 20 June 1822)

As these comments suggest, David's days of dealing in British Funds were over and he had no intention of returning to that market. As he told Mallet, "he did not conceive how any man who could get 3½ percent by land could leave his money in the [British] funds" (Mallet, in *Political Economy Club* 1921, p. 210)

David's first transfer of funds to fixed assets came as early as 1812, when he purchased the leasehold on a house on fashionable Grosvenor Square, at what he said was "an enormous price." Grosvenor Square was part of what once had been the Manor of Ebury, surrounded by St. James's Park, the Mall, and the choicer areas of Westminster. After James I moved the center of government to Westminster, the area flourished, and the City of Westminster stretched north and west. In the 1600's the Manor of Ebury came into the ownership of Alexander Davies and, upon his death in 1665, two-thirds of the estate was bequeathed to his one year old daughter, the famous Mary Davies.

Reared in a luxurious fashion in Westminster and London, Mary Davies was betrothed when 12 years old to Sir Thomas Grosvenor, Baronet of Chester, in the northwest portion of England, near the Welsh border. As part of her dowry, Mary Davies took some 300 acres of the marshland or what later became the Mayfair and Belgravia sections of greater London (Gatty, 1921). At the time of their marriage, Thomas Grosvenor had more wealth than Mary Davies, but through the union the Grosvenor family became the owners of some of the highest valued land in London. Under English law he leased parcels of the land for 99 years, leaving to the leaseholder the right to construct a building on the site; the leaseholder paid the taxes and maintained the site. When the lease expired in 99 years, the buildings and site would revert to the Grosvenor family.

The house for which Ricardo bought the leasehold had been built in 1729, so he hired the best known architect of the day, Samuel Pepys Cockerell (1754-1827), to renovate the property and attest to its fitness. Despite Cockerell's efforts, in 1815 the house developed structural defects and there was an extensive rebuilding of the basic framework, a matter of some considerable concern to the current leaseholder because of the inconvenience and additional cost. David claimed the Mayor who sold him the house was "a real knave." As indicated in an earlier chapter, the annual rent on the Grosvenor Square property came to £480, and assuming the house was worth a hundred times the rental value of the land, David Ricardo could well have paid something in the neighborhood of £50,000 for the house, truly "an enormous price."

Besides the purchase of the townhouse in Grosvenor Square, David purchased seven estates between 1814 and 1817, as shown in Table VIII-1. The first and

**Table VIII-1. David Ricardo's Acquisition
of Estates and Loans on Mortgages 1814 - 1821**

No. of Estates	Location	Size of Estate	Price	Year Acquired
1	Gatcomb Park, Manor of Minchinhampton, Gloucestershire	5,000- 6,000 acres	£60,000	1814
2	Hadlow place, Manor of Dalchurst, Kent	Unknown	£25,000	1814
3	Bromesberrow Place, Manors of Bromesberrow and of Bury Court, near Ledbury, Hertfordshire	Unknown	£50,000	1816
4	Manor of Pauntly Court, Hertfordshire	Unknown	£54,000	1816
5	Berrow of Worcestershire	Unknown	£20,350	1817
6	Manor of Brinsop, Hertfordshire	800 acres	£26,000	1817
7	Unnamed Estate, Parish of Minster, Isle of Thanet, Kent	Unknown	£35,000	1817
8	Miscellaneous plots to round out estates		£4,000	1816- 1817
		Total	£274,350	

No. of Loans	Mortgagor	Property Mortgaged	Amount of Mortgage	Year
1	Francis Dukinfield Astley	Manors of Dukinfield and Newton (coal deposits) England	£165,000	1819
2	Lord Portarlington	Portarlington Manor, Ireland	£25,000	1818
3	City of Waterford	City of Waterford, Waterford County, Ireland	£10,000	1821
		Total	£200,000	

largest acquisition was Gatcomb Park, in Minchinhampton, Gloucestershire. Its purchase was not dictated by a desire to invest in land, so much as it was by a wish to move to the countryside. Having lived all his life in London, David really knew very little about the rest of England. He never did visit Ireland, Scotland or Wales, being much more familiar with the commercial centers of Western Europe than the new industrial towns of the English midlands. He and various members of the family were familiar with the famous vacation spas, such as Brighton, Bath, and Ramsgate, but for a man who was about to transfer large portions of his wealth to landed estates, he was really quite unfamiliar with the hinterland. It is not surprising, therefore, that the £60,000 purchase of Gatcomb Park was made possible through the intervention of his new son-in-law's family, the Clutterbucks.

The Ricardos' eldest daughter, Henrietta, married Thomas Clutterbuck (1779-1852) in February 1814, a union enthusiastically supported by both parental families. Thomas Clutterbuck's father was a successful banker of Wiltshire, and it was he who called Ricardo's attention to the availability of the Sheppard estate in Minchinhampton. The Clutterbucks and the Sheppards were related by marriage. In July 1814, the transfer of the property was completed, with half the sale price being paid at the time, with the remainder held by Ricardo until the youngest Sheppard son attained his majority in 1822. The entire transaction was handled by the Clutterbuck banking house of Bath (*Works*, Vol. X, pp. 62, 95-96).

In 1814 Ricardo also purchased the Manor of Dalchurst, in Kent. It was one of several estates tenanted to a farmer, who paid an annual rent of £1,050, with probably the largest share going to Ricardo.

As a result of his two 1814 purchases, David held two distant estates, one in the west of Gloucester, the other in the east of Kent. In neither instance did he have any hand in managing the properties, nor did he have any intention of engaging in such activities, and Trower commented that David was not "*half a country gentlemen, nor a particle of a farmer*" (*Works*, Vol. VII, p. 207; Trower to Ricardo, 9 November 1817; italics in original).⁴

In 1815 Ricardo entered into an agreement with a land agent, Edward Wakefield (1774-1854), a long-time friend of James Mill and Francis Place, who must have introduced the two. A one-time farmer, Wakefield offered his services to persons in search of landed property or estates, and Ricardo paid him a one percent commission on the purchase of an estate, and an annual stipend of £300 to manage his properties (*Works*, Vol. X, pp. 96-97 n.4 and 5).

Wakefield was critical of David's 1814 purchase of the estate in Kent because it was so far removed from his major holding in Gloucester. Accordingly, he suggested a plan of concentrating future purchases in a particular area, which turned out to be around Ledbury, where the three shires of Gloucester, Hereford and Worcester converge. These were estates #3, #4, #5 and #6 reported in Table VIII-1, plus the miscellaneous purchase of small tracts of land to round out the larger estates. Altogether Wakefield arranged for the purchase of estates worth some

⁴ By this date Ricardo and his large family were living year-round at Gatcomb Park, while retaining the townhouse in Grosvenor Square, where David always stayed when he was in London.

£150,000. On his own in 1817, Ricardo purchased an estate on the small Isle of Thanet, off the coast of northeastern Kent, near Ramsgate. The Ricardos vacationed at Ramsgate on several occasions, and that may have been the reason for the new acquisition in Kent, since the purchase was contrary to Wakefield's plan that Ricardo's estates should be as adjacent as possible. Ricardo bought the Isle of Thanet estate from John Garrett of Ellingham (*Works*, Vol. X, p. 98)⁵ who like many of Britain's landed gentry, was forced to sell portions of his holdings at the conclusion of the long wars with France.

Having invested £275,000 in landed estates, with Wakefield's assistance, Ricardo thereafter made loans on mortgages, for a total of £200,000. In 1819, over 80 percent of this amount (£165,000) was loaned to Francis Dukinfield Astley (1781-1825). At first glance it would appear that because the loan was made on mortgages, for the Manors of Dukinfield and Newton, it was for agricultural purposes. Actually, however, Ricardo's loan undoubtedly contributed to the great industrial transformation of the Manchester region which came after the Napoleonic Wars. Within a generation, Manchester was converted from a market community, based upon labor intensive textile manufacturing, to the leading industrial sector in England. The major factor responsible for this development was the large coal seam which covered the region. The famous labor uprising at Peterloo (1819) was symptomatic of the resistance to the transformation of the Manchester region.

The Dukinfield lineage stretched far back into Lancashire history, as the successive Barons of Dukinfield aided the development of the infrastructure of the canals, roads, and bridges which contributed to the economic growth of the community of parishes surrounding Manchester (Bowman 1960, *passim*). The Manchester canal system was begun in 1761, followed by a second link in 1767 and the final portion in 1820.

The last of the Dukinfields was Sir William, who died in 1767 without issue.⁶ His estate, including the Manors of Dukinfield and Newton, with their large coal deposits, passed to his widow, Mary Dukinfield. In 1774, she married John Astley, and their eldest son was the Francis Dukinfield Astley, to whom Ricardo made the substantial loan in 1819, arranged for by his agent Edward Wakefield. Francis Dukinfield Astley inherited his mother's estates but not the Dukinfield baronetcy, and continued to develop and expand the industrial potential of the parishes of Ashton, Stockport, and Glossop, each of which was a center for a large coal deposit (Butterworth 1827).⁷ Ricardo's loan to Astley contributed to the industrial

⁵ Little, if anything, is known of John Garrett, except that the family at one time had been well established in Kent. Cf. Walford 1868. Some indication that John Garrett was not financially secure is suggested by the fact his eldest son, Robert, pursued a military career. Traditionally, the eldest son of an established family would inherit the estate, and never pursue any type of career. An eldest son might pursue a career until the father died, but in the case of Robert Garrett he was a lifetime military man, and rose through the ranks to Lieutenant General of the 43rd Regiment. He became a baronet, and made it into the *Dictionary of National Biography*, Vol. 21, pp. 15-16.

⁶ For some unexplained reason, Sir William Dukinfield took on the additional surname of Daniel, and at the time of his death was Sir William Dukinfield Daniel.

⁷ Francis Dukinfield Astley, in addition to his management of his estates, was a poet and art collector. His most important works were Astley 1809 and 1819.

transformation of Manchester in the 1820's. While the loan was for mortgages on the Manors of Dukinfield and Newton, the value of the estates derived from the underground coal seams upon which they rested. By far the largest single investment Ricardo ever made was instrumental in the process of the industrial revolution; he did not just purchase estates to bail out bankrupt members of the landed aristocracy, even though that was the basis for the largest share of his overall investments.

The second loan on a mortgage that Wakefield negotiated for Ricardo was the one with Lord Portarlington, the basis by which Ricardo obtained his seat in Parliament. The decision having been made that he would follow Mill's advice and buy the rottenest borough he could find, Wakefield was assigned the task of finding a suitable seat. In 1818 he negotiated a loan of £25,000, and the next year Ricardo became the M.P. for Portarlington.⁸

The third loan on mortgage Ricardo arranged himself, with his friend and fellow M.P. Sir John Newport, representative for the City of Waterford, Waterford County, Ireland. An elected member of Parliament from 1803 to 1832, Newport was very much a Whig, and during the war was a minor member of the Cabinet, as the Chancellor of the Exchequer for Ireland. He was a strident advocate of Catholic Emancipation, a position which probably was responsible for his failure to hold Cabinet rank in his later career. Newport served on the House Agricultural Committee along with Ricardo, and their names were usually among the minority on votes on social and economic issues.⁹ The loan for £10,000 to the City of Waterford, made in 1821, was the last of Ricardo's career.

The third area of Ricardo's investments was the French Funds. Sraffa reported that the records of Ricardo's solicitors reveal that in July 1817, he transferred £100,000 to the two banking houses of Delessert and Ardoin for an investment of £75,000 in French Funds and £25,000 in the shares of the Bank of France (*Works*, Vol. X, pp. 99-100).¹⁰ He augmented his July investment by £40,000 in August, and through the two banking houses the transactions brought a total investment of

⁸ The details of Ricardo's entry into Parliament are traced below.

⁹ In 1821 Newport gave evidence in the House proving that when the Irish tax burden increased, government revenue declined. The speech intrigued McCulloch, who was preparing an article on excise taxes. McCulloch's article was occasioned by a review of Sir Thomas Bernard, *The Case of the Salt Duties, with Proofs and Illustrations* (1817). As with most reviews in the *Edinburgh*, McCulloch's piece went far beyond Bernard's discussion, as he was cited but once. The article was an attack upon all excise taxes, because they reduced legitimate consumption and led to smuggling. As a consequence, a rise in an excise tax on salt, tea, sugar, etc., actually reduced the amount of government revenue, as McCulloch tried to show from several examples, one being the evidence on increased taxation and the reduction of government receipts in Ireland, 1807-1821. Newport was not mentioned in the article, but his figures were utilized. ([McCulloch] 1822, pp. 516-536, especially p. 530 for Newport's statistics) "The true way to put down smuggling," wrote McCulloch, "is to render it unprofitable—to diminish the temptation to engage in it; and this is to be done not by surrounding the coasts with cordons of troops . . . but simply and exclusively by *reducing the duties on the smuggled commodities*" (p. 536; italics in original).

¹⁰ Sraffa did not publish any of Ricardo's correspondence having to do with his investment activity, and the details of the text above are taken from Sraffa's "Investments and Estates," *Works*, Vol. X, pp. 95-104. The unpublished letters form a part of *The Ricardo Papers*, deposited in the University Library at Cambridge. Some details of the unpublished correspondence are discussed by Sraffa, *Works*, Vol. X, pp. 386-391. [On *The Ricardo Papers*, see Samuel Hollander 1979, pp. 717-718. Editor]

2,600,000 francs in the Funds, purchased at 67, and 607,500 francs in the shares of the Bank of Paris, bought at 1,350 francs per share. A year later, in July 1818, the Funds had risen in price to 78, and following Ricardo's order the Ardoin house sold about half his holdings for 1,831,000 francs, an amount that included not only the initial investment, but the reinvestment of the accumulated dividends. In the course of a year, the price of the Funds had risen in excess of 16 percent.

Ricardo did not remain liquid for very long, and when the price of the Funds fell below 70 in November 1818, he invested about two million francs, again through the banking houses of Ardoin and Delessert. His total investment in the Funds in 1818 came to about 3 million francs, and he held the stock until July 1821. At that time he transferred the handling of his French investments to his brothers, Jacob and Samson, who together were heavily engaged in the financial markets of Paris. There is good reason to assume that once again David was attempting to render financial assistance to his brothers as he increased the size of their portfolio. On David's instruction, between July and November of 1821, Jacob and Samson sold half of his French Funds at a price of 87½; some of the stock he could have bought at 67, in July-August 1817, or just below 70 in November 1818. Within a matter of weeks David instructed his brothers to buy back the Funds, if the price fell one or two points. At this point, however, David may have had some second thoughts about his dealings with his brother Jacob, recalling their exchange of letters in 1810. Sraffa describes the problem of 1821:

The anticipated fall [in the Funds] did take place; but at this stage a mishap occurred, in that Clavet Gaubey, the *agent de change* whom Ricardo's brothers employed in this business, became a defaulter. The stock was still registered in Ricardo's name, so that there was no anxiety on that account. But there was some doubt as to how much of the price-difference in the settlement could be recovered. Jacob Ricardo undertook, however, to bear himself any loss that might arise as a result of Ricardo's having placed the stock at his disposal 'when it was materially useful' to him.

(*Works*, Vol. X, p. 101)

Ricardo engaged in no more trading in the Funds until June 1823, when he sold a portion of his holdings, but retained some 2,723,000 francs in the stock. In December 1822, in a letter to Maria Edgeworth, he explained his current strategy:

... upon the subject of French stock. You will have observed that there have been great variations in the price, accordingly as the opinions in favor of peace or of war have prevailed. Peace appears now to be probable: if it should not be disturbed, all alarm respecting the goodness of our security will for the present cease. I retain a favorable opinion of the soundness of the resources of France, and at the present depressed price of stock I have not any intention of selling mine, but if the price should rise

to 95 I shall be disposed to sell about half of what I have. My reasons for doing so are, first, that I bought at a much lower price, and secondly because the measures pursued by the French Government are such as I think will at no distant time produce internal disorder, if they do not disturb the relations of peace with foreign countries. I am pretty confident however that the funds will survive, let whatever changes that may take place.

(*Works*, Vol. IX, pp. 236-237; Ricardo to Maria Edgeworth, 13 December 1822)

In April 1823, French troops crossed the Pyrenees to put down the revolution against Ferdinand VII, and the price of the French Funds rose to 95. Ricardo sold some of his stock, but not half of it as he suggested to Edgeworth that he would. The June 1823 transaction in the Funds was David's last, as there was no further activity up to September, when he died.

According to Sraffa's estimates, based upon solicitor's records, Ricardo's annual income from landed estates was about £10,000, just about the 3½ percent Mallet said he expected (£9,625). From loans on mortgages there was also an income of about £10,000; five percent on the £165,000 English mortgage (£9,250), and six percent on the £35,000 in Irish mortgages (£2,100). Dividends on the £140,000 in the French Funds and Bank of Paris stock accounted for an additional £8,000, plus the short run gains from trading. On his total investment of £615,000, Ricardo, for the years 1821-1823, was receiving an annual income of approximately £28,000, or about a 4½ percent return. His other assets included the leasehold on the house on Grosvenor Square and some stock in the East India Company and the Bank of England, attested to by the fact he attended the meetings of both sets of proprietors. He also, of course, maintained some bank deposits and other liquid assets. Between 1817 and 1823, Ricardo's total assets came to about £700,000, ignoring the appreciation in the value of the landed estates.

To return to the issue of Say's request for a loan of 40,000 francs, the exchange rate was about 34-2/3 francs to the pound sterling, which meant that Say was asking for a loan of £1,154. While it was certainly true that Ricardo at the time was heavily invested in landed estates, mortgages and French Funds, the amount requested was not large, given his assets. Undoubtedly it was not the size of the loan but its purpose that prompted Ricardo's refusal of his French friend. Dealing in commodity futures had never been a Ricardo practice, and he was not about to begin with potato flour futures, especially given his prejudices about the detestable root. As he told Edgeworth:

I confess I have always inclined to that view which regards it as an evil that the population of a country should be chiefly fed and supported on potatoes.

(Ricardo to Maria Edgeworth, 13 December 1822, *Works*, Vol. IX, p. 237)

Although he was not aware of the fact, Say could not have picked a worse commodity with which to suggest that Ricardo loan him money for speculative

purposes, even though Ricardo did not mention to say what he thought of potatoes. On one occasion he told the House that "if he were inclined to speculate", he would do it in corn (*Works*, Vol. V, p. 85).

As he moved into public life, first as a pamphleteer and later as a Member of Parliament, Ricardo was sensitive to the fact that personally he should avoid being the beneficiary of the consequences of the adoption of the economic policies he supported and advocated. The issue first arose when he was writing *Secure Currency*. In the pamphlet, as discussed above, he attacked the Bank of England for making a profit on the eleven million pound deposit of the British Treasury. At Mill's suggestion, Ricardo made his argument rest on moral grounds, saying it was "lamentable" that a great opulent body like the Bank of England should "augment their hoards by undue gains from the hands of an overburthened people" (*Works*, Vol. IV, p. 93). But might not the same charge be brought against Ricardo himself? As a loan contractor and a large holder of the national debt, had he also not made gains from the hands of an overburthened people? The difference in the two situations, Mill claimed, was that the Bank was a monopoly, while Ricardo functioned in a free market.

Do not dread the chance of any body advancing that you, as a loan contractor, and a successful one, are in the predicament which you condemn. The case is not so. You have gained nothing from the public, but under the fair laws of an open market, exposed to all the force of unrestrained competition. Your earnings are therefore your own, in the fairest and most honourable sense of the word, in the very same sense in which the gains of any man who makes rich by selling sugar or cloth to his countrymen, whether in their public or private capacity, are truly and honourably his own. Nor are your earnings greater than the superior industry and capacity which you have displayed—in a line in which capacity is calculated to produce more than ordinary effects—most fully entitle you to.

(*Works*, Vol. VII, pp. 5-6; Mill to Ricardo,
3 January 1816)

Despite Mill's suggestion he ignore any charges that he gained at the expense of others, Ricardo continually was accused of advocating economic policies from which he would personally benefit. Perhaps it was to avoid such claims that he divested himself of all his British stock, transferring his funds to land. Although such a motive probably was not preeminent when he initiated the process, in time it provided a basis for his statements that he was a landowner, and not a holder of any part of the national debt. The major reasons for Ricardo's transfer of investments to land continued to be those which he had claimed, namely that landed property provided a good annual income, and he no longer had to worry about the daily exigencies of the market. But then there was the anomaly of Ricardo's continuous trading in the French Funds, so in this sense he was a holder of public debt. The

difference of course, was that he exercised no influence upon the formulation of economic policy in France, in contrast to his important role in Britain.

Claims that Ricardo stood to gain from the adoption of his policies had two contexts. Most important was his recommendation for monetary reform. There was no question, it was argued, that a reduction in the quantity of bank notes was beneficial to the holders of the national debt, as the fall in the price level raised the relative value of the interest paid on the debt. Secondly, there was his advocacy of free trade in corn, and it was alleged that as a "mercantile man" Ricardo would benefit. In Parliament:

Mr. Ricardo rose to defend his conduct and opinions, which had been repeatedly attacked in the course of the discussion. When he heard that all the interests of the country were equally consulted, he could not help saying, because he felt it, that the interests of landlords were chiefly considered. He had been represented as a mercantile man, having a particular interest which he consulted. He denied that he was interested either as a mercantile man or as a fundholder. He was a landed proprietor, and his interests were bound up with that of the House.

(*Works*, Vol. V, pp. 81-82; Ricardo, Speech, 7 March 1821, as reported in the *British Press*)

Hansard's summary of the same comments, as reported in other newspapers, was to the same effect:

Mr. Ricardo disclaimed any intention of imputing unworthy motives to any of the various parties whose interests were concerned in the question; but he would say, as he had said before, that the interest of the landholders must necessarily be opposed to that of the consumers in the present case. Some hon. gentlemen had been pleased to address him as a mercantile man, as if he had a particular interest to serve. He would answer, that he was not a mercantile man—that he was not a man of funded property, but that he was a landed proprietor, and, as such, had the same interest in the question with many of those who had opposed him. He did not look to the interest of any party in the state, but to that of the whole country . . . Something also had been said on the question of the national debt. He had no particular individual interest in it, because he derived no revenue from it . . .

(*Works*, Vol. V, pp. 87, 90; Hansard's summary was based primarily upon reports published in the *Morning Chronicle* and the *Courier*)

Charles Callis Western (1767-1844), the M.P. for Essex, was one of the leading spokesmen for the landed interests. He asserted frequently that the return to specie payment in 1819 was responsible for a 30 percent decline in the price of corn, with the revaluation being mainly beneficial to holders of the national debt.

Accordingly, he proposed a reduction in the interest paid on the debt so as to nullify the gain which accrued from the 1819 legislation. Several motions to this effect were introduced by Western, and in 1822 he also published a pamphlet outlining his proposal. When he again put forth his motion in the House in June 1823, Ricardo spoke against the Western view, also using the occasion to respond to what he believed were Western's unfair allegations about his character.¹¹

In speaking of Mr. Peel's bill, he [Western] acquitted his majesty's ministers of any intention of plunging the country into the difficulties which he thought that bill had caused: he paid a compliment to their integrity, by supposing them ignorant: but not so to him (Mr. Ricardo). Without naming him, the hon. gentleman alluded to him and his opinion, in a way that no one could mistake the person meant, and said, that it required the utmost extent of charity to believe, that in the advice he had given he was not influenced by interested motives. The hon. gentleman would have acted a more manly part, if he had explicitly and boldly made his charge, and openly mentioned his name. He (Mr. Ricardo) did not pretend to be more exempted from the weaknesses and errors of human nature than other men, but he could assure the House and the hon. member for Essex, that it would puzzle a good accountant to make out on which side his interest predominated. He (Mr. R.) would find it difficult himself, from the different kinds of property which he possessed (no part funded property), to determine the question. But, by whom was this effort of charity found so difficult? By the hon. gentleman, whose interest in this question could not, for one moment be doubted—whose whole property consisted of land—and who would greatly benefit by any measure which should lessen the value of money. He imputed no bad motive to the hon. gentleman. He believed he would perform his duty as well as most men, even when it was opposed to his interest; but he asked the hon. gentleman to state, on what grounds he inferred, that he (Mr. Ricardo) should, under similar circumstances be wanting in his.

(*Works*, Vol. V, pp. 317-318. Ricardo speech,
11 June 1823)

Despite the fact that between 1814 and 1817 Ricardo became a member of the landed interests, he continued to be viewed by some as a man of the City, a stockjobber and loan contractor who fed from the public trough. While he denied there would be any personal gain from the adoption of his policies, he could never

¹¹ Western had written: "when I see public creditors and mortgagees swallowing up the rents of the landowners, the profits of the tenant, and the general fruits of industry, *it requires the fullest effort of charity to believe they did not intend it . . .*" The emphasis is that of Ricardo, who made numerous comments and underlined many portions of his personal copy of Western's pamphlet. (Western 1822, in *Works*, Vol. V, pp. 522-528. especially p. 527)

walk away from his heritage, one grounded in the City, for he was thought of as a mercantile and a former Jew.

The Provident Institutions

In addition to managing the complete transformation of his own portfolio, between 1814 and 1817 Ricardo also was active in the development of a new financial intermediary, the Provident Institutions, or Savings Banks. Such thrift institutions as existed prior to 1816 were mainly the product of the Friendly Societies, which grew out of craft guilds, or the weekly gatherings of the parishioners of some clergyman who believed in fostering savings among his flock. In both instances members would meet weekly to make some small contribution to help one another, when either sick or to provide a sum for their old age. If it was a friendly society, the meeting took place over a mug of ale; if in a religious setting it was on Sunday evening. The friendly societies were the most numerous, largely as a consequence of Rose's Act of 1793, which accorded the societies legal status. Dedicated to encouraging thrift among the working classes, the friendly societies thus were exempted from the drastic laws that were enacted against purely trade union combinations. By 1805, it is estimated the membership in the friendly societies of England exceeded 700,000, organized mostly in the new industrial cities of the midlands and the north.

The growth of the friendly societies demonstrated more than anything else the increasing desire to save on the part of the laboring classes. Contrary to the view that the lower classes merely squandered their meager earnings, as suggested by Malthus, the friendly societies gave evidence of a sincere wish on the part of many workers to provide for their old age and the ever obvious "rainy day." The major difficulties with such clubs or societies, however, were the mismanagement of the funds, the fraud, and the fact that there was no outlet for investment of the accumulated savings of the members. The country banks paid no interest on deposits, there was no organized use for funds in the private sector, and investment in government stocks was closed to all but the well-to-do. The member of a friendly society, with his sixpence per week savings, could only place his funds in "the box," with its three locks to ensure that no single officer could take off with the contents. As one early nineteenth century pamphleteer wrote:

The labouring man can make no profit on money retained. He also lies under many chances of being able to preserve it. The coarse and imperfect means of shutting his house or any receptacle which it may contain exposes his little treasure to the hand even of a clumsy depredator. Accordingly we find that persons in the lower situation of life who acquire a reputation for the possession of hoards are almost always robbed. If they are disposed to lend the fruit of their industry and frugality, their limited experience of mankind makes them yield to the man who

takes most pains to persuade them; and that is often the man who never means to pay them again, and who has therefore the strongest motive to take the measures necessary for gaining their confidence.

(quoted in Horne 1947, p. 21)

In order to alleviate these problems, the lower classes were dependent upon the assistance of a squire, industrialist or professional person who would come forward to aid in the management of the small deposits. The motive for such philanthropy might be religious in nature, a genuine concern for helping the poor, or a desire to foster thrift among the lower classes so as to eventually reduce the householders burden of the parish poor laws. Messrs. Winston and Galpin of Durhamshire formed a Penny Bank, on the deposits of which they paid annual interest to those who kept up their weekly contributions of a pence. Messrs. Loveil and Bingham had much the same type of scheme in Wendover. Mrs. Priscilla Wakefield of the Tottenham district of London was a Quaker and the mother of Ricardo's land agent, Edward Wakefield. She organized a Female Benefit Club and a Children's Bank, in each instance contributing the annual interest which accrued on the weekly deposits of two or three pence. None of these schemes ever led to more than £20 or £30 on an annual basis, but Mrs. Wakefield believed that a thrift institution could be organized on a wider scale. In 1804 she opened the Tottenham Benefit Bank, to accept deposits of any amount, and interest of 5 percent was paid on deposits of a pound or more. Philanthropy was still necessary in order to maintain the Tottenham Bank; but the burden was spread amongst a larger number of volunteer managers. Eventually deposits were of sufficient size that the trustees purchased Government stock paying 5 percent.

From this modest beginning in Tottenham,¹² the idea of a benefit or provident bank spread quickly throughout the United Kingdom, even though the Scots led the way and actually had the first savings bank per se. By 1816 there were 74 savings banks in England; the years immediately after the war produced a sudden growth in the number of such financial intermediaries. Moreover, the motivation on the part of the upper classes for such institutions took on a new look.

Here was the first constructive and practical proposal for counteracting the growing pauperization of the community, restoring independence to the masses, stopping the growth of the poor rate, and giving the ordinary man and woman some interest in the financial stability of the country.

(Horne 1947, p. 71)

The poor rate had risen rapidly during the late stages of the war, in part because wages were subsidized by parish relief. As the cost of living rose, employers persisted in maintaining the traditional level of wages, and workers of necessity requested the supplement provided by the Speenhamland system. For

¹² The idea of a thrift institution was not a nineteenth century phenomenon, for it had been suggested by Defoe in 1697 and Bentham in 1797. See Horne 1947, pp. 27-31. Bentham called the thrift institutions "Frugality Banks."

many who paid the poor rates, it was the workers who were responsible for the rising taxes, and not the large employers who benefited from the subsidized wages. By 1816 the total cost of the poor laws was about £7,000,000, a sixth of the government budget. If workers could be taught to save, the poor rate would fall. In 1816, Hutches Trower inquired of his friend Ricardo:

What think you of the Savings Banks? . . . I consider them as very important means, under good management, of improving the condition and the morals of the poor. They would ultimately too go far to diminish the pressure of the Poor Rates, and would, I should hope, gradually supersede the Benefit Societies, to which I think there are some serious objections, although highly useful in many respects. I am collecting what information I can on the subject with a view of seeing whether on a small scale it will be practicable to establish one in this neighborhood.

(*Works*, Vol. VII, p. 12; Trower to Ricardo,
19 January 1816)

By the 20th of February Trower had drawn plans for the Godalming Savings Bank, and it was established in April of the same year. In May, Trower reported that the Bank had deposits of a sufficient amount that £500 was used to purchase 3 percent Consols (*Works*, Vol. VII, p. 34; Trower to Ricardo, 24 May 1816). As with most of the new savings banks, the Godalming institution was organized after the model of the Bath Provident Institution. The bank was controlled by a group of trustees and managers, who handled deposits and withdrawals, and made the investment decisions as to which type of Consols to purchase. Depositors became proprietors when they had accumulated £1 or more, and received four-fifths of the dividends paid on stock, the other fifth going to pay the necessary expenses of the institution. It was this feature that made the new savings banks different from the original philanthropic type, for expenses of the latter were not borne by the depositors. Unlike people like Mrs. Wakefield, the general view of trustees of the new savings banks was that of Trower, who claimed the success of the provident institutions depended upon the principle "they should support themselves" (*Works*, Vol. VII, p. 23; Trower to Ricardo, 20 February 1816).

In reply to the question as to what he thought of savings banks, Ricardo responded:

I think them excellent institutions and calculated to improve the condition and morals of the poor, provided they are properly managed. My fear is that though they will at first be established by gentlemen of great respectability and fortune,—as they spread, they will at last be undertaken by speculative tradesmen, as a business from which to derive profit. The poor should have some check on the employment of the funds, or the same evils will arise as from the indefinite multiplication of country Banks.

This check should be afforded by the legislature, or there will be no security against the failure of the undertakers. The poor have no means of discovering the wealth and respectability of the parties who open these Banks.

*(Works, Vol. VII, p. 16; Ricardo to Trower,
4 February 1816)*

Ricardo always distrusted bankers, whether he had in mind "a great and opulent body like the Bank of England," the "grave offences of the Country Banks," or the potential mismanagement of Savings Banks. The Bank of England should be nationalized and the others controlled by the legislature. If that "company of merchants, notoriously ignorant of the most obvious principles of political economy" was incapable of protecting society's interest, the legislature must be sure to protect the depositors of country and savings banks. In the meantime Ricardo became one of the managers of the new Provident Bank of Westminster that opened 15 April 1816.

The initiative for establishing the Provident Institution of Westminster rested with the Society for Bettering the Condition of the Poor, a society created in 1796. There were four trustees of the Westminster Provident Bank, with the Duke of Somerset as President, and the Dukes of Kent and Sussex Vice-Presidents. Altogether there were twenty members of the peerage included among the sixty-two managers. The list of managers also contained the names of anyone who counted as a political economist: Malthus, Mallet, Ricardo, Torrens, Trower, and Vansittart, the Chancellor of the Exchequer. Conspicuously absent from the list of managers was the name of James Mill. Managers, of course, were expected to make sizable deposits, up to £100, and Mill, with little annual income, may not have been able to participate. On the other hand, neither he nor Ricardo ever mentioned savings banks in their letters, and Mill may not have approved of the scheme, despite the fact that Bentham had been an early advocate. Although Mill at the time was not living in London, this should not have been a problem, since both Malthus and Torrens also lived out of London.

Joseph Hume (1777-1855), M.P. for Weymouth, was one of the active managers of the Westminster Savings Bank, and the author of a well known pamphlet which described the institution's rules and regulations (Joseph Hume 1816). As youths, he and Mill had attended Montrose Academy together, and the latter introduced Hume to Ricardo in 1815. They were among the most active managers of the Westminster Bank.

In the Provident Institution of Westminster, each depositor held a passbook, in which a record was kept of all deposits, transfers, and withdrawals. Once a depositor had accumulated 12s 3d he became the proprietor of 3 percent Consuls, with one-sixth of the dividend being deducted for the annual expense of management. Trustees and managers served on a volunteer basis, and while depositors were stockholders, they could not individually sell their stock, as all stock of the institution was listed in the name of the trustees. Fourteen days notice of intention to withdraw funds was required of all depositors, and Hume claimed the

rule was to prevent the withdrawal "on any sudden whim" (Joseph Hume 1816, p. 48). Three months after the Bank opened, Ricardo reported weekly receipts of about £350 (*Works*, Vol. VII, p. 49; Ricardo to Trower, 15 July 1816), but the flow must have picked up since total receipts reached £16,348 by the first of December, and £350 for 32 weeks (15 April to 1 December) would only be £11,200.

The Westminster Provident Institution proved so successful that the trustees and managers opened two other banks in greater London. The first was in the City of London, in the Bishopsgate Church Yard, a site Ricardo did not believe was very appropriate. The City Institution was opened 23 July 1816, with Sir Thomas Baring as President, and Ricardo, Mallet, Malthus and Torrens among the Trustees. The second of the new banks was in Bloomsbury, at Southampton Row, established 10 February 1817. While each of the three London Provident Institutions was autonomous, with their own trustees and depositors, they were integrated with respect to policies and procedures, all of them being organized in the same fashion.

By this time Ricardo was having second thoughts about the procedure of investing the funds of depositors, as the epigraph from Mallet at the beginning of this chapter suggests. If the bulls chased the bears there was no problem, but if the price of government stock fell there was no way to protect the depositor's funds that had been used to buy stock at a higher price, unless of course the trustees were willing to make up the difference. Ricardo indeed had placed his finger upon the major flaw in the savings bank scheme. Even though Provident Institutions might be well managed, and free from all fraudulent practices, there was still a problem that so long as the funds of depositors were invested in the national debt, there was no way to guarantee a depositor that he would be able to withdraw an amount equal to his deposit, let alone the accumulated dividends. If a £5 deposit was used to purchase a 3 percent Consul at 86 in April and withdrawn in December when the 3 percents were at 71, then as Ricardo claimed the depositor was gambling in the stocks, and in this instance had lost. As a later authority observed:

When the trustees themselves took the risk of depreciation in the funds, it was likely to become increasingly difficult to persuade suitable men to accept the responsibility. Where the risk was passed to the depositors as individual stockholders, there was a fear that a fall in the funds would cause criticism, if not acute hostility, on the part of those in whose interests the whole system was framed.

(Horne 1947, p. 71)

Legislation was passed in 1817 which dealt specifically with the issue of protecting depositors from the depreciation in the value of the funds. The force behind the legislation was George Rose (1744-1818), M.P. for Lyminster, and the father of the legislation of 1793 which gave official status to the Friendly Societies. He was an old Pitt man, had served in the offices of the exchequer and board of taxes and then became an Administration M.P. in 1784. He did well by doing good, and Cobbett claimed he and his family held annual sinecures of over £11,000 and

that he smelled "pretty strongly of the immense sums of the public money which he has received" (*Political Register*, 7 September 1816, p. 210). Rose was now in his 73rd year as he proposed legislation which would lend government protection to the savings banks, a proposal that received the support of persons like Vansittart of the Exchequer and Wilberforce, each of whom was a manager of the Westminster Provident Institution. Rose's Savings Bank Act of 1817 stipulated that all deposits of English savings banks would be transferred to the Commissioners for the Reduction of the National Debt. In turn the Commissioners would issue debenture bonds, bearing interest of £4 11s 3d. The trustees of the individual banks would no longer have any discretion as to the investment of deposits.

Here at last was the solution of the investment difficulties of the English trustees . . . The security was the best possible—the Consolidated Fund for the United Kingdom—and the money deposited would always be repaid to the trustees pound for pound.

(Horne 1947, p. 77)

The legislation solved the problem of the uncertainty associated with the depreciation of depositors in the Consuls, but it created other difficulties. In the first place, there was the question of the interest of £4 11s 3d, while the market rate was £3 15s, a subsidy of almost a full percentage point. Because both the high rate of interest and the price of the debentures were guaranteed, savings bank deposits became a vent for the wealthy, as well as the small depositor with a few shillings a year. This difficulty was partially overcome with the limitation on deposits. A depositor in the first year could not have more than £100 in his account, and thereafter deposits were restricted to £50 annually. But there was nothing to prevent a depositor from having an account in all three banks in greater London or anywhere else, and it was always possible to open accounts in the name of a spouse or children. How widespread this practice actually was is difficult to prove, but probably the instances were exaggerated by the critics of savings banks. The critics took great fun in pointing out that an institution started as a haven for the poor had in fact become a mechanism for the rich.

One provision of Rose's original bill that he was not able to have accepted, but which caused great controversy, was the stipulation that a depositor with less than £30 in his account would not lose his right to parish relief. Rose argued that since there were those who claimed the savings banks were started so the poor rates could be eliminated, it was incumbent upon Parliament to prove there was no conflict between the savings banks and the poor rates. An individual worker could benefit from both, and for those like Trower who were attempting to foster a savings bank, Rose's proposal was essential.

I contend, that not *one shilling* will be *added* thereby to the *poor rates*; but, on the contrary, that it will tend *considerably to their diminution*—*Without it*, your Institutions will do *nothing*, as far as the *poor are concerned*; they may go on receiving the savings of

servants, and of people not coming within the scope of the poor laws, but they will rank among their numbers *few*, if *any* of the laboring classes. If these latter become depositors the rates *must* be diminished, to a certain extent; if they do not, these rates will go on increasing in spite of your provident Institutions. But this is not all—I contend further, that in point of fact you are giving up *nothing*. For it is not probable, that Depositors will be reduced to the necessity of asking the proffered relief. The thrifty man is not likely to become burthensome to his Country—and none but thrifty men will belong to these Institutions. It is however one of the strongest arguments in favor of these Institutions, that if properly regulated, and encouraged, they are calculated to *make thrifty men*, to *convert the thoughtless spendthrift* into the cautious and prudent *economist*. In my last letter I never intended to object to the single man's receiving more than sufficient for his immediate necessities; quite the contrary—his so doing is the *foundation* upon which these Institutions are built for it is from that *class of people only*, that we can expect to derive Depositors—I only wish therefore to give these men an assurance that they are accumulating, not for the purpose of saving the money of their richer neighbours, but for their own benefit. For the former object you will never succeed in urging them to do any thing, for the latter you may induce to perform every thing—

(*Works*, Vol. VII, pp. 129-130; Trower to Ricardo,
9 February 1817; italics in original)

His friend Ricardo was not so sanguine that the inclusion of the clause would encourage the poor to join the Provident Institutions. There were two classes of workers, married men whose wages had to be supplemented by the poor rates so they could not possibly save, and single men for whom the wage rate was sufficient, and if thrifty, they were the ones who could accumulate in the funds. For these single men, would the inclusion of the clause have any effect upon their savings? All of us, he claimed, undervalued the possibility of misfortune, and for the single man the fear of poverty would have little influence upon whether he saved some of his wages. As for the poor rates, the solution was to raise the wages of "the lowest labourers with families" so they would not have the habitual reliance of the subsidy of these rates and they could be eliminated. "By so doing," it was argued, "we should better the condition of all above that class and then these Institutions would become powerful auxiliaries" (*Works*, Vol. VII, pp. 134-135; Ricardo to Trower, 24 February 1817)

At the time the Savings Bank Act was passed, total deposits were small, so the burden of the uneconomic rate of interest was not acute, nor was the additional cost of the debentures. But if savings bank deposits grew rapidly, what of the future cost? Ricardo speculated:

It appears to me so desirable that the depositor should be secured in the receipt of the precise sum of money which he may originally deposit that notwithstanding there are great objections against the limiting each man's deposit to £50 it should be agreed to, if on no other condition this advantage is to be obtained. . . .

I am very much surprised at Ministers sanctioning such a clause [rate of interest at $4\frac{1}{2}$ percent], for it cannot be doubted that if the amount of deposits should become very large, it will not only subject the country to a considerable tax, but may on the breaking out of a war very much embarrass the financial operations. Suppose that a sum as large as 3 millions of debentures should be issued by the Bank in return for deposits made by trustees, when 3 pc^{ts}. are at 85, Government would by purchasing 3 pc^{ts}. obtain only $3\frac{1}{2}$ pc. on 3 millions for which they would be paying to the holders of debentures more than $4\frac{1}{2}$ pc, thus losing £30,000 p^r. ann., and when 3 pc^{ts}. fell to 60 they would be called upon for the payment of this sum of 3 millions at a very inconvenient time, as to obtain it they would lose the difference between 85 at which they bought, and 60 at which they would be forced to sell or £750,000. Now though I am a friend to these Institutions I do not think that they are deserving of these extraordinary bonuses, particularly as I am persuaded that this loss to the public would not act as any great encouragement to savings. The depositors whether they received 5, 4 or 3 pc. for their money would be of little importance in determining them to economical habits.

With respect to the moral influence of these Institutions do you think that a depositor will feel that he has an equal stake in the country and is therefore interested in its peace and good government whether he have £5 in the funds or in a government debenture? In that respect I can see no difference.

*(Works, Vol. VII, pp. 154-155; Ricardo to Trower,
9 May 1817)*

Ricardo's fears were soon realized, as there was a very significant increase in the amount of deposits. In 1818 there were 119 new banks established in England alone, with another 13 in Wales and Ireland, and deposits increased better than sevenfold (See TableVIII-2). The debenture scheme and the preferential interest rate each contributed to the success of the banks, and Ricardo probably was wrong in his hypothesis that the interest rate made no difference as to whether people saved. For the next several decades the question of the cost to the Government of the deferences accorded the savings bank was continually debated, and Joseph Hume became the leading advocate for reducing the interest rate of £4 11s 3d guaranteed depositors. In 1823, when total deposits came to over £8,000,000, Hume called for a reduction in the interest rate, which he claimed was costing the

government £40,000 a year. Even though he was one of the managers of the Westminster Bank, and the author of the very sympathetic and informative pamphlet describing the Institution, Hume believed that Rose's Act had gone too far in subsidizing Savings Banks, to the detriment of the public.

**Table VIII-2. Total Deposits in Savings Banks,*
1817-1826**

Year Ending November 20th	Balances Due Depositors £
1817	230,028
1818	1,697,853
1819	2,813,023
1820	3,469,910
1821	4,740,188
1822	6,546,690
1823	8,684,662
1824	11,720,629
1825	13,257,708
1826	13,135,218

*Excluding Scottish savings banks.

Source: Home 1947, Appendix II, p.386.

In this respect, as in many others, his views were the same as Ricardo's, but Hume was far more vociferous in his support of the public interest. It generally was acknowledged that Hume spoke more frequently on all topics, and was less listened to, than any member of the House. Trower claimed Hume was a "complete Ferret," because of his constant prodding for causes.

Mallet, who also was one of the managers of the banks in London, wrote Ricardo to plea for a continuation of the status quo and for no new legislation on savings banks. He claimed that depositors did not really earn £4 11s, the rate paid on the debentures, because the costs of bookkeeping and management reduced the effective rate to £3 17s. Accordingly, large depositors could do better in Consuls, and the London institutions were losing accounts. It was not a proper time "for proposing any alteration in the rate of interest granted by Government." The great importance of the experiment of the savings banks was paramount over any consideration of the costs to Government (*Works*, Vol. XI, pp. xvii-xx; Mallet to Ricardo, 24 February 1823).

In reply, Ricardo agreed it was not the appropriate time to question the rate of interest paid to savings banks, and he thought that Hume would agree (*Works*, Vol. XI, p. xxi; Ricardo to Mallet, 25 February 1823). What had to be considered, however, was the increasing cost to the public, as against the benefit accruing to the provident institutions. For those like Trower and Mallet, who were involved in the daily management of the savings bank, any policy necessary to make the experiment feasible was to be pursued. Trower believed the reduction in the poor rates was directly tied to the growth of saving bank deposits, and by 1820 he claimed there was evidence that the system was working, at least in Godalming (*Works*, Vol. VIII, p. 202; Trower to Ricardo, 5 July 1820).

Ricardo's interest in Provident Institutions never waned, but he was not active in their operation after 1817 as he became more occupied with writing political economy and then his legislative career. In 1817 he was one of the trustees of a new savings bank in Tetbury, Gloucestershire, just as Malthus was a trustee for a bank in Hertfordshire, and Trower in Godalming. These banks in the industrial areas, however, were not very successful, as the manufacturing classes typically were skeptical of Provident Institutions, as Ricardo observed:

we understand that a strong prejudice exists among the manufacturing classes against us. They think that we have some sinister object—that we wish to keep wages down. Time and good temper will overcome this feeling and convince the prejudiced how that the rich have no other personal object in view excepting the interest which every man must feel in good government,—and in general prosperity. The success of these Banks would be great if the enormous abuses of the Poor Laws were corrected.

(*Works*, Vol. VII, p. 220; Ricardo to Trower, 10
December 1817)

There was Cobbett, of course, who was highly suspicious of the savings banks, also questioning the sincerity of the philanthropists who acted as trustees and managers. The notion of provident institutions was just absurd and ridiculous. Laborers and journeymen were in a state of misery, and one would have thought that the philanthropists, desirous of improving the lot of rude persons, would discover the means of giving them a larger income. But instead there was

a project to get from labourers a part of their present income in order to collect it into a fund for their relief. It was very clear that they had not the means of furnishing themselves with a sufficiency of food and raiment out of their wages in order to form a fund, to be drawn upon by them at a future time.

(*Political Register*, 7 September 1816, p. 209)

But despite the manufacturing workers who were prejudiced against savings banks and Cobbett's claim that workers had no opportunity for savings, the overwhelming majority of depositors were domestic workers. Typically their money wages were minimal, perhaps £6 or £7 a year, but all their food, lodging and uniforms were provided. Moreover, they were protected from the effects of the rising cost of living, and not subject to either seasonal or periodic unemployment. Being on duty from early morning to late evening, these workers were not apt to develop propensities for conspicuous consumption, such as trips to the local ale house. As a result, domestic servants saved a good portion of their money wages, and when their employers extolled the great advantages of earning interest in the new savings bank, such workers flocked to make their annual deposits of £5 or more. After the domestic workers, most of whom were women, came artisans and small tradesmen. The £50 limit on annual deposits meant the amount coming from the more well-to-do was restricted. The success of the provident institutions, as marked by the growth in deposits, attests to the fact that workers with limited incomes were induced to save when a proper financial intermediary was established to hold and invest the accumulated funds. It was to this activity that Ricardo devoted a considerable share of his time in 1816 and 1817.

New Critics and Converts

In the several years following the publication of the *Essay on Profits and Secure Currency*, Ricardo began to hear from a widening circle of individuals, most of whom disagreed with his economic ideas, or at least some portion of them. None of these people were aware that he was engaged in recasting his ideas for the publication of the *Principles*; only Mill, Malthus, and Trower had such knowledge. For the most part, the brushes with new critics were but brief encounters because Ricardo and they were so wide apart in their views. In two instances, however, those of McCulloch and Barton, the exchanges of this period marked the beginnings of lasting influence, as McCulloch became Ricardo's greatest advocate, while

Ricardo made Barton famous. In both instances the initial issue they raised with Ricardo was his position on the question of the influence of machinery on the condition of the laboring classes. It was the question that raised the greatest controversy, as Ricardo and McCulloch eventually switched positions, while Barton maintained his original view. In the meanwhile, Ricardo heard from other critics, among them Alexander Crombie (1762-1840).

A Presbyterian minister and schoolmaster in Kincardineshire, Crombie was a relentless critic of the new liberalism, and an old line Tory. He was a friend of Torrens and exercised considerable influence for the writing of Torrens's *Essay on Money and Paper Currency* (1812). At the time Torrens was a strict antibullionist, and like Crombie a sharp critic of the *Bullion Report*; Torrens even dedicated his *Essay* to Crombie. Since Ricardo was the leading bullionist in 1816, Torrens sent him a copy of Crombie's latest pamphlet, which was in part an attack upon the *High Price of Bullion*. As was his habit, Ricardo extended a dinner invitation to Crombie, so they might discuss their differences. Crombie declined the invitation, since he said he seldom dined away from home, but told Ricardo he was preparing a pamphlet on "almost everything of importance on the other side" (*Works*, Vol. VII, p. 32; Crombie to Ricardo, 1 May 1816). The next year Crombie published *A Letter to D. Ricardo Esq. containing an Analysis of his Pamphlets on the Depreciation of Bank Notes* (Crombie 1817). In none of his correspondence did Ricardo ever refer to Crombie's pamphlet and if he wrote the author himself the correspondence is not extant.

The link between Crombie and Ricardo was Torrens who, as he became less and less of an antibullionist, moved away from Crombie's strident position. As discussed in an earlier chapter, Ricardo and Torrens first met in April 1815 at which time Ricardo tried to convince his new acquaintance that his views on money were in error. By 1819 Torrens still was opposed to a return to the gold standard, but he was willing to concede there may have been some excessive issue of notes by the Bank of England, a position he had repudiated in his 1812 *Essay*.¹³ Lionel Robbins has observed:

Ricardo must have been an overwhelmingly persuasive talker. Torrens was in great sympathy with his views on agricultural protection and on many propositions in the theory of value and distribution. It would not be surprising if the eloquence of his new friend had induced him to shed his earlier opinions and join the ranks of the bullionists.

(Robbins 1958, p. 81)

¹³ For an analysis of Torrens's monetary views, and his change from an antibullionist to a bullionist, see Robbins 1958, Chapter IV. Robbins said he was at a loss to explain the reasons for Torrens's change in view (p. 74). In the 1820s and 1830s, it was Ricardo's monetary views which prevailed, though his other theories were under attack. On money and banking, Ricardo's paradigm prevailed, and if Torrens wanted to speak on the issues he had to become a bullionist, as antibullionists were in full retreat.

By the time Torrens became a bullionist in 1830, Ricardo was no longer around, and Crombie was then attacking his old friend for his views on agricultural protection (Crombie 1932). Torrens initially had sent Ricardo a copy of his and Crombie's pamphlets attacking the bullionist position, but instead of changing Ricardo's views, the letter converted Torrens to his side. Crombie, however, remained as antibullionist and anti-free trade as ever. After 1817 Ricardo and Crombie had nothing further to do with one another because of their opposing views.

Another protagonist was John Broadley of Glasgow.¹⁴ He wrote after reading Ricardo's pamphlet, which Broadley referred to as dealing with the advantages of "Cheap Money" (*An Economical and Secure Currency*). While agreeing with Ricardo that historically the Government had made some disadvantageous arrangements with the Bank of England, Broadley claimed that the plan for reducing the quantity of bank notes and a return to specie payments would be ruinous to the Bank. It was "a proposition so fully fraught with injustice to that Company and impolicy and danger to the nation itself" that it must be rejected (*Works*, Vol. VII, p. 39; Broadly to Ricardo, 23 June 1816). The Bank of England, he argued, did not possess the means to purchase a sufficient quantity of gold to permit it to redeem Notes at £3 18s. Broadley did not appreciate Ricardo's argument that a reduction in the quantity of bank notes itself would restore equilibrium between the market and mint price of bullion. Instead, Broadley claimed that money could not serve as a measure of value, since it could not be controlled.

The Misfortune is, that you argue from an erroneous proposition or foundation, you have chosen for your standard measure of value a thing that deserves not the Name, you say Bullion at the Mint price is the Standard Measure of value, but, as the price of Bullion does and ever will vary it cannot deserve the denomination of *Standard*. And this, Sir, is the unfortunate condition of every

¹⁴ The identity of Ricardo's correspondent is confused, since there were two John Broadleys, if not three. The most known was John Broadley (1774-1833) the art collector, Fellow of the Society of Antiquarians, and Fellow of the Linnaean Society. He was also the editor of a volume on the life of John Shawe, an early seventeenth century poet. Upon Broadley's death his collection of drawings, engravings and volumes were sold at auction in London.

The second John Broadley was the author of a pamphlet, *Pandora's Box and the Evils of Britain, with Effectual, Just, and Equitable Means for Their Annihilation; and the preservation of the Peace, Happiness and Prosperity of the Country* (London, Printed for the author, 1801). The author was identified as a merchant. From the contents of the pamphlet he obviously lived in London and wrote of England's problems and not those of Britain. The argument of the pamphlet was somewhat advanced for the times, as it proposed that not all of the unemployed had worked in agriculture, and the burden of the poor should not rest solely upon the landowners. Manufacturers and mine owners should be required to pay the unemployment relief for those persons who had worked in their respective sectors.

Sraffa attributed *Pandora's Box* to this second John Broadley, and also identified him as Ricardo's correspondent (*Works*, Vol. VII, p. 37), but the latter was a resident of Glasgow and there is no indication he was a merchant. Accordingly, it is quite possible that he was not the author of *Pandora's Box*, but a third John Broadley.

Man I've yet seen write on the subject of *Currency*—nay it is in fact our Countrys misfortune that our "Standard Measure of Value" has not yet been discovered, or has been intirely overlook'd by every Writer on Political Economy &c. from the justly celebrated Adam Smith down to this day—excepting none . . . not even the Members of the Bullion Committee!

(*Works*, Vol. VII, p. 40; Broadley to Ricardo, 3 June 1816; italics in original)

Ricardo replied to Broadley, noting the two were so divergent in their views that it would require a lengthened correspondence to come to agreement, and for that he did not have sufficient leisure (*Works*, Vol. VII, pp. 41-42; Ricardo to Broadly, 14 June 1816). There were, however, several points he wished to make. In the first place, he had no intention of ruining the Bank of England, nor would his recommendations lead to that situation.

My scheme was proposed as a measure which in my opinion would be beneficial to the Bank, without being attended with any corresponding injury to the public and therefore as of national advantage. . . . You say that I have not provided for the Bank being enabled to buy gold bullion at or under the price at which they are to sell. . . . as the Bank are to be the sole issuers of money, they have the power of regulating the quantity to be issued. Will you deny that a reduction of 1, 2 or 3 millions, would produce an effect on the comparative value of bank notes and gold? If you do, we are at variance on the first principles of the science.

(*Works*, Vol. VII, p. 42)

Ricardo agreed there could never be an invariable measure of value, but money was the least variable item that could be chosen and had been so designated by law, for a variable measure was preferable to no measure. The situation was likened to that which might prevail if the length of a yard should vary from time to time, due to atmospheric conditions. Nevertheless, "we might still use the yard measure and might justly call it (by law) our standard measure" (*Works*, Vol. VII, p. 43).

After providing Broadley with several requested definitions, those pertaining to the meaning of foreign exchange and how such exchange affected the trading countries, Ricardo closed his letter abruptly, as the postman was waiting.¹⁵ In the meanwhile, there were other new correspondents.

Ricardo first learned of the existence of John Ramsey McCulloch (1789-1864), when unsolicited, he received a copy of the young Scot's first publication in political economy (McCulloch 1816a). It was the beginning of a somewhat strange

¹⁵ Broadley answered Ricardo's letter, and after restating his views argued in favor of a nominal standard of value and a Ledger pound. (*Works*, Vol. VII, p. 44)

relationship, for although McCulloch became known as Ricardo's greatest advocate and convert, he seldom agreed with him on theoretical grounds, since McCulloch was more interested in their mutual belief in free trade and lower taxes. As a newspaperman, McCulloch initially was concerned almost exclusively with policy matters and stayed away from such questions as the degree to which capital affected exchange values, or why the isolation of a measure of value would permit an estimation of absolute value. In his later years, when he earned his income as a lecturer and teacher, McCulloch discarded most of Ricardo's theoretical economics, as did most of the converts.

McCulloch was born in the southwestern part of Scotland in Wigtownshire, at Whithorn.¹⁶ His father was a small landowner who died when his son was five years old, at which time the maternal grandfather, the Reverend James Laing, took possession of the household and the education of McCulloch and his younger brother, Edward. The education of the two boys was classical, mainly under the supervision of one of Laing's servants, a man who had once studied for the priesthood in Ireland. In his twenties McCulloch could still recite the *Iliad* from memory. John Ramsey lived in the Laing household until 1807, when at eighteen he inherited his father's small estate and moved to Edinburgh to live with his mother who years earlier had remarried. At the same time, McCulloch commenced his studies at Edinburgh University with an emphasis on mathematics and the natural sciences. He left the University in 1811 but did not take a degree, which may explain his later contemptuousness for degree holders.

The individual who exercised the greatest influence upon McCulloch at Edinburgh was Sir John Leslie (1766-1832), the Professor of Mathematics. Leslie was a physicist as well as a mathematician, and it was for his contribution to this subject area that he was knighted in 1823. It probably was because of Leslie that McCulloch first became interested in applied statistics, for he was more of a statistician than a mathematician or political economist. McCulloch was not any more theoretically bent in mathematics than he was in economics, and in both areas he knew less than he thought. While at Edinburgh, for example, he enrolled for lectures in Mathematics III, and the next year dropped down to Mathematics II. There is no evidence that at any time he sat for an examination in mathematics or any other subject. As a political economist, however, he probably made more use of statistics than most of his contemporaries.

When McCulloch was at Edinburgh, the study of political economy was beginning to decline in importance and that may explain why he did not study the subject. Dugald Stewart was still the Professor of Moral Philosophy, and he certainly considered political economy as within his domain. But because of poor health, Stewart did not lecture after 1808, nor did he take on tutees. He held the chair until 1820, when he resigned, his successor being John Wilson (1785-1854). A staunch Tory, Wilson did not lecture in political economy as he considered it outside the purview of moral philosophy. A frequent contributor to *Blackwood's Magazine* under the alias Christopher North, Wilson was appointed professor of

¹⁶ The most detailed account of McCulloch is the somewhat biased one by O'Brien 1970.

moral philosophy largely because of the political influence of the Tory establishment of Edinburgh society. After 1826 he began to lecture in political economy, primarily because of the efforts of the Whigs to establish an independent chair in political economy, and to separate the subject from moral philosophy and Wilson's control of the curriculum. The leading candidate for the post was McCulloch, whom Wilson attacked as being unfit. In any event, between 1808 and 1826 there were no lectures in political economy at Edinburgh University.

Nevertheless, the ideology of David Hume, Francis Hutcheson, and Adam Smith, as passed on by Stewart, permeated the thinking of many portions of the Edinburgh community, as the *Review*, started by Jeffrey, Horner, Brougham and Sydney Smith, continued to foster the Whig philosophy. It was not only because Jeffrey or Horner had studied political economy with Stewart that the economic approach was dominant in Scottish Whig circles, but rather that the "new science" was the catalyst for the rationalistic and humanistic approach to public policy. Almost every social issue was tainted with economic implications, and while earlier generations had studied the classics, Greek and Roman, the new Whig generation of Edinburgh was much more ethnocentric. It was into such an atmosphere that McCulloch sought admission after 1811.

Soon after he left his studies at the University, McCulloch returned to his birthplace, was married, and then took up residence in Edinburgh, where he was employed as a lawyer's clerk. Whether he had always held liberal views, or just how he became interested in political economy, there is little evidence, but in 1817 he joined the staff of a new weekly newspaper, the *Scotsman*. The paper was started the same year by seven young Scots, most of whom were small merchants or clerks. The editors pledged that they would be impartial, firm, and independent of the Tory establishment, and dedicated to constitutional liberty. The first issue of the *Scotsman* was but eight small pages, and sold for 10d. After 1823 the paper was published twice a week and in 1855 was the first penny daily of Edinburgh, if not Scotland. In writing, eighty years later, about the founders of the *Scotsman*, it was said that

These men, with little of influence or wealth to back them, animated with a spirit of resistance to the prevailing intolrances, the narrow prejudices, and the oppressive methods of government in their time, in founding the 'Scotsman' achieved for their country a good work such as it has been given to very few, even of our leading statesmen, to accomplish. They and their successors, through good repute and through ill repute, have held firmly by those principles of liberty and moderation, formerly identified with the Whig party, but which under various names have now become almost the common property of the nation. If we discard from our thoughts, for a moment at least, party names and party badges, we see that, so far as political principles are concerned, the fathers of the 'Scotsman' and their direct descendants have won along the whole line.

(Anonymous 1896, p. 220)

The three founders most involved in writing for the *Scotsman* were Edward McLaren (1782-1866) and the Ritchie brothers, William (1781-1831) and John (1778-1870). McLaren was editor for the first few issues, but after he became a clerk in the customs house he relinquished the day-to-day responsibilities to McCulloch, who was editor until 1821. McCulloch was never one of the proprietors of the *Scotsman*, as he was paid for each article as well as his time devoted to the editorial duties. Under his editorship the paper became an organ for espousing the new political economy. McLaren and the Ritchies continually complained about the explicit emphasis, since it had not been their intention to publish a paper which stressed economics alone. They did not appreciate that each issue was dominated by McCulloch's discussion of the national debt, taxation, and reviews of works such as Say's *Traite* or Ricardo's *Principles*. It was this conflict of opinion which led to McLaren again taking over the editorship in 1821, which he retained until 1848. McCulloch continued to contribute articles to the paper, but he frequently enlarged upon the pieces and then published them in the *Edinburgh Review*. It was because he published almost the same article in the *Scotsman* and the *Edinburgh Review* that Wilson later accused him of "self-plagiarism."¹⁷

The pamphlet that McCulloch sent to Ricardo¹⁸ was his first work in political economy, written the year before he commenced his journalistic activities. As the title suggests, McCulloch called for a reduction in the rate of interest on the national debt, because the £49 million in annual interest was an "open and barefaced oppression" of the agricultural and commercial classes. Although his attack upon the fundholder was not as vituperative and muckraking as would come from the pen of a Cobbett, nonetheless McCulloch believed the owners of the debt were receiving much more income than justice required. What made his attack different from that of others who, in the tradition of Lord Chatham, complained consistently about the "monied interest," was the framework of McCulloch's economic analysis which accounted for the current situation. A copy of the pamphlet was forwarded to Ricardo, likely because McCulloch's policy recommendation was contingent upon an analysis of the changes in the value of money.

¹⁷ There is nothing terribly dishonest about an author using his own ideas a second time or to quote himself and ignore the inverted commas. It is difficult for an author not to be repetitive and to reuse the same phraseology. Moreover, O'Brien's analysis shows that Wilson's claims as to McCulloch's self-plagiarism were unfounded, except in one instance where the same piece was published in both the *Scotsman* and the *Edinburgh Review*. In the other instances cited by Wilson, there was considerable rewriting of previously published material. McCulloch's two reviews of Ricardo's *Principles* were quite different in tone and length. The first review was published in the *Scotsman* (3 May 1817), and ran to less than two columns in the eight page newspaper. While obviously sympathetic it was not as laudatory as the long piece in the *Edinburgh Review* (June 1818, pp. 59-87). The latter was obviously written for an informed audience, for those who knew their Adam Smith and the rudiments of political economy. For McCulloch's extensive bibliography, see O'Brien 1970, pp. 409-425.

¹⁸ Apparently no covering letter accompanied the copy of McCulloch's pamphlet. When he wrote the author, Ricardo simply addressed his letter to J.R. McCulloch, Esq., Edinburgh. As J.H. Hollander first observed, Ricardo's letter was opened by J. McCulloch, an innkeeper on Princes Street, Edinburgh (Hollander 1931, p. 1n). Ricardo's second letter, six months later, was addressed to McCulloch on College Street, his Edinburgh residence.

In McCulloch's opinion, the period after the war was marked by a decided increase in the value of money, as the number of bank notes issued by the Bank of England declined. As a result of the appreciation of money, the price of commodities fell, so that farmers in 1816 were selling corn at 60s a quarter, as against the 80s they had received in 1814. The price of corn was low not only because money now bought more goods, but also because farmers had to compete with the cheaper grains of the continent. The lower money prices which farmers now received for their products meant a heavier tax burden. Given the downward flexibility of prices, except for the interest on the debt, there was a squeeze on profits. Holders of the debt still received the three, four, and five percent interest rates contracted during the war, and since the debt was issued in perpetuity the interest payment in relation to the new price level was higher than it had been during the war. The process gave fundholders an "undue advantage." Actually, debt holders benefited in two ways. The current level of prices resulted in an appreciation in the value of the money balances, a rise in real income, while at the same time the total amount of the coupon paid on the consols was the same as it had been when the debt was contracted. The obvious remedy, as McCulloch saw it, was to reduce the rate of interest paid on the debt by an amount equal to the fall in the price of corn. Such a remedy would restore the equilibrium between interest rates and other prices, particularly for necessities such as corn.

As might be expected, Ricardo took a longer view of the question of the interest on the debt. He agrees that there had been a rise in the value of money, but the current appreciation had been preceded by the depreciation of the war years, when prices were rising.

My own opinion is that there has been both a fall in the value of the precious metals and a rise in the value of paper. Inasmuch as the latter has taken place the stockholder has been benefited, but if it would be wise to legislate for every alteration in the value of the currency we ought to have begun long ago, when the stockholders were suffering from a fall in the value of money; and such has been their situation ever since the commencement of the National Debt. No relief is ever afforded to those who suffer from a fall in the value of money, but every heart sympathizes with those who are losers by its rise.

(*Works*, Vol. VII, pp. 37-38; Ricardo to McCulloch,
9 June 1816)

In addition, Ricardo told McCulloch the low price of raw produce was not due to the rise in the value of money, but to adverse circumstances in that particular sector. Producers of raw produce had no claim to relief. In time, profits in the sector would rise, as supply adjusted, and it was incorrect to claim that taxes were responsible for the difficulties of agriculture. Taxes, he said, "fall ultimately on the consumers," and as such had no effect upon producers. (*Works*, Vol. VII, p.38)

The remedy which Ricardo recommended was for the government to reduce its expenditures and raise taxes until the two flows were equal. Under no circumstances should the ministers dip into the sinking fund, or "interfere with the dividends of the stockholders," as it was "expenditure which will ruin us, not the taxes necessary to pay the interest on the expenditure" (*Works*, Vol. VII, p. 38)

In November, five months later, McCulloch forwarded to Ricardo a copy of the revision of his pamphlet. The new essay was four times the length of the original, though he did shorten the title (McCulloch 1816b). In his accompanying letter the author claimed he had rewritten the essay to dispose of Ricardo's argument "that the reducing of the interest of the Public Debt, would be taking advantage of a rise in the value of Gold and silver" (*Works*, Vol. VII, p. 93; McCulloch to Ricardo, 19 November 1816). On this point McCulloch traced the relation between the rates of increase in bullion and goods for the period after 1775, concluding that there had been no alteration in the value of bullion. There had been an increase in nominal prices in Great Britain, but that increase was the result of the Bank Restriction Act of 1797, which had led to the excessive issue of paper money. The flood of paper money had produced a "fictitious" system, McCulloch's descriptive term to characterize post-war Britain.

The "fictitious" system had arisen because of the growth of the government sector, and although McCulloch never actually claimed the Napoleonic Wars were unnecessary, his analysis of the French Revolution was in tune with the early Whig sympathies for the upheaval of July 1791.

Whether the French Revolution has been propitious, or otherwise, to the social relations and general happiness of Europe, may perhaps be questioned; but there can be no doubt of its having improved the condition of the great body of the French people themselves, especially those supported by agriculture. The abolition of the hereditary privileges of the nobility and clergy, of the gabelle, the corvees, and other grievously oppressive and partial imposts and burdens, would of themselves have sufficed to render the situation of the farmers and peasants more respectable and comfortable. . . Their political and religious equality, and the inviolability of their property, being secured and protected by a vigorous and energetic government, a new and effectual impulse was given to their industry, and to the improvement of the country. The farmers and peasantry were no longer oppressed and plundered by rapacious nobles, and ignorant monks; and their industry being exerted for their own advantage, did not fail to produce corresponding effects.

(McCulloch 1816b, p. 75)

The benefits which flowed from the elimination of the oppressive regime of France could also accrue to Great Britain, through a drastic reduction in the heavy burden of taxation. That burden arose from two sources: one, the large government

expenditures which supported "some useless regiment, some pampered sinecurist, or some profligate mistress" (McCulloch 1816b, p.177); and second, the funds necessary to pay the interest on the national debt. In both instances the expenditures supported unproductive and wasteful economic activity. Particularly disturbing to McCulloch was the size of Britain's standing army, a force that in the peace time of 1816 was larger than in the tumultuous year 1793. His Judgment of government expenditure was reminiscent of an earlier Scot, namely Adam Smith. In McCulloch's view, government expenditures supported

those who, if they were annihilated at any given instant, would not leave any capital behind them—nothing to represent the immense sums that had been lavished on their support. Their productions are properly denominated *immaterial*, and consists almost always in moral results. It is no doubt necessary for the state to maintain soldiers and sailors for her *defence*; and to think they could be entirely dispensed which seems perfectly visionary. But we must not be silly enough to imagine, that whatever is consumed by them has as great an effect in increasing national *opulence* as if it were consumed in giving birth to new products. Fashion renders coachmen and valets necessary to people of fortune, but certainly they do not contribute to increase their riches. Abstracting from the security derived to the state, the consumption of military is precisely the same in its effects on industry, as if the same quantity of produce they consume was purchased by Government, and then cast into the ocean. Everything expended on them is just so much capital, so much *reproductive* power, taken from the industrious classes of society, and for ever lost to the state . . . It is . . . perfectly absurd to imagine, that the industry of a state can be in any respect benefited by the expenditure of its government.

(McCulloch 1816b, pp. 175-176, 177;
italics in original)¹⁹

Reducing government expenditures would lead to less taxation and it was the latter which McCulloch believed could be greatly reduced by a more prudent administration. An example of a prudent government was the United States, where the President had an annual salary of but £6,000, which he later calculated as being 1/34th the stipend of Britain's Prince Regent. The heavy burden of wasteful expenditure and taxation restricted the industrial classes. Now that peace had arrived, British manufacturers no longer enjoyed an advantage over their continental competitors, as in the period 1793-1815. During those years British producers benefited from the fact that the war was waged on the mainland, as French, Polish, and even American manufacturers were not able to take advantage

¹⁹ For Smith's statement of the unproductive character of government expenditure, see Smith 1937, p. 861; see also pp. 685, 689 and *passim*.

of the latest industrial techniques. But with the return to peace, manufacturers in these countries were surpassing the British producers, whose costs were kept artificially high by (1) the heavy burden of taxes, (2) the high price of grain that was artificially maintained by the Corn Law of 1815, and (3) the large interest payment on the national debt.

McCulloch's analysis of the impact of the corn law was in terms of the price of grain being the major determinant of wages. It is perhaps incorrect to refer to McCulloch's "analysis," since the equality between corn prices and wages was asserted, rather than proven. There was no hint of a theory of value, and it was the latter which McCulloch so admired when he reviewed Ricardo's *Principles*. As he later wrote:

Mr. Ricardo has demonstrated, that, whatever is added to wages, must be taken from profits; and conversely. Dr. Smith, who was not aware of this fundamental principle, supposed that a heavy taxation on necessaries neither fell on the capitalists nor the labourers, but on the consumers generally; and that it was always in the power of the producers to indemnify themselves for a rise of wages, by enhancing the price of the commodities brought to market. But it is easy to see that no *general* rise of wages can have any such effect. Commodities are in every case bought by commodities; and as a rise of wages must affect, in an equal degree, the producers of every different article, it cannot possibly derange their relative values one with another, or occasion any increase of price.

(McCulloch 1820, p. 164; italics in original)

The corn laws were a part of the "fictitious system," especially the law of 1815 which had set the import price at 80s a quarter. The price of 80s was fictitious because it was a *nominal* price, a derivative of the excessive issue of paper money of the war years. Given the post-war decline in nominal prices, the corn tariff should be reduced to at least 50s a quarter, as cheaper corn would allow for a decline in money wages.

It is certainly true, that the abolition of the prohibitive system would be attended with a good deal of *temporary* distress and inconvenience. That, however, is no reason why it should not be abandoned. It might, with as much propriety, have been objected to the introduction of the steam engine, and of Sir Richard Arkwright's cotton mill, that the use of them would entirely supersede the old clumsy machinery. Private interests must, in such cases, give way to the general good. But, in order to give time to withdraw capital from the cultivation of poor soils, and to invest it in more lucrative employments, a gradually diminishing scale of duties might easily be adopted. The price at

which foreign grain should be admitted duty free, might be made to decrease from 80s, its present limit, by 4s or 5s a quarter annually, till it reached 50s when the ports could safely be thrown open, and the restrictive system for ever abolished.

When this happy event shall have taken place, it will be no longer necessary to force nature—we will only second her efforts. The capital and enterprise of the country will be turned into those departments of industry, in which our physical situation, national character, or political institutions, fit us to excel. The corn of Poland, and the raw cotton of Carolina, will be exchanged for the muslins of Glasgow and the wares of Birmingham. The genuine commercial spirit, that which *permanently secures* the prosperity of nations, is altogether inconsistent with the dark and shallow policy of monopoly. The nations of the earth are like provinces of the same kingdom,—a free and unfettered intercourse is alike productive of general and local advantage.

(McCulloch 1816b, pp. 145-146;
italics in original)²⁰

Having made his case for both free trade in corn and the necessity for lowering taxes, in the last section of his pamphlet McCulloch turned to the crucial question of the need to reduce the interest paid on the debt. In an earlier section (Five) he had discussed the moral connotations of the debt.

The national debt gave birth to the nefarious practice of stockjobbing. It generated a spirit of gambling, destructive of public morals, disgraceful to the state, and decidedly hostile to the pursuits of sober industry. Capitalists were deterred from lending money to agriculturists or manufacturers, because, when in their hands, they had no opportunity of taking advantage of the rise and fall in the price of the funds, of imposing on the simplicity of some, and the cupidity of others. And Government being absurdly released from the operation of the usury laws, contracted frequently for loans at a much higher rate of interest than capitalists could legally have exacted from other persons, and obtaining money in preference, engrossed the floating capital of the country to the real prejudice of the productive classes.

(McCulloch 1816b, pp. 181-182)

²⁰ The analogy between Arkwright's cotton mill and free trade in corn was borrowed, without attribution, from Ricardo's *Essay on Profits*, where it was argued that, "We might just as fairly have been told, when the steam-engine, or Mr. Arkwright's cotton-machine, was brought to perfection, that it would be wrong to adopt the use of them, because the value of the old clumsy machinery would be lost to us. That the farmers of the poorer lands would be losers, there can be no doubt, but the public would gain many times the amount of their losses; and, after the exchange of capital from land to manufactures had been effected, the farmers themselves, the landholders, would very considerably increase their profits." (*Works*, Vol. IV, p. 33)

The foregoing could just as well have been written by Defoe, Cobbett, or Lord Chatham, for McCulloch's characterization of stockjobbing was typical of their earlier criticism. Moreover, a knowledge of English history would have revealed that stockjobbing had not commenced with the trading of the national debt, but with Josiah Child and the trading of East India stock, reaching its greatest intensity with the South Sea Bubble. But the association of the national debt with stockjobbing was of aid in McCulloch's campaign to reduce the interest in the debt, which he estimated at 45 million pounds per annum. The national debt was the real millstone that over-burdened and destroyed "the enterprise, the industry, and vigour of the people" (McCulloch 1816b, p. 192) It multiplied the need for tax-gatherers, caused pauperism, crime and wretchedness, thus preventing a true happiness in a time of peace. Moreover, he argued that the loans of the war years would return much more purchasing power than the contractors originally expected, and that the fictitious system was yielding stockholders a greater return than they were entitled to under any circumstance. Justice required nothing less than a reduction of the interest on the debt. What the government really had intended when it contracted the war loans was to pay the stockholders a given quantity of corn or, the same thing, the purchasing power of money for a given quantity of corn.

For example, let us suppose that the state, in consideration of sums advanced by a capitalist in 1812, engaged to pay him for fifty years, an annuity of £10,000; on referring to the price of corn for that period, it will be found that it had *really* in view to give him a power of purchasing annually about 1600 quarters of wheat; but supposing the price of wheat to be permanently reduced to one half of its then price, it is clear this annuitant would be invested with a power of purchasing 3200 quarters of wheat; and would, unless the amount of the annuity were reduced, receive in all 80,000 quarters more than he was entitled to, or than what entered into the view of the parties at the time of the contract. The case here supposed is entirely the same in principle, with the real case of every stockholder who has lent money to the country during the late war.

(McCulloch 1816b, p. 197; italics in original)

Citing the "penetrating analysis" and "the wonted perspicuity" of Mr. Malthus, who had shown the "unjust and ruinous advantage" which would accrue to the stockholders at the expense of "the industrious classes" from a fall in the price of corn, McCulloch rested his case for a reduction in the interest on the national debt (McCulloch 1816, pp. 198-210).²¹ The stockholders, by insisting on a larger interest than they were entitled to, were contributing to a diminishing trade, a sapping of the "very foundations of the national prosperity," and the acceleration of

²¹ The citation was to Malthus 1970, *Grounds*, pp. 165-168. McCulloch took certain liberties in quoting Malthus, by giving emphasis to words and phrases which Malthus had not italicized, and leaving out whole sentences of the original text. The meaning and intent of the original, however, was retained.

a "national bankruptcy." Any comment beyond what Malthus had written was said to be "superfluous."

After Ricardo received McCulloch's revision, he read it within several days and wrote to his new Scot friend that he was both instructed and pleased by the content of the pamphlet. McCulloch had made several favorable references to Ricardo's *Essay on Profits*, and certainly the latter agreed with the need for free trade in corn, reducing taxes and government expenditures, not to mention a return to specie payment by the Bank of England. But there were differences, as the retired stockjobber objected to McCulloch's plan for reducing the interest on the debt.

I do not deny that for many of the loans borrowed during the war a really greater interest will be paid when Bank notes are at par than what was contracted for during the depreciation. But who depreciated the money borrowed? what made it of less value than gold money? Was it not the act of the legislature, and would it now be just for the same legislature to say to a man who then lent £100 "you must now take £3 for your interest, instead of £5, because £3 is now as valuable as £5 was then." Will not the lender reply "the reason why my £100 was then less valuable than it is now was in consequence of your giving an unlimited power to a corporate body. Since 1797 I had employed my money in discounting bills and always received £5 for every £100 for interest. By an act of yours you reduced its value, and assured me at the time that I was mistaken in thinking so, as my £100 was as valuable as before. By reducing my interest now you will really pay me only 3/5 of my original £100." You may say that he probably had not the money since 1797, that in 1812 he sold goods to purchase stock, or to lend it to the state, and obtained an additional quantity of money because it was depreciated, and therefore his plea is not valid; but who is to determine this? You say that you do not propose to reduce the interest of any part of the debt created anterior to the depreciation of paper, but how is this part to be distinguished from the other, how are you to distinguish the stockholder of 1790 from the stockholder of 1800 or of 1810 or of 1816? It is evidently impossible, the stock is all amalgamated together—has passed through a thousand hands and can in no way be distinguished.

(*Works*, Vol. VII, pp. 103-104; Ricardo to McCulloch, 4 December 1816)

As to McCulloch's claim that the government intended to negotiate its loans upon the basis of a given quantity of corn, that was not the case at all. The loans were exclusively monetary in character, with no provision being intended for a change in the value of money. The latter was the conventional standard of value, not corn or some other commodity. "Your system proceeds," he said, "upon the supposition that the price of corn regulates the price of all other things" (*Works*,

Vol. VII, p. 105). This Ricardo denied, since he believed that a change in the price of corn affected wages and profits, but left the relative prices of other goods unaffected, and it was this argument which later was so crucial to his theory of value.

As part of his scheme for relieving the tax burden on the commercial and agricultural classes, McCulloch called for a reduction in the sinking fund to partially pay the current interest on the debt. To Ricardo the sinking fund represented a contract, "a positive bargain between the nation and the stockholder, which cannot be infringed by one of the contracting parties." (*Works*, Vol. VII, p. 106) Further, McCulloch was free to avail himself of the quotation from Malthus, but Ricardo wrote that Malthus's analysis did not satisfy him, but to show the error "would require more space than I now can allow myself." And, finally, there was a caveat, or qualification.

You accuse me of protesting strongly against the injustice of encroaching on the sinking fund at the same time that I shewed the propriety and justice of *repealing* the corn laws. In this you are mistaken I recommended no *repeal* of the corn laws, for I wrote before they were enacted.

(*Works*, Vol. VII, p. 105; italics in original)

At the time of the initial exchange with McCulloch, Ricardo was in the process of writing the *Principles*. The thrust of the volume, of course, was to demonstrate the economic advantages of a free trade in corn, and to trace the way the resulting fall in wages reverberated throughout the system. The fall in the price of corn was beneficial to the stockholders because the purchasing power of their money funds rose. Given the quantity theory of money, the increase in the quantity of goods, procured from an international division of labor, would mean that the real purchasing power of society would rise. No matter that stockholders gained more than any other class, since the benefit to the society of the cheap corn was the crucial issue. To reduce the dividend paid the holders of the national debt, by lowering the interest rate, would violate the operation of the quantity theory of money. Moreover,

Justice and good faith demand that the interest of the national debt should continue to be paid, and that those who have advanced their capitals for the general benefit, should not be required to forego their equitable claims, on the plea of expediency.

(*Works*, Vol. I, pp. 245-246)

There was no reason to assume that those who would benefit from a reduction in the interest paid on the debt would employ their funds "more productively than those to whom indisputably it is due" (*Works*, Vol. I, p. 246). It was an error and a delusion to believe there were benefits to be derived from shifting the burden of the interest on the debt "from the shoulders of one class of the community, who justly

ought to bear it, to the shoulders of another class, who, upon every principle of equity, ought to bear no more than their share" (*Works*, Vol. I, p. 246). It was not the interest on the debt that impoverished a nation, but the excessive expenditures of government. The effective means for reducing the burden of the national debt was for taxes to exceed expenditures, the only meaningful sinking fund which a nation could utilize. But Ricardo was never averse to drawing attention to those who disagreed with his view of things.

Mr. McCulloch, in an able publication, has very strongly contended for the justice of making the dividends on the national debt conform to the reduced value of corn. He is in favor of a free trade in corn, but he thinks it should be accompanied by a reduction of interest to the national creditor.

(*Works*, Vol. I, p. 426, Ricardo's note; in the first edition of the *Principles*, the reference to McCulloch is at p. 314)

Typically converts are more zealous than their proselytizers, and McCulloch adhered to the pattern. He reviewed the first edition of Ricardo's *Principles* in both the *Scotsman* and the *Edinburgh Review*, describing in detail the author's "harmonious, consistent and beautiful system" of political economy (McCulloch 1818, p. 87). The article in the *Edinburgh Review*, McCulloch's first for the journal, was uncharacteristic of the great majority of his contributions, in that he stayed exclusively with Ricardo's ideas rather than his own. He traced all of the intricacies of Ricardo's value theory, to reveal that changes in price could not obviate the crucial conclusion that profits were the reciprocal of wages; for when wages rose, because of the rise in the price of corn, profits fell. There were long quotations in the review, and nowhere did McCulloch indicate any reservation or disagreement with any of the *Principles*. He did suggest, however, that Ricardo had "given too mathematical a cast to his reasoning, to make it perfectly intelligible to the generality of readers" (McCulloch 1818, p. 64). McCulloch was completely convinced that the repeal of the Corn Laws and a reduction in government expenditures were the two policies necessary for Britain's future growth. Unlike his initial correspondence with Ricardo, there were no differences between them, and McCulloch in his reviews did not mention the need for reducing the interest on the national debt.

Ricardo's analysis of why the interest rate should not be reduced, contained in his letter of December 1817, may have convinced McCulloch that his argument for justice was incorrect. Ricardo's treatment of the issue was based upon a hypothetical, and he could not offer McCulloch any evidence of the actual losses and gains during the respective periods of depreciation and appreciation. Several years later, in 1821, Robert Mushet published a tract which attempted to measure just such losses and gains to stockholders from changes in the value of money (Mushet 1821).²² Ricardo and Mushet were old friends from the 1809-1810 bullion controversy, when they were on the same side, and it could well have been that Mushet's statistical analysis was suggested by Ricardo. There is absolutely no

²² In 1815, when Mushet was appointed Melter of the Mint, Ricardo was one of his two bond endorsers, the other probably being Horner.

evidence for this to have been the case, except that Ricardo was so familiar with Mushet's figures that he made extensive recalculations which were incorporated by Mushet in his second edition (*Works*, Vol. VIII, pp. 396-398, for Ricardo's corrections of Mushet's "grave errors;" Ricardo to McCulloch, 30 June 1821), published the same year as the first. It is Sraffa's view that McCulloch changed his mind about the desirability of reducing the interest on the debt as a result of Mushet's *Tables* (*Works*, Vol. VII, p. 93 n2). McCulloch reviewed Mushet's second edition in the *Edinburgh Review*²³ (McCulloch 1821) at a time when there was considerable agitation for abandoning the gold standard, to which Britain had returned in 1819.

In his article on the "Pernicious Effects" of depreciation, McCulloch wrote that

the advocates of degradation have still another resource! They admit that economy and retrenchment might be carried much further; but they contend, that it is to no purpose to expect any considerable relief from this source, while *the interest of the public debt continues undiminished*. It might indeed be easily shown, that this is, in point of fact, a very exaggerated statement.

(McCulloch 1821, p. 482; italics in original)

He neither identified such advocates nor suggested that he himself had previously held such a view about reducing the interest on the debt; to have done so would have erased his anonymity. Moreover, he now endorsed the position that Ricardo had outlined to him in 1816, as there were offsets between the depreciation and appreciation of the value of money.

Now this, it is manifest, is a point that can only be decided by a comparison and balancing of gains and losses. None can deny that the interest payable on that large portion of the public debt which was contracted during the depreciation of the currency, must, now that the value of the currency has risen to par, be increased in an equal degree. But, on the other hand, it is equally plain, that the interest payable on all that portion of the debt contracted previous to 1801, must have been equally diminished during the continuance of the depreciation; and it is further plain, that the fundholders sustained a real loss whenever the interest payable on such loans as were contracted in paper depreciated to a certain extent, was paid in paper depreciated to a greater extent. If, therefore, substantial justice requires that the fundholders should be deprived of the advantages which they derive from the late rise in the value of money, it must also require that they should be indemnified for the losses they had sustained in consequence of its previous depreciation. *This is too*

²³ The article also covered the work of Henry James (1821) and a speech by Matthias Atwood on the Bank Cash Payments Bill (9 April 1821). Neither James nor Atwood were mentioned in McCulloch's review.

obvious a principle of adjustment to be liable to the smallest dispute. We are not entitled to depart from the literal terms of our engagement with the fundholders, except for the purpose of rendering them more fair and equitable;—a purpose which, however desirable, could not certainly be fulfilled, were we to appropriate to ourselves all the advantages, and to leave all the loss attending the late fluctuations, to be borne by the fundholders.

Founding on the just principle of compensation being equally due by the public to the fundholders, for what they lost by the fluctuations in the value of the currency since 1800, as by the fundholders to the public for what they have thereby gained, Mr. Mushet has calculated a set of Tables with the view of adjusting this account, and of ascertaining to whom the balance, if there be any, is due, and its precise amount. From these Tables it appears, that, instead of the fundholders gaining several millions by the late fluctuations, they have really incurred a permanent loss of 72,704*l.* a year!

(McCulloch 1821, p. 485; italics added)

Initially having taken the position that justice required the reduction of the interest paid on the national debt, so as to bring tax relief to the commercial and agricultural classes, McCulloch was converted to the Ricardo stance in favor of the gold standard which would establish a constancy in the value of money. To change the money standard was "open and barefaced robbery" (McCulloch 1821, p. 488), as was changing the contract between the stockholders and the government. Policy now should be directed at reducing the impact of the Corn Laws and lowering government expenditures. In his second article in the *Edinburgh Review*, which was really a companion piece to his review of Ricardo's *Principles*, McCulloch wrote:

But we do not despair of the country. And having thus, we trust satisfactorily, established that the present distresses are almost entirely owing to the excess of taxation, and the monopoly granted to the agriculturists, it is a comparatively easy, as well as a more pleasing task, to point out the means by which they may be alleviated. In order to accomplish this most desirable object, we have only to act on a system precisely the reverse of that by which the public distresses have been produced. An effectual reduction of taxation, and a cautious and gradual repeal of the restrictions on the trade in corn, and of the other restrictions which disgrace our commercial system, will put to flight the evils by which we are now assailed, and restore wealth and prosperity to all classes of the community. But it is in vain to suppose that any thing short of this will be sufficient to counteract the progress of pauperism—*Qui vult finem vult media*. If we have not good sense and virtue

enough immediately to set about making an unsparring retrenchment in every branch of expenditure, and to permit our artisans to purchase their food in the cheapest market, we must submit not only to a continuance, but to an increase of all the mischiefs we now suffer. Palliatives may delay, but it is not in the nature of things that they should be able to avert the final triumph of pauperism. Nothing but a very great reduction of the demands made by Government, and the total repeal of the worst of all possible taxes—the tax on corn, can save the country from the abyss of poverty and misery to which, if it has not already arrived, it is fast hastening.

(McCulloch 1820, pp. 179-180)

McCulloch never again referred to his scheme for reducing the interest on the debt, as the question of the debt gave way to the argument for free trade. On his own copy of the pamphlet for reducing the interest on the debt he wrote: "This tract I have suppressed and disavowed long ago: J.R. McC. Edin.^f 1845." (Cited, *Works*, Vol. VII, p. 93 n2) Meanwhile there was Ricardo's reference in the *Principles* to McCulloch's "able publication," in favor of a reduction in the interest paid on the debt. When McCulloch brought out his edition of Ricardo's *Works* in 1846, he took the liberty of removing the footnote which referred to his first publication. He also declined to publish Ricardo's famous "Notes on Malthus," since he agreed with James Mill that they tended to cast a shadow of controversy over the subject matter of political economy. The advocates of political economy must present a united front, a body of theory and practice devoid of conflicting opinion, so as to be more effective in exerting influence over British affairs. Ricardo's "Notes on Malthus," on the contrary, revealed great differences in theory with respect to the most basic of fundamentals, and the same desire to deny controversy may have been behind McCulloch's action to delete Ricardo's reference to controversy with respect to his own work.

During the interval between the publication of the *Essay on Profits* and the *Principles*, another new correspondent Ricardo heard from was John Barton (1789-1852). The latter was reared as a member of the influential Quaker community of Tottenham, of which Priscilla Wakefield was one of the leaders, as well as her son Edward, Ricardo's land agent. Barton's father died before he was born and, like McCulloch, the boy was brought up in the home of his maternal grandfather, Thomas Horne.²⁴ A man of considerable wealth, Horne provided his grandson with the best available education, probably with private tutors since being a Quaker he would not have the youth attend either Cambridge or Oxford. Barton knew the continental languages and his brother said he had a mathematical orientation. When his grandfather died, John Barton inherited a sizable fortune, married and lived out his life in Chichester, Sussex.

²⁴ The best biographical sketch of Barton is found in Sotiroff 1962, vol. 1, pp. 5-24.

Like many of the Quakers, such as the Wakefields, Barton was one of the early promoters of savings banks, particularly in Chichester. Later in life, he was a member of the First General Committee of Managers of the London Mechanics Institute, and for many years a lecturer in sessions for the working class. The London Mechanics Institute was the largest of the many such institutes, devoted to both promoting the dissemination of technological knowledge among artisans and fostering their study of political economy.²⁵

Ricardo's exchange of correspondence with Barton was limited to May 1817, initiated by Barton, and there is no evidence they were social acquaintances. Barton was never a member of the Political Economy Club, for example. Because his wife attended a Quaker Meeting and his land agent was a Quaker, it might be expected that Ricardo would know Barton personally, but that does not appear to have been the case. There were, of course, many Quakers and Quaker Meetings.

Barton wrote Ricardo to take issue with the *Essay on Profits* on two grounds, though his letter is not extant. The first objection was to the effect that changes in the value of money could affect profits, and that Ricardo was in error in assuming that "the rate of profit is regulated in all cases by the rate of wages, one being inversely as the other" (*Works*, Vol. VII, pp. 155-156; Ricardo to John Barton, 20 May 1817). Ricardo's reply was to the effect that a fall in the value of money would raise the nominal income of manufacturers and farmers, as money prices rose, but there would be no rise in their "real income." While they would "receive more money for their goods, they will also have to pay more money for the goods which they themselves consume." The same relation would exist if the taxes raised to pay stockholders were reduced, for there would still be no change in profits, since taxes did not determine the latter.

Suppose I paid £1,000 p^r Ann. for income tax, my profits being £10,000 p^r Ann^m; when the tax is remitted I am £1,000 p^r Ann^m. richer, but my profits are still only £10,000, and bear the same proportion as before to the money value of the capital, from which this profit was derived. I am benefited then not by my increased gains, not by any alteration in the rate of profits, but by my power of expending a larger proportion of those profits on myself, and a less proportion on the public, or stockholder.

(*Works*, Vol. VII, p. 157)

Ricardo said that Barton's second objection was more difficult to answer, but he was convinced Barton was wrong. The second objection, of course, had to do with the effects of alternative investment in circulating and fixed capital. Circulating capital represented wages only, while fixed capital was any form of machinery, buildings, and the like. In Barton's view the rise in the proportion of fixed capital in society would produce a downward pressure in both employment and the rate of increase in total output. The more capital intensive the investment,

²⁵ For a description of the importance of the mechanics institutes, see Berg 1980, Chapter 7.

the more depressing would be the effect upon the laboring classes. Ricardo conceded that accumulation in fixed capital would yield less employment, and there would be less need for an increase in population to maintain wages at a constant proportion of output. But he denied that a rising proportion of investment in fixed capital would reduce the net amount of the goods produced in society. In rebuttal he quoted Barton's formulation of the problem:

You say "Additions to circulating capital increase the supply of commodities in a like proportion; double the circulating capital and twice as much goods will be produced. But the same amount added to fixed capital, increases the supply of goods in a much smaller degree. A man lays out £1,000 in hiring workmen to produce cloth thus the quantity of cloth at market is increased by £1,100 worth.

But if he lay out the £1,000 in building a steam engine for the same purpose the quantity of cloth at market is increased only by the £100 worth, yet in either case the capitalist gains the same profit, viz. 10 p^{ct}.

(*Works*, Vol. VII, pp. 157-158)

According to his own analysis, Ricardo claimed the net gain to society would be the same, £100, regardless of whether £1,000 was employed to hire workers or build a machine. If used as circulating capital, the £1,000 would pay the cost of the food and necessaries of the workers, and the capitalist would come away with a surplus of £100. If invested in fixed capital, the net gain would again be £100, but in this instance "£1,000 worth of goods less will be produced, but at the same time £1,000 worth less will be consumed." In order to obtain the net increase from an investment in circulating capital the system had to feed the workers on the £1,000, but machinery did not consume and so there was no need to produce for that purpose, and the machine was still there at the end of the production cycle.

As for the employment consequences of investment in fixed capital, Ricardo claimed the new machinery would generate sufficient auxiliary employment so there would be no reduction in the number of jobs. Workers would no longer make cloth, having been displaced by the new machine, but they would find new occupations,

for there is no new creation of machinery which *entirely* supersedes the use of the labour of man. A steam engine requires the constant labour of man— he must regulate its motion and velocity—he must produce coals for the fire necessary to work it—he must attend to its annual repairs, and by degrees in a rich country the employment of men for these purposes becomes on an average as nearly a fixed quantity as the number of men devoted to any other occupation.

(*Works*, Vol. VII, p. 159; italics added)

By admitting that a rise in the amount of fixed capital might generate some unemployment, though not entirely all that Barton assumed, Ricardo may have let

the cat out of the bag. But employment generation was not what concerned Ricardo in 1817, and he referred Barton to a passage in his latest publication:

profits depend on high or low wages, wages on the price of necessaries, and the price of necessaries chiefly on the price of food, because all other requisites may be increased almost without limit.

(Works, Vol. I, p. 119)

Units of labor and capital were homogeneous, and if there were an increase in the demand for some wage good other than food, the price of the good might rise from, say, 40s to 60s. But the entry of new units of labor and capital would increase the supply, and price would return to the original equilibrium at 40s. The increase in the demand for food, however, not only would bring forth more labor and capital but also less fertile land, and the price of food would not return to its former equilibrium level. Wages and rents would rise, as a proportion of total output, and profits would fall, with the result being a slackening in the pace of accumulation.

When Barton initially wrote to Ricardo he had not yet published his pamphlet which set forth his thesis regarding the adverse effects of the continuous rise in the proportion of fixed capital (Barton 1817). When the pamphlet appeared the next month, in June 1817, Barton no longer argued that a fall in the value of money would raise profits, as apparently Ricardo convinced him that profits were the reciprocal of wages, and he cited Ricardo's recent work to the effect that "a rise of wages cannot possibly raise prices" (Barton 1817, p. 19). On the other point, the adverse effects of rising investment in fixed capital, Barton persisted in his view that "the demand for labour depends . . . on the increase of circulating, and not of fixed capital" (Barton 1817, p. 17).

As already noted, there was no further correspondence between Barton and Ricardo, nor does Barton's name appear in any of Ricardo's correspondence with other political economists, such as Malthus or McCulloch. It is not known whether Ricardo possessed a copy of Barton's pamphlet, since it was not in his library, though certainly he knew of its existence because he quoted Barton in the third edition of his *Principles*. Ricardo's subsequent acceptance of Barton's "correct view of some of the effects of an increasing amount of fixed capital on the condition of the labouring class" (*Works*, Vol. I, p. 396n) is discussed below.

Writing the *Principles*

In the months following the publication of the *Essay on Profits*, Mill was urging Ricardo to rewrite the pamphlet on a more extended basis. Ricardo retained his earlier reservations as to whether he was capable of such a task, but by late October of 1815 he was determined "not to be daunted by common difficulties" such

as style and organization. Perhaps, with repeated revisions, he could produce something worthy of publication, but it would take "a year or two" (*Works*, Vol. VI, pp. 315-316; Ricardo to Trower, 29 October 1815). As it turned out, only a little over two years transpired between the appearance of the *Essay*, 24 February 1815, and the publication of the first edition of the *Principles*, 19 April 1817, the day after Ricardo's 45th birthday. During the interval he was not continuously engaged in writing the *Principles*, as other events interrupted him, and, in fact, he actually wrote the volume over the course of about three months.

The first series of interruptions arose from Ricardo's continuing need to move between Gatcomb Park and his residence in London. While in London he found it difficult to write, and it was not until 30 July 1815 that he finally was able to leave town, as the pressure of business "nearly banished all considerations of subjects connected with political economy" (*Works*, Vol. VI, p. 240; Ricardo to Malthus, 30 July 1815). Even after going to Gatcomb Park in July 1815, he returned to London in August, October, November and again in December, each time for about a fortnight. Not only did he need to settle his financial affairs, transferring his wealth from British stock to land, mortgages and French stock, but also time had to be devoted to writing *Secure Currency*. Published on 6 February 1816, the pamphlet was written during the preceding August and September, and Ricardo's trips to London in November and December of 1815 were connected with the printing of the pamphlet. In addition there was the overseeing of the repairs to the house on Grosvenor Square, at a cost of several thousand pounds (*Works*, Vol. VII, p. 18; Ricardo to Trower, 4 February 1816).

Even though the repairs on the house were not completed, the Ricardos returned to London in early February 1816. David must have written out some ideas while at Gatcomb Park, other than those of *Secure Currency*, for in February he read Mill portions of a manuscript. The content is not known, and Mill claimed it was difficult to follow, "because hearing a thing read is very different from reading it when you have leisure by yourself" (*Works*, Vol. VII, p. 60; Mill to Ricardo, 14 August 1816). In August, Mill was urging Ricardo to send him the papers from which he had read, no matter what shape they were in and disorganized as they appeared. Ricardo had done nothing further with the material until he returned to Gatcomb Park in July, and he refused at the time to send Mill any of his working papers. While at work again on his manuscript, Ricardo was not pleased with his product, nor had he been

able wholly to seclude myself from morning intruders. Those who are staying in the house with us for two or three days at a time would not I fear understand my absenting myself from them, and would regard it as a want of hospitality. What I can I will do, and when we meet in London I shall convince you that I am not equal to the task you have assigned me.

(*Works*, Vol. VII, p. 54; Ricardo to Mill, 8 August 1816)

What the conditions were that turned things around, it is easy to speculate. It could even have been the weather, as the unseasonably heavy English summer rains

kept Ricardo indoors, as walking and riding were out of the question. In any event, two months later he posted Mill a manuscript containing the material for what became the first seven chapters of the *Principles*. The manuscript was to some extent a rework of the papers from which Ricardo had read excerpts to Mill in February, as the author said he had been "copying what is now dispersed in various directions." He told Mill:

In its present form I scarcely understand it myself, and I am sure you could make nothing of it. I shall not be careful to omit the repetition of the same thought, perhaps in various places, because as my fault is that of brevity and it may sometimes be proper to repeat the idea in another form, if it should be superfluous you can easily scratch your pen across it. Even when I shall have copied my dispersed papers it will be imposing a severe task on you to read them . . .

(Works, Vol. VII, p. 66; Ricardo to Mill, 8 September 1816)

In reply, Mill claimed Ricardo should not be wasting his time in the drudgery of copying, and should employ an amanuensis. In his own writing, Mill said, he could not afford to hire someone to copy for him, but since Ricardo could well afford an amanuensis there was little financial burden in hiring one, and he should do it (*Works, Vol. VII, p. 73; Mill to Ricardo, 6 October 1816*). On the matter of an amanuensis, Ricardo claimed he was too inexperienced a writer to hire someone, since he did not just copy his material. He rewrote, changing sentences, paragraphs and rearranging the material. He altered and amended every page, as he went over his earlier draft. (*Works, Vol VII, p.83; Ricardo to Mill, 14 October 1816*) In conversation and discussion it was much easier to communicate, he said, as one could tell from the facial reaction of the listener whether the ideas expressed were clear, and understandable. But in writing, there was only the page on which one expressed ideas, and he found it difficult to know if what he was saying was going to be understood. Hence his great problem with writing, as against speaking in conversation.

It is interesting, in view of their later disagreements, that in the middle of 1816 Ricardo was hoping that Torrens would take on the task of writing something to explain Ricardo's views on profits, wages, and the effects of the relation between changes in wages and changes in prices. In February, he wrote to Malthus that Torrens

appears to me to have adopted all my views respecting profits and rent; and in some conversation which I had with him a few days ago, he unequivocally avowed that he was now of my opinion, that the price of labour, arising from a difficulty in procuring food, did not affect the prices of commodities. He confessed that his former view on that subject was erroneous.

I should be glad to see all the arguments in favor of my view of the question clearly and ably stated. I should not wonder if Torrens undertook it.

(*Works*, Vol. VII, p. 24; Ricardo to Malthus, 23 February 1816)

In May, Ricardo wrote Malthus that he thought Torrens was now a convert to *all* of his own ideas on profits, rents, wages and prices, despite the fact that Malthus believed them to be "peculiar opinions" (*Works*, Vol. VII, p. 36; Ricardo to Malthus, 28 May 1816). Ricardo's perception that Torrens acquiesced with respect to his views on political economy may have been due to his ability to convince and, perhaps, overwhelm others in conversation. As noted earlier, when Ricardo first became acquainted with Torrens, the Colonel let it be known he did not particularly desire to engage in conversations about political economy, as he preferred the written to the spoken word. But for Ricardo, even in the atmosphere of "merriment and diversion" the conversation usually turned to the consideration of topics in political economy. What Ricardo perceived as Torrens's acceptance of his "peculiar opinions" may in fact have stemmed from the Colonel's inability to engage in conversation on topics of political economy. Whatever the reason, the acquiescence which Torrens may have shown toward Ricardo's view of things in 1816 was short lived. If anything, in time, Malthus became a better defender of Ricardo's views than Colonel Torrens. Had Ricardo waited for Torrens to write a volume setting forth his views, he never would have attained the reputation which followed from the publication of his own *Principles*.

Difficulties with composition, style, organization and the expression of complex ideas, each was cited by Ricardo as a problem associated with writing. They had not been as noticeable in writing the *Price of Gold*, the *High Price of Bullion*, the *Reply to Bosanquet*, or *Secure Currency*, since those pamphlets dealt with specific issues and events, and empirical data was ready at hand. The *Essay on Profits* and the *Principles* were another matter, representing abstract tracts in the theoretical vein, more difficult to execute than the other pieces. Malthus, to whom Ricardo complained about the problems of exposition, was of a different view. He believed the problems were associated with Ricardo's theoretical concepts:

I cannot help thinking that the reason why with your clear head, you find a difficulty in your progress is that you are got a little into a *wrong track*. On the subject of determining all prices by labour, and excluding capital from the operation of the great principle of supply and demand, I think you must have swerved a little from the right course. But on this point of course you differ with me.

(*Works*, Vol. VII, p. 30; Malthus to Ricardo, 28 April 1816; emphasis added)

At this point, Ricardo had not finished the version which he subsequently sent to Mill in October, but there had been sufficient discussion with Malthus, both in correspondence and private conversation, that he was aware of Ricardo's views on the relation between changes in wages and changes in prices. The problem arose because he was on the "wrong track." Some 63 years later, in the "Preface" to the second edition of his *Theory of Political Economy*, William Stanley Jevons claimed that

it will be seen that the able but wrong-headed man, David Ricardo, shunted the car of Economic science on to a *wrong line*—a line, however, on which it was further urged towards confusion by his equally and wrong headed admirer John Stuart Mill.

(Jevons 1931, p. li; emphasis added)

Jevons could not possibly have known of Malthus's depiction of the source of Ricardo's problems and errors, since the Malthus side of the correspondence with Ricardo was not published until 1952. It is entirely possible, of course, that Malthus's description of the source of his friend's error was a part of the oral tradition of the Political Economy Club when Jevons became an honorary member in 1874. The similarity in the phrases "wrong track" and "wrong line" is striking and indicates that both Malthus and Jevons believed Ricardo started out wrong by using the labor theory of value. Of course, Malthus's "track" referred to the ridges in a dirt road for carriage wheels, while Jevons's was a "line" of rail.

The Ricardo manuscript posted to Mill in October 1816 was some 140-odd handwritten pages, with neither breaks for chapter headings nor sections within chapters. It was written like the *Essay on Profits*, a pamphlet published with no section headings or spacing breaks. Mill had claimed the first task was to write everything Ricardo had to say on a topic, and not to worry about chapters and sections. Those decisions could be made when the material was being prepared for the printer. In this regard, Mill was following the same procedure he advocated in preparing *Secure Currency* for the press, when he divided Ricardo's manuscript into seven sections, with an introduction added by the author while the manuscript was at the printer.

Although Mill had some idea of Ricardo's intentions as to the scope of his book, he knew little of the details. It is interesting, for example, that as late as December 1816, Mill was suggesting:

In preparing your book, the question for you to determine is—whether you will chuse to include in it a view of the *whole* science . . . or, whether you will content yourself with those parts of the science which you yourself have improved. In the first way, you would be most useful; but I rather think you will get most reputation in the last.

(*Works*, Vol. VII, p. 107; Mill to Ricardo, 16 December 1816; italics in original)

In response, Ricardo wrote he would only concern himself with those parts of the science "which have particularly engaged my attention," and if those views were favorably received he might some time in the future extend his scope (*Works*, Vol. VII, p. 112; Ricardo to Mill, 20 December 1816).

His volume was conceived of as being in three portions, or books, even though such delineations were not perceptible in the published work. Part I contained some principles of political economy, what became the first seven chapters, the first manuscript Mill received. Part II was a long "dissertation on the Principles of Taxation", as Mill later referred to it (Mill 1817, Vol. I, p. 196n). It was originally written with no division into chapters, the form of Ricardo's pamphlets. He wrote the manuscript in about a month, sending it to Mill on 17 November 1816. Part III contained what Sraffa has called the "polemical chapters," views which Ricardo considered might be confined to an "appendix." They were largely taken from Ricardo's commonplace books, his personal comments on the works of Adam Smith, Buchanan on Smith, Say, and especially Malthus.

In the first edition of the *Principles*, the polemical material was broken into thirteen chapters, many of which were only six or seven pages in length. The eight paragraphs devoted to disputing Smith's distinction between Gross and Net Revenue (XXVI), for example, and the short discussion of Buchanan and Lord Lauderdale, on the role of demand in determining price (XXX), could hardly be designated chapters. A large portion of these chapters was merely quoting the respective authors, with Ricardo's added comments as to why they were in error, and the appropriate limitation of their theory. The latter especially was true with respect to Lauderdale's views that the demand influenced price, which Ricardo assented to only in the case of monopoly, or some temporary cause for a deviation from natural price.

As might be expected, the longest chapters in Part III are those devoted to the "Effects of Accumulation on Profits and Interest" (XIX), where Ricardo disputed Smith on the point that increased competition was the cause of lower profits, and "Mr. Malthus's Opinions on Rent" (XXIX). The chapter, "Currency and Banks" (XXV), was a review of Ricardo's ideas contained in his several monetary pamphlets, with some three pages reprinted word by word from *Secure Currency*. The nine long paragraphs were, however, correctly placed within inverted commas. Unlike McCulloch, Ricardo never plagiarized himself, as he always identified the source where he had previously expressed his views.

The main content of the chapters of Part III of Ricardo's volume had been prepared some time before December 1816. Subsequently, he was recasting some of his comments, even after the manuscript of Parts I and II had gone to the printer. There was no attempt to integrate the material of the three parts of the volume, and Ricardo did not refer to preceding discussion. Each part of the *Principles* stood on its own legs. When, in the third edition, he added his infamous chapter "On Machinery" it also was not integrated with the general schema. To do so, as is discussed below, would have required that Ricardo alter his view as to the reason for the so-called stationary state. The difficulty of a nation having to produce additional grain with inferior soil would have been compounded by a rise in the

amount of fixed capital. Rather than integrate the effects of a rise in the amount of fixed capital into his general model, Ricardo simply inserted the chapter "On Machinery" among his other commentaries in Part III. It is interesting, however, that he retained an order of chapters so the last one was "Mr. Malthus's Opinions on Rent."

Lord Keynes claimed that Adam Smith was the only political economist ever to write a treatise, by which he meant a volume which included a treatment of all aspects of the subject. He wrote:

in view of the transitory character of economic facts, and the bareness of economic principles in isolation, does not the progress and the daily usefulness of economic science require that pioneers and innovators should eschew the Treatise and prefer the pamphlet or the monograph? . . . it was Jevons' willingness to spill his ideas, to flick them at the world, that won him his great personal position and his unrivalled power of stimulating other minds. Every one of Jevons' contributions to Economics was in the nature of a pamphlet. Malthus spoilt the *Essay on Population* when, after the first edition, he converted it into a Treatise [1803]. Written as ephemeral pamphlets . . . Economists must leave to Adam Smith alone the glory of the Quarto, must pluck the day, fling pamphlets into the wind, write always *sub specie temporis*, and achieve immortality by accident, if at all.

(Keynes 1951, pp. 173-174; from
essay on Alfred Marshall)²⁶

Ricardo's greatest work, his *Principles*, was also written as a pamphlet, especially when the first seven chapters are viewed as the essence of the volume. One of the most widely circulated editions of Ricardo, edited by W.J. Ashley, contained only the first seven chapters. Initially published in 1895 by Macmillan and Company, the edition totaled 5,490 copies, almost ten times the number of original volumes for all three editions (*Works*, Vol. X, Appendix A, p. 372). The most authoritative work devoted to Ricardo's dissertation on the principles of taxation is, of course, the volume by Carl S. Shoup (1960). He found it difficult to explain just why Ricardo devoted eleven chapters of his *Principles* to the topic of taxation, since there is seldom any mention of the topic in the correspondence, either prior to or after 1817, and the issue was not an area of Ricardo's interest, as was monetary theory, international trade or value theory. Until his letter to Mill of 14 October 1816, there was no indication taxation would be a major consideration in his volume. But at that time he said he would "now consider the subject of taxation that I may have a consistent theory in the first instance on paper" (*Works*, Vol. VII, p. 84; Ricardo to Mill, 14 October 1816). During the next month he apparently "worked out his tax analysis almost *de novo*," and left the eleven

²⁶ Because Keynes considered Marx a member of the "underground of economics," he naturally ignored the author of *Das Kapital* as a possible candidate for having produced a Treatise. The three volume work of Marx, aided by Engels, should be placed alongside Smith's *Wealth of Nations* as another Treatise.

chapters virtually unaltered in the second and third editions. There were a few cosmetic changes in wording but they did not in any sense suggest a change in view. The most persistent change was to preface consumption with the adjective unproductive.

In his first chapter on taxes (VIII), Ricardo observes that if taxes in any year are less than the net increase in accumulation, there is a growth in the capital stock and an increase in the nation's real income. If taxes exceed the rate of growth, then real income declines. As far as England was concerned, despite the immense expenditure of the government during the war years, production had grown faster than taxation and "the national capital has not merely been unimpaired, it has greatly increased" (*Works*, Vol. I, p. 151). England had a higher real income than any time in its history. Ricardo's view that England was better off, despite the tremendous growth of the government sector, was disturbing to his greatest admirer and advocate, McCulloch. He begged leave of Ricardo to add the following paragraph:

Still, however, it is certain that but for taxation this increase of capital would have been much greater. There are no taxes which have not a tendency to lessen the power to accumulate. All taxes must either fall on capital or revenue. If they encroach on capital, they must proportionably diminish that fund by whose extent the extent of the productive industry of the country must always be regulated; and if they fall on revenue, they must either lessen accumulation, or force the contributors to save the amount of the tax, by making a corresponding diminution of their former unproductive consumption of the necessaries and luxuries of life. Some taxes will produce these effects in a much greater degree than others; but the great evil of taxation is to be found, not so much in any selection of its objects, as in the general amount of its effects taken collectively.

(Works, Vol. I, p. 152; the paragraph in the second and third editions is the actual wording suggested by McCulloch, *Works*, Vol. VII, p. 353; McCulloch to Ricardo, 6 December 1818)

The point McCulloch wanted made clear was that England could have been even better off than she was, but for the increase in the government sector, a view he had expressed in his two pamphlets about the pernicious effects of the national debt.

The other substantive change in the taxation chapters was the addition of two footnotes in the third edition, both dealing with the same issue. The question was "whether a tax on commodities could raise prices without an increase in the quantity of money" (*Works*, Vol. XI, p. 320; Sraffa's note). Ricardo changed his opinion twice, first believing there was no need for an increase in the money supply, and then reversing himself in the first and second editions (*Works*, Vol. I, pp. 169 and 213). In the third edition he went back to his original opinion, probably after an exchange with Trower on the subject. Accordingly, Ricardo concluded:

On further consideration, I doubt whether any more money would be required to circulate the same quantity of commodities,

if their prices be raised by taxation, and not by difficulty of production. Suppose 100,000 quarters of corn to be sold in a certain district, and in a certain time, at 4*l.* per quarter, and that in consequence of a direct tax of 8*s.* per quarter, corn rises to 4*l.* 8*s.*, the same quantity of money, I think, and no more, would be required to circulate this corn at the increased price. If I before purchased 11 quarters at 4*l.*, and in consequence of the tax am obliged to reduce my consumption to 10 quarters, I shall not require more money, for in all cases I shall pay 44*l.* for my corn. The public would, in fact, consume one-eleventh less, and this quantity would be consumed by Government. The money necessary to purchase it, would be derived from the 8*s.* per quarter, to be received from the farmers in the shape of a tax, but the amount levied would at the same time be paid to them for their corn; therefore the tax is in fact a tax in kind, and does not make it necessary that any more money should be used, or, if any so little, that the quantity may be safely neglected.

(*Works*, Vol. I, pp. 213-21 4n)²⁷

Hypothetically, Ricardo wrote his *Principles* with Adam Smith as his chief protagonist. The latter, rightfully, was the greatest source and expounder of the principles of the science, but in many instances he had been confused and there is little question that Ricardo was attempting to correct the errors. Particularly this was the case with respect to the theories of value and of the distribution of income to rent, wages and profits. He did not address all aspects of Smith's great work, but his analysis of the effects of taxation followed directly from the analysis of the causes for the changes in income distribution. As Shoup observed:

Ricardo's eleven tax chapters . . . are closely keyed to his macro-economic system. The system itself, with all its gaps and inconsistencies, is an astonishing intellectual achievement, and the degree of consistency that the tax analysis maintains with it is no less remarkable. Moreover . . . Ricardo's passages on taxation in his other writings after October, 1816, and in his speeches leave the impression each time that he has just come from rereading some part of the *Principles*. Given the economic world that he had created in his mind, Ricardo succeeds brilliantly in demonstrating the effects of taxation on the distribution of income among the three major claimants

(Shoup 1960, p. 249)

²⁷ Trower really put his finger on the solution when he wrote that there would be no need for more money since there would be an increase in the "ratio of its circulation," by which he meant a rise in velocity (*Works*, Vol. IV, pp. 321-322)

Ricardo's major emphasis in the chapters on taxation was to reinforce his theory as to the reasons for the functional distribution of income. Given the assumption of a subsistence wage rate, subject only to a long run improvement factor, a tax on wage goods would reduce profits, leaving unaffected the level of real and relative prices. Naturally, a land tax would reduce rents, as would a tax on corn. He was little concerned with questions of an income versus an excise tax, and in the tradition of Adam Smith he viewed all state revenue as a drain upon useful economic activity. As Sraffa suggested, Ricardo's chapters on taxes follow the same sequence as that used by Smith (*Works*, Vol. I, pp. xxiii, xxv), and it is clear that Ricardo wrote out his comments with the *Wealth of Nations* at his elbow.

Mill read the manuscript on taxation in the course of several weeks, and was as pleased with the content as he had been with the manuscript on the principles of political economy. "For the first time," he wrote, "the real operation of taxes was explained" and Smith's superficial treatment had been augmented. Smith's Book V, however, was the first text covering the subject of what now is known as public finance and he discussed many aspects of the subject which Ricardo ignored, primarily because they had been so "ably handled by Adam Smith." Moreover,

His [Smith's] language is so clear, and his explanations so satisfactory, that I feel a reluctance to weaken the effect of it by using my words instead of his, and always feel a propensity to quote him without a word of comment.

(Works, Vol. VII, p. 88; Ricardo to Mill,
17 November 1816)

If Smith was so clear on the question of taxes, why did Ricardo believe it necessary to include his own dissertation on the subject? He never explained his reason, and as Shoup points out, he kept promising Trower that some day he would write something on "the practical operation of taxation" (*Works*, Vol. IX, p. 87; Ricardo to Trower, 4 October 1821). The inclusion of the "high level of economic abstraction, supported by generally dependable reasoning on taxation," as Shoup put it, appears to have been required because of Ricardo's juxtaposition of the order of importance of Smith's three major categories of income: wages, profits and rent. In the *Wealth of Nations*, Smith had discussed wages first, as in "that early and rude state of society", the amount of time it took to hunt beaver and deer was the basis upon which the two items would exchange, one for the other. But after the emergence of the institution of private property, profits and rent became additional sources of income, and the previously free laborer now had to share the work of his harvest. Hence the price of commodities contained a payment for wages, profit and rent.

The great conundrum always has been whether Smith thought the exchange value of the beaver and deer was different after the accumulation of private property, than it had been before such events occurred. On the basis of Ricardo's interpretation, Smith confused the issue, and what the former desired to show was that property accumulation had no effect upon the basis of exchange of the beaver

and deer. There was, for sure, a change in the distribution of the booty, since the worker now had to share the harvest of his labor with the owners of property, both capitalist and landlord. But did beaver and deer still exchange in accordance with the amount of labor time it required to bring the two animals to bay? So far as Ricardo was concerned, Smith had confused the issue by arguing that the exchange prices of the two animals would be different after the institution of private property was established, than that of the "rude and early state." So far as Ricardo was concerned the exchange ratios both before and after the accumulation of property would be no different in the two situations, since profits and rents were merely a deduction from the respective efforts of the hunters.²⁸ But to Ricardo the issue was confused by Smith's analysis, and hence his reason for a chapter on value.

In order to make clear the relation between the three categories of income, Ricardo reversed Smith's order of presentation. Rather than discuss rent as the third category (Smith's Chapter XI), Ricardo put it up front:

By getting rid of rent, which we may do on the corn produced with the capital last employed, *and on all commodities produced by labour in manufactures*, the distinction between capitalist and labourer becomes a much more simple consideration. The greater the proportion of the result of labour that is given to the labourer, the smaller must be the rate of profits, and vice versa. Now this portion must essentially depend on the facility of producing the necessaries by the labourer [the value of wage goods]—if the facility be great, a smaller proportion of any commodity, the result of capital and labour, will be sufficient to furnish the labourer with necessaries, and consequently profits will be high.

(*Works*, Vol. VIII, pp. 194-195; Ricardo to McCulloch, 13 June 1820; italics added)

The discussion of rent, which in Smith came last (Chapter XI), was first in Ricardo's analysis (Chapter II), coming right after his chapter "On Value." Next followed the chapter "On Wages," and then that "Of Profits." The latter sequence was the same as Smith's, of course, but Ricardo made clear that rents were an effect, not a cause of the variations in exchange values. Having gotten "rid of rent," Ricardo turned to the distribution between wages and profits, where it is clear that the latter was a residual, and not a contributor to exchange value.

Ricardo's order of preference for rent, wages and profits was not fully perceived by his editor, James Mill, or by himself. In October 1815, he told Trower he and Malthus continued to differ on the topics of "Rent, Profit and Wages" (*Works*, Vol. VI, p. 315; Ricardo to Trower, 29 October 1815), and the next month Mill was urging him to get on with his discussion of "rent, profit and wages" (*Works*, Vol. VI, p. 321; Mill to Ricardo, 9 November 1815). When he wrote out

²⁸ Kaushil (1973) argues that only two authors, prior to himself, had correctly evaluated Smith's analysis: A.K. Das Gupta 1960-1961 and John P. Henderson 1954.

his principles of the distribution of income, Ricardo shifted the order and used the sequence: rent, wages, and profits, for if wages rose, profits had to fall, and vice versa. Wages would only rise, moreover, if the real cost of producing wage goods rose, as society had to have recourse to inferior inputs of lands, in the absence of free trade. The single cause of the rise in wages, was the single cause of the fall in profits.

The new sequence of income categories—rents, wages and profits—was somehow ignored when the time came to write the "Preface." There it was claimed that the whole produce was divided among three classes, the proprietor of the land, the owner of capital necessary to its cultivation, and the labourers:

in different stages of society, the proportions of the whole produce . . . which will be allotted to each of these classes, under the names of rent, profit and wages, will be essentially different depending mainly upon the actual fertility of the soil, on the accumulation of capital and population, and on the skill, ingenuity and instruments employed in agriculture.

(*Works*, Vol. I, p. 5)

The old sequence, which had been used by Mill, Ricardo, and Malthus, was retained, despite the fact that the *Principles* made profits dependent upon wages. The retention of the old sequence may have been the result of the hasty writing of the "Preface," and the fact that James Mill had a hand in its preparation, as Sraffa has suggested (*Works*, Vol. I, p. xxi). Mill does not seem to have recognized the significance of having wages made the independent category, with profits the dependent share.

On the 20th of December 1816, Ricardo sent Mill the third parcel of manuscript, containing all but the last of the polemical chapters which followed the dissertation on taxation. He was still writing what he later referred to as his "last article" (*Works*, Vol. VII, p. 137; Ricardo to Malthus, 5 March 1817), the critique of Malthus's three pamphlets, *Rent*, *Observation* and *Grounds*, and did not finish the task until most of the *Principles* had been printed. He sent the chapter to Malthus as a courtesy, to be sure he had not misquoted or distorted any of Malthus's views. After Malthus had read the chapter, he suggested this was not the time to attempt to explain their differences, but did request the addition of a footnote, to correct an error in the *Rent* pamphlet²⁹ (*Works*, Vol. VII, p. 145; Ricardo to Malthus, 26 March 1817).

At the time Ricardo sent Mill Part III, he said they should plan to meet in London in early February, when they would take care of the printing of his volume. He told Mill there was no great hurry, as his "views will be as new six months hence as they are now." At Mill's suggestion, he outlined a list of chapters, or at least places in the manuscript where chapter headings might be inserted. Since

²⁹ Malthus was in London on the 22nd or 23rd of March, and they had discussed Ricardo's chapter. The requested footnote appears on p. 415 of the Sraffa edition (*Works* Vol. I).

Mill had always claimed his major contribution to Ricardo's effort would be in arranging the chapters, the printing did not begin until Mill came into London. As Sraffa says, the result did not give much credit to Mill's passion for system and detail. As he read the manuscript he had written a short summary of each paragraph, so he could have an outline of the argument as it went along (*Works*, Vol. VII, p. 97; Mill to Ricardo, 18 November 1816). Despite his outline, and Ricardo's suggested chapter headings, the Mill-Ricardo editing job was badly botched. Of the 31 chapters in the first edition, there were two chapters numbered V, and two chapters numbered VIII, the duplicate in each instance being designated with an asterisk. Jacob Hollander claimed the strange numbering of the chapters was "evidence of the carelessness or haste with which the book was made" (J. Hollander 1910, p. 82).

Detective Sraffa hypothesizes that Chapter IV was originally "On Wages," followed by Chapter V, "On Profits." This means there was no separate chapter "On Natural and Market Price," as that discussion was the beginning of the chapter "On Wages." The printer was turning out a sheet a day, which in the Sraffa volume would cover about 14 pages, and proofs came out in page form and not in galleys. When Mill-Ricardo read the page proof of the original Chapter IV "On Wages," someone made the decision, probably Mill, that the first nine paragraphs could stand on their own, with a title "On Natural and Market Price," hence the new Chapter IV. The original Chapter IV was now Chapter V, "On Wages," but the printer already had produced Chapter V, "On Profits," Chapter VI "On Foreign Trade," and was working on the chapters on taxation. Rather than renumber all the subsequent chapters, the asterisk was added to the original Chapter V, "On Profits." As Sraffa says, it is a "typographical peculiarity" that the last page of the chapter "On Natural and Market Price" and first page of "On Wages" form "exactly a normal full page." Assuming, as he does, that they were originally joined together, the printer made the subdivision without having to change subsequent pagination (*Works*, Vol. I, Sraffa's "Introduction," pp. xxv-xxvi). It is not known what the printer must have thought about the two political economists, whose approach was similar to that of engineering in steel.

The same problem arose with Chapter VIII, "Taxes on Raw Produce," only here the issue was more complicated, since changes were made after the book was bound and the Index prepared. The last two paragraphs of Chapter VIII were removed, to form a new chapter, "Taxes on Rent," also numbered VIII, with an asterisk. The pages "had to be reprinted and substituted by the binder in every one of the 750 copies of the edition" (for details see Sraffa's "Introduction," *Works*, Vol. I, pp. xxvi-xxx). In his original comment on the problem, written in 1931, Sraffa said it would be of interest to find copies of the first edition where the binder "failed to carry out the replacement." Subsequently two such volumes were found, one by George Stigler (*Works*, Vol. X, pp. 403-404) and the other by Arnold Heertje (*Works*, Vol. XI, p. xxx).

The second edition of Ricardo's *Principles* had 31 chapters, correctly numbered; in the third edition, the addition of "On Machinery" accounted for the 32nd chapter. Also in the second edition, the chapter "On Value" was divided into sections, with the headings edited by Mill, and redone in the longer version of the third edition.

From the foregoing discussion it seems clear that Ricardo wrote and published the first edition of his *Principles* in the course of about nine months. With the exception of Mill's assistance in seeing it through the printer and preparing the Index, the author accomplished the task on his own, in much the same fashion as he prepared his other pamphlets.

The Role of Ricardo's Theory of Value

The focal point of the developments leading to Ricardo's writing of the *Principles* was his lengthy controversy with Malthus regarding the several factors that affected profits. Resolution of their disagreement as to the derivation of profits was crucial to Ricardo's claim that the cadence of the economy was a function of the direction of profits, which were inexorably tied to wages. His economic model, both in the *Essay* and the *Principles*, was cast in a negative mold, in which it was essential to assume the importation of cheap grain was denied, because of the legislation of corn laws. Capital accumulation in Britain was taking place, therefore, under the heavy burden of the country continually utilizing agricultural land of less and less fertility. He hypothesized that diminishing returns in agriculture was the major deterrent to Britain's continuing industrial development, and it was this factor that was responsible for the economy's advance toward the stationary state. The prospect of moving toward such a condition was not very inviting, the reason free trade in corn was so essential to economic prosperity. The importance of diminishing returns in agriculture depended, *inter alia*, upon Ricardo's definition of the profits as "surplus produce," for it was this category of income that provided the creative force for capital accumulation.

In the *Essay*, Ricardo had attempted to demonstrate that, with diminishing returns in agriculture, the rate of "surplus produce" would decline as accumulation took place. By showing that a fall in the facility of producing corn would raise the proportion of corn required as an input to produce a given corn output, he argued that a rise in wages, or the corn input, was necessarily accompanied by a fall in the rate of profits, when profits were viewed as a "deduction" from total output. The obvious ethical implications of the redistribution of income, which would follow from a decline in the facility of corn production, was of less significance than the chain of events which tied diminishing agricultural returns to general wages and profits. Because of the repercussions upon wages and profits, diminishing returns in the agricultural sector directly affected the developmental tendencies of the economy as a whole. If Ricardo's definition of profits, what Ladislaus Von Bortkiewicz called a "deduction theory of profits," could be established, then it would be shown that profits were solely dependent upon the size of the total wage

bill, and the consequences of continued protection to agriculture would be more clearly apparent. Proof of this definition provided a theoretical schema in opposition to agricultural protection, his major policy objective.

Malthus contended that Ricardo's theory, as set forth in the *Essay*, was a special case, and not a general explanation of the derivation of profits. His alternative formulation defined profits as a function of relative prices, which he said were determined by both supply and demand. He claimed Ricardo's exclusive association of changes in profits with changes in the facility of production was of limited significance to a general theory of profits because, Malthus argued, only supply was directly affected by a change in the facility of production. Any disproportionality between demand and supply, he said, would have a major effect upon general profits. An increase in the demand for manufactures, for example, would raise their price and profits, in the absence of any alteration in the facility of producing manufactures. Profits in manufactures would raise general profits, just as Ricardo said profits in agriculture determined general profits.

It was against this type of reasoning that Ricardo objected, since the facility of production was the only general rule which could explain variations in the prices of particular commodities. The universality of the rule was based on an acceptance of Say's law, that aggregate demand moved *pari passu* with aggregate supply, an argument Ricardo presented very early in his disputes with Malthus. The price of any particular commodity could be altered by (1) a change in its facility of production, or (2) a change in its demand, but price changes occasioned by demand were "always in consequence of a cheapness of some other commodity," and no net change occurred in the whole system—there was merely a reallocation of the aggregate purchasing power (*Works*, Vol. VI, p. 95; Ricardo to Malthus, 17 August 1813). In this way, Ricardo claimed that while individual prices could temporarily fluctuate in accordance with demand, "permanent" changes in the prices of commodities could only come about because of changes in the facility of producing said commodities. Furthermore, a change in the price of one commodity, due to an alteration in its production coefficient, would have no influence upon the facility of producing other commodities. If the commodity in question were corn, or any wage good, a change in its price would affect general wages, and therefore general profits.

After the publication of the *Essay*, Ricardo had been chiefly concerned with showing Malthus the effects upon general profits which resulted from a change in the facility of producing a wage good. He hypothesized that a change in the price of a wage good, like corn, would affect all wages in the economy, but there would have been no changes in the exchange values of other goods. The exchange value of commodities could only be altered by a change in the facility of their production and while the price of corn would rise because less fertile land was cultivated, that would not alter the production coefficient of other commodities. There would be a change in the distribution between rents, wages and profits, but not the prices of commodities. The major effect of a change in the price of corn was its wage effect, and not its price effect. Ricardo purposely wanted to minimize the price effect, since he realized that the size of the economy's aggregate product would appear to

change if all prices changed. As Sraffa explained: "if a rise or fall of wages by itself brought about a change in the magnitude of the social product [by changing all prices] it would be hard to determine accurately the effect on profits" (*Works*, Vol. I, Sraffa's "Introduction," p. xlviii). Ricardo claimed that one of the major weaknesses of Adam Smith's analysis had been the failure to recognize that wages could change without affecting prices ("the Ricardo effect"). Ricardo had tried to convince Malthus that one had to analyze the general economic consequences of changes in the facility of production and the distribution of income without considering the consequences of these changes on the determination of prices. Malthus, on the other hand, emphasized that changes in prices could be independent of the facility of production, usually being determined by relative scarcity and changes in demand.

In order to prove his contention that the use of heterogeneous land inhibited economic growth, and establish the principles which would refute Malthus's scarcity explanation of price, Ricardo's value theory had to emphasize the productive element of economic activity. He had to show that value was an invariant quantity, "an underlying characteristic of which exchange value [was] merely a reflection" (Myrdal 1953, p. 61), rather than a relative quantity determined by exchange ratios independent of the production of commodities. He needed a theory which would show that value was a constant, and that "no alteration in the wages of labour could produce any alteration in the relative value" of commodities, as he put in the first edition of his *Principles* (*Works*, Vol. I, p. 54; the same statement appears in the third edition, p. 28, although modified by Sections IV and V of Chapter I). Such a theory would prove both a so-called "Ricardo effect" and that profits were regulated by the facility of producing wage goods, and not by changes in demand, as they affected relative prices. Hence, as wages rose, profits fell. This hypothesis, called by Schumpeter Ricardo's "pet proposition," was the spearhead of the thesis that accumulation and growth were promoted or deterred by the facility of producing wage goods. Since corn was the major wage good, the recourse to inferior inputs of land meant that wages rose as accumulation moved forward, unfortunately toward the stationary state when profits would as be so low as to arrest the pace of that very accumulation.

The purpose of Ricardo's theory of value was to show that an increase in wages reduced profits, thereby changing the distribution of income, but these changes had no influence upon relative values, which were predetermined in the process of production. From the beginning, in the *Essay*, Ricardo had argued that profits were the leavings of wages, and if the latter rose, the former fell. Contrary to the view that Ricardo started with a theory of value, and found a theory of profits,³⁰ he started with the latter and worked out a theory of value to reinforce his proposition that profits were dependent upon the level of the wages paid to workers for producing wage goods. The necessity to minimize the price effect of changes in the

³⁰ "The Ricardian system involves a highly original and at the same time paradoxical line of reasoning. Starting from the labor theory of value, Ricardo stumbled upon the theory that profit is a deduction from the product of labor." (Sweezy 1949, p. xxvi)

facility of producing wage goods plagued Ricardo because it made an invariable measure of value the essential hinge for his production theory. Just as Keynes was plagued with the selection of a measure of the change in income (Keynes 1936, Chapter 4, "The Choice of Units," where "these difficulties are rightly regarded as 'conundrums' " p. 39), so Ricardo was harassed by the search for a measure of value. The success with which Ricardo's theory substantiated his hypothesis as to the effect of wages on profits, and achieved the desired minimization of the price effect, depended upon the several measures utilized in working out his labor theory of value.

In the *Essay*, Ricardo had used agricultural profit, expressed in terms of a corn input-output ratio, to measure changes in profits throughout the system when wages rose. Sraffa's evaluation of the advantages of this method is that "at the cost of considerable simplification, it makes possible an understanding of how the rate of profit is determined without the need of a method of reducing to a common standard a heterogeneous collection of commodities" (*Works*, Vol. I, p. xxxii). In the *Principles*, Ricardo attempted to correct this oversimplification by adopting a broader base from which to estimate profits. He dropped the single-industry corn measure, and used the total labor power necessary to produce the economy's total output.

This method created the new problem of constructing an index of all commodities, which would allow for changes in the value of the inputs, for Ricardo now had to measure not only the labor required to produce a given output, but also the exchange value of the heterogeneous commodities which the output comprised. If labor were the only agent of production, solving this problem would not have been difficult; the conundrum arose when fixed capital was also a factor in production, since the various commodities produced contained varying quantities of fixed capital. Commodities produced with these heterogeneous units had to be reduced to a common denominator, or measured against some unit which was itself invariable in value.

It must be emphasized that Ricardo had no particular affinity for developing a theory of value. He came to such a theory as a means of establishing his hypotheses that restrictions on the importation of grain were detrimental to the interests of capital accumulation. In this regard it is interesting that no political economist ever embraced a theory of value for other than class interests. Ricardo came to his formulation of the labor theory in order to refute the claims of the landlords, that agricultural protection was in the best interest of society. Marx, of course, used the same theory to advance the claims of the laboring class, and to substantiate his view that the wage system was but another method for the extraction of the surplus product of labor, a process which he claimed was common to all previously existing economic systems. For the marginalists the same motives persisted. J.M. Clark, for example, claimed his father's

statements are oriented at Marx, and are best construed as an earnest, and not meticulously qualified, rebuttal of Marxian exploitation theory . . . he concluded that distribution on this basis

[Clark's] is not robbery, as Marxian socialism contended, but is basically honest. This causal concept, and especially the ethical conclusions, have been subject to more criticism than any other features of Clark's system; yet he would appear to have regarded them as his most basically important contribution.

(J. M. Clark 1952, p. 610)

As for Jevons, it is clear that social issues were very much in the forefront of his thinking, in developing the utility theory of value. Ten years before the publication of his *Principles*, he claimed the greatest danger to society was "that our working classes, with their growing numbers and powers of combination, may be led by ignorance to arrest the true growth of our liberty, political and commercial. . . even if all could combine with equal ease they would only make things dear and hinder the production of the commodities upon which we all live" (quoted in Hutchison 1953, p. 46). The problem of the growth of the power of unions was to be solved by formulating a new theory of value:

(L)abour once spent has no influence on the future value of any article: it is gone and lost forever. In commerce by-gones are forever by-gones; and we are always starting clear at each moment, judging the values of things with a view to future utility . . . labour is never the cause of value . . .

(Jevons 1911, pp. 164-165 italics in original)

Perhaps the clearest expression of the relation between a theory of value and the political implications of such a formulation was that of Wieser:

Never has there been as deep and pressing a need of economic theory as in the present. At the time when the representatives of the classical school were thinking out their principles of economy, practical interest was confined to the question of the degree of freedom which the state should give to private economy as such. The socialistic thinkers fought the laissez-faire attitude of private management. One who gave no weight to their objections set himself scientifically apart from them. One did not dream that the day would come, was indeed near, when the proletariat should be strong enough to give pertinence to its demands by force . . . Almost everywhere in Europe the proletariat has come forward with such strength that it must be considered and a counter-reform of the economic order proposed. . .

The final distinction between possessors and proletariat will not be successful without the aid of theory. Both classes have sought scientifically to strengthen that position which their own interests have led them to take, and both have thus made errors

with serious consequences. The proletariat thinkers have fastened on untenably impractical dogmas. The bourgeois thinkers on the one hand have developed their own case, but on the other hand have left too many loopholes in the explanation . . . Power will also make its influences felt. In time, however, theory will be called upon. This time will come so soon as it is realized that raw power can work evil but cannot heal it. But when this happens, theory must have unified its thought sufficiently so that men may find the necessary help in it when once their thoughts advance to a point at which they may subject their wishes to the insistent commands of reality. . .

. . . *the contradictions which the classical-socialistic theory could not solve have been removed by the theory of marginal utility* . . . it enables us to understand, the sense of the economy may be perverted from a social point of view when the mighty utilize their superiority for themselves.

(Wieser 1927, pp. xviii-xx; italics added)

Ricardo, therefore, was no different from any other political economist in the sense that his theory of value was formulated in an attempt to substantiate previously conceived political or class interests. The labor theory of value emerged as a part of his proof that facility of production affected wages, but not prices. It was a theory which held that value was a constant not affected by the circulation of commodities since it was a function of production, and was in that respect similar to the theory of value in Marx's *Capital*. In both instances the theory was utilized to show that the interest of one class was in opposition to the interests of another class. In Ricardo's case, the two opposing classes each owed the justification for their income to the existence of the institution of private property, as Adam Smith had so clearly demonstrated (Smith 1937, Book I, Chapters VI and VIII). While he had not claimed there was harmony between the two classes, whose income was a derivation of private property, Smith did not emphasize the consequences of the two opposing classes. By Ricardo's time the disharmony had reached greater proportions, and he attacked the landlord's right to increase the size of their harvest by making it easier "to reap where they never had sowed" through control of the unreformed Parliament. His theory of value was but an instrument, or tool, for continuing that attack.

The difficulties Ricardo experienced in this "labyrinth of value and price" were discussed at length with Mill in the early stages of the projected volume of *Principles*. Mill agreed that a theory of value was a necessary sheet anchor for the rest of the system:

No doubt, you will be called upon, as you say, for the elucidation of price—because it is to tell how the events in question operate upon the relative proportions of exchangeable commodities, that is the problem to be solved. Therefore you are to set down

everything which that solution requires. Whatever the place in your ultimate work, in which it will be most convenient to distribute what you have to say on the *rationale* of price, to that place may hereafter be consigned whatever may then be useful, of what you bring forth.

(*Works*, Vol. VII, p. 7; Mill to Ricardo,
3 January 1816; italics in original)

During the course of the writing of the *Principles*, Ricardo made numerous references to the problem. To Malthus, his most severe and relentless critic, he wrote:

If I could overcome the obstacles in the way of giving a clear insight into the origin and law of relative or exchangeable value, I would have gained half the battle.

(*Works*, Vol. VII, p. 20; Ricardo to Malthus,
7 February 1816)

Seven months later, in October 1816, he again wrote to Malthus:

I shall be glad to see in a connected form your matured opinions on the progress of rent, profits, and wages, and in what manner they are affected by the increasing difficulty of procuring food, by the increase of capital, and the improvement of machinery. I fear we shall not agree on these subjects, and I should be very glad if we could fairly submit our different views to the public, that we might have some able heads engaged in considering it. Of this however I have little hope for though I feel strongly the truth of my theory I cannot succeed in stating it clearly. I have been very much impeded by the question of price and value, my former ideas on those points not being correct. My present view may be equally faulty, for it leads to conclusions at variance with all my preconceived opinions.

(*Works*, Vol. VII, pp. 71-72; Ricardo to Malthus,
5 October 1816)

To Mill the same story was told:

I have been beyond measure puzzled to find out the law of price. I found on a reference to figures that my former opinion could not be correct and I was full a fortnight pondering on my difficulty before I knew how to solve it. During that time I could not proceed or I should have made greater progress.

(*Works*, Vol. VII, pp. 83-84; Ricardo to Mill,
14 October 1816)

Despite the problem of value, when the first edition of the *Principles* was published in 1817, it proved to be an elaboration of the theories of profits and accumulation that had been set forth in the *Essay*, and the only new theoretical material appeared in the chapter "On Value."

The Theory of Value in the First Edition

Essentially, Ricardo's chapter "On Value" dealt with two main issues: (1) what regulated the exchange value of commodities, and (2) what effect a change in wages would have upon said exchange values. The analysis also incorporated a measure of value, which Ricardo utilized to establish his hypothesis with respect to (2).

He disputed a few preliminary points, but they were of no real significance to the central thesis. References to points such as the contrast between use value and exchange value (*Works*, Vol. I, pp. 11-12) and the significance of different qualities of labor power (*Works*, Vol. I, pp. 20-22) were actually of passing importance to the main issues.

Ricardo began by noting that Adam Smith had correctly pointed to the solution of the problem of exchange value, with his statement that "the proportion between the quantities of labour necessary for acquiring different objects, is the only circumstance which can afford any rule for. . . exchanging them for one another . . ." (*Works*, Vol. I, pp. 22-23 n.3, the passage as it appeared in the first edition).³¹ However Smith had confused the problem by limiting its solution to the "early and rude state of society." Consequently, he had bequeathed to political economy the idea that "when profits and rent are to be paid, they would have some influence on the relative value of commodities, independent of the mere quantity of labour that was necessary to their production" (*Works*, Vol. I, p. 23 n3). Smith, he said, had implied that the functional distribution of income, characteristic of advanced stages of society, changed the general rule of exchange value. This confusion arose, Ricardo believed, from the fact that Smith had never actually analyzed the "effects of the accumulation of capital, and the appropriation of land, on relative value." As a result, Ricardo considered it important

to determine how far the effects which are avowedly produced on the exchangeable value of commodities, by the comparative quantity of labour bestowed on their production, are modified or altered by the accumulation of capital and the payment of rent.

(Works, Vol. I, p. 23 n4)

The language which Ricardo found in Smith's analysis failed to correctly evaluate the degree to which the accumulation of capital and the payment of rent

³¹ Adam Smith's analysis of value was the beginning of several alternative theories, and he can be credited with three theories: the labor-quantity theory, illustrated in the beaver and deer society; the labor-disutility theory of the toil and effort of labor; and the cost-of-production analysis. Ricardo took the first, Malthus the second, and Senior the third, and never the *trois* would meet!

modified the theory of embodied labor as the single basis for value. Given these private property sources of income, what effect did a change in wages have upon the relative value of commodities? Ricardo's answer to this query was quite simple: "no commodities are raised in absolute price, merely because wages rise." [?] All he required was a proof of this proposition, and his deduction theory of profits would remain intact; if no prices rose when wages rose, there could not be a rise in profits in any area and the effect of a wage increase would be to lower profits.

The significance of this point to Ricardo's central thesis lay in the fact that Malthus had claimed that if wages rose the resulting price effect would more than compensate for the adverse effects upon profits, and the recourse to inferior land would have no adverse consequences. By attempting to limit profit changes to the single change in the facility of production, Ricardo had to show there would be no price effect, which could offset the adverse consequences of a rise in the labor cost of wage goods. A rise in the amount of labor required to produce wage goods would have the single consequence of lowering the amount of the economy's "surplus produce," and no change in prices could overcome this change in the "real" facility of production. If labor were the only agent of production, then it was obvious that the "Ricardo effect" would be true. Granted a rise in the quantity of labor required to produce wage goods, there would be no change in the exchange ratios of commodities other than goods directly affected by the change in facility of production. But with agents other than labor included in the production process, what effect would a change in labor cost have upon relative exchange ratios? The solution depended upon the role that capital and land played in the determination of value. If their contribution was significant, there would be a large price effect to compensate for the wage effect, granted a decrease in the facility of production. The problem was to analyze the significance of capital and land in the determination of value.

The analysis of the effect of the presence of fixed capital on relative values involved a number of steps. The first was the problem of commodities being produced with different proportions of fixed and circulating capital, and second, the fact that fixed capital was usually of varying durability. Commodities produced with varying amounts of circulating capital, varying quantities of fixed capital, and fixed capital of various durabilities, would be affected in varying degrees by a change in wages. A change in wages, therefore, would influence the exchange ratio for any two commodities, or group of commodities, depending upon their particular production coefficients.

To evaluate these varying effects which wages have upon the exchange value of commodities, Ricardo needed a measure of value against which other commodities could be gauged. The choice of a measure of value was not the same problem as setting out the determinants of value, but the ability to measure any two social aggregates was essential if he was to prove that labor was the cause of value. It was possible to alter the measure of value while retaining a single theory as to the cause, and Ricardo never altered his theory that the quantity of embodied labor determined value, but he did use a number of different measures to gauge the varying effects of wage changes upon heterogeneous commodities.

What he had in mind was quite obvious:

If there were any . . . commodity which was invariable in its value, requiring at all times, and under all circumstances, precisely the same quantity of labour to obtain it, we should be able to ascertain . . . how much . . . variation was to be attributed to a cause which affected the value of [one commodity], and how much to a cause which affected the value of [another].

(Works, Vol. I, p. 54)

Since there was no such standard available, he simply assumed a theoretical commodity and called it money. He viewed the quantity of money as irrelevant in the determination of any exchange relation. Money was not an active variable in the determination of the multiple transfers in the system of exchange ratios. Money was merely the medium through which the heterogeneous quantities of labor time, contained in commodities, reduced themselves to a common denominator. In "simple circulation," as Marx called it, the function of money was to supply commodities with the material for expressing "their values, or to represent their values as magnitudes of the same denomination, qualitatively equal, and qualitatively comparable" (Marx 1906, p. 106).³² Because commodities were produced with varying quantities of embodied labor and fixed capital, there were any number of possible measures by which to evaluate the effects of accumulation on value. Rent was not considered a causal factor in price, so Ricardo gave it a passive status. On the other hand, any combination of the two ingredients, capital and labor, could serve for Ricardo's *numeraire*; at one extreme, fixed capital alone (the one Torrens later suggested), or at the other, embodied labor alone. It was the latter which Ricardo chose in the first edition of the *Principles*.

Actually the degree to which Ricardo was successful in minimizing the effects of wage changes upon prices and values was dependent upon the measure of value adopted. In the first edition, the peculiar conditions he ascribed to money were that it was produced with "unassisted labour" (*Works, Vol. I, p. 63*). Therefore, fixed capital was not represented in the characterization of his *numeraire*. This allowed him to analyze the effects of fixed capital upon values by measuring the degree of variation in their price, as against his *numeraire*, when there was a rise in the cost of producing a wage good.

³² See the same author's more extended discussion of the role of money, in "simple circulation," in Marx 1904, pp. 73ff.

When analysis is concerned with something more than just the "simple circulation of commodities," money may be assigned an active role in a system of prices, either by affecting interest rates (as Keynes's analysis showed) or by the "necessity for commodities to generate money" (as Marx's analysis of the "capitalist system as a whole" showed). However, as Dobb noted, "the Ricardian school may have been justified in ignoring this possibility in an age when factory industry was still in its infancy and a chronic reserve of equipment did not exist on the scale it does to-day." (Dobb 1940, p. 40, n. 2)

The use of a standard measure of value had arisen in 1816, during Ricardo's correspondence with Broadly, with the latter denying the usefulness of such a notion. Ricardo replied:

Suppose that the influence of the atmosphere were such on our measures of length, the yard for example, that it varied one fourth, being sometimes longer and sometimes shorter, than a given portion of the arc of the meridian which is supposed invariable. We might still use the yard measure and might justly call it (by law) our standard measure.

(*Works*, Vol. VII, p. 43; Ricardo to Broadly,
14 June 1816)

There was an implied inference here, that even though all items might be variable, the one with the least variability could be used to measure the degree of variance of all other items, a logical point that was obscure.

Having established his *numeraire*, Ricardo turned to the issue of the price effect of a wage increase. Given fixed capital, what effect would a change in wages have upon values? The answer to this issue was of large "importance to the science of political economy" because it was usually assumed that "every rise in wages is necessarily transferred to the price of commodities" (*Works*, Vol. I, p. 61). Smith was the source of the opinion that any wage increase would be transferred to prices. With reference to the discussion of bounties on exportation, Ricardo observed that a rise in the price of corn, due to a subsidy, would fall upon profits, and price increases could not reduce the impact of such an imposition. Referring to his discussion in Chapter I, he says:

If this opinion of Dr. Smith were well founded, profits could never really fall, whatever accumulation of capital there might be. If, when wages rose, the farmer could raise the price of his corn, and the clothier, the hatter, the shoemaker, and every other manufacturer, could also raise the price of their goods in proportion to the advance, although estimated in money they might be all raised, they would continue to bear the same value relatively to each other.

(*Works*, Vol. I, p. 308)

In addition to the differences in the amount of fixed capital, there was another variable that had to be considered, namely the durability of said fixed capital. Therefore, three variables were involved in the determination of the exchange ratio of any two commodities: (1) degrees of circulating capital, (2) degrees of fixed capital, and (3) the durability of the latter. But "the foundation of all value" was labor, and the "relative quantity of labour determining the relative value of commodities" was the operational assumption of Ricardo's chapter, "On Value." Despite the fact he admitted that fixed capital "modified" the embodied labor

doctrine, Ricardo never agreed it was a drastic modification, and in the third edition of the *Principles*, he referred to it as a "slight" variation without "much importance" (*Works*, Vol. I, p. 36). However, in the third edition he used a different measure of value than the one used in the first edition, and this afforded him the luxury of making such claims. With the *numeraire* utilized in the first edition, he believed the modifications "considerable" (*Works*, Vol. I, p. 66). For purposes of analysis, Ricardo established three classifications of commodities, with one or more variables operative in each classification when there was a rise in wages.

First Variable: Assume two commodities are produced with equal quantities of equally durable fixed capital. Assume further the ratio of circulating to fixed capital in the production of each commodity is also equal. Given a change in the facility of producing a wage good, such as corn, there would have to be a rise in wages in all industries, including the two under consideration, in order for workers to receive the same real income. What effect would this rise in wages have upon the exchange values of these two commodities? Answer:

If wages rose 10 percent and consequently 10 percent more circulating capital were required in each trade, it would equally affect both employments . . . they would therefore be at the same relative value, and profits would be equally reduced in both trades.

(Works, Vol. I, p. 55)

The relative value of the two commodities would remain the same, since the price of one commodity could not rise relative to the other, "because the money in which they are valued is by the supposition of an invariable value, always requiring the same quantity of labour to produce it" (*Works*, Vol. I, p. 55). The two commodities would change in price by the same absolute amount, measured against the standard commodity.

Second Variable: Assume equal durability for all fixed capital, but assume that fixed and circulating capital are in different proportions in the production of two commodities. What effect does a rise in wages have upon their relative value? Answer:

with every rise in wages, in proportion as the capital employed in any occupation consists of circulating capital, its produce will be of greater relative value than the goods produced in other occupations, where a less proportion of fixed capital are employed . . . if wages rise, although neither of these commodities should require more labour for their production, yet their relative value will be altered.

(Works, Vol. I, pp. 57, 58)

Third Variable: Assume fixed and circulating capital to be of the same proportions, but the durability of fixed capital to be of different magnitudes. What affect would a rise in wages have upon their relative values? Answer:

In proportion as [a] machine were less durable, prices would be less affected by a fall in profits, and rise in wages.

(*Works*, Vol. I, p. 58)

Durability of fixed capital would also have the affect of causing relative prices to change when wages changed.

In summarizing his general theory of the effect of wage changes upon relative values, Ricardo claimed that where labor alone was the *numeraire*, "in proportion to the quantity and durability of fixed capital employed . . . the relative prices of those commodities . . . will vary inversely as wages; they will fall as wages rise and rise as wages fall" (*Works*, Vol. I, p. 63).³³ Given fixed capital, it was possible for some prices to change with a change in wages.

Was the cat out of the bag? Was Malthus correct after all, when he claimed that facility of production was not the regulator of profits, for, obviously, price changes could occur independently of changes in the facility of production? If there was more than one cause of a change in price, then there was also more than one cause of profits, since individual profits certainly were a function of price. To state the issue another way, were relative values independent of changes in wages, as Ricardo had hypothesized? While it was true that prices changed, it was the direction of the change which was crucial to Ricardo's thesis, and it turned out that his theory of value had actually established more than he had ever hoped. In one manner of speaking, his actual working out of the theory showed Ricardo that he was wrong. Wage changes did affect relative prices, but still there was the "curious effect" that "no commodities whatever are raised in absolute price, merely because wages rise" (*Works*, Vol. I, p. 63).

Because no commodities rose in relative price, when wages increased, the rise in the latter could not have a secondary effect which was contrary to the effect of wages upon aggregate profits. Using his peculiar measure of value, which assumed that money was a commodity produced with unassisted labor, Ricardo was able to show that a rise in wages produced only a fall in the absolute price of commodities produced with fixed capital. Since he had assumed that circulating capital was also a variable, no commodity could contain less fixed capital than his *numeraire*, and it was for this reason that he had chosen such a measure.

Ricardo concluded his analysis of the effects of accumulation on relative value, by noting:

It appears then that the accumulation of capital, by occasioning different proportions of fixed and circulating capital

³³ For some writers Ricardo's qualifications were drastic; as Schumpeter says, "the murder is out" and Ricardo must give up his theory "on principle . . . but actually it is retained . . . as an approximate truth" (Schumpeter 1954, pp. 594-595). In his *Theories of Surplus Value* (Marx 1951), Marx says that his analysis of "price of production" is necessary to save Ricardo's major premise, while Bortkiewicz claimed that "Compared with Ricardo's standpoint, Marx's view represents a decided retrogression." (Bortkiewicz 1952, p. 33)

to be employed in different trades, by giving different degrees of durability to such fixed capital, introduces a considerable modification to the rule, which is of universal application in the early stages of society.

Commodities, though they continue to rise and fall, in proportion as more or less labour is necessary to their production, are also affected in their relative value by a rise or fall in profits, since equal profits may be derived from goods which sell for 2,000*l.* and from those which sell for 10,000*l.*; and consequently the variations of those profits, independently of any increased or diminished quantity of labour required for the goods in question must affect their prices in different proportions.

(Works, Vol. I, p. 66)

Despite the recognition that the relative prices of commodities would change because of changes in the functional distribution of income, Ricardo continued to hold to his original thesis that only facility of production was really significant as a cause of price variation. On this point he wrote, in his *Notes on Malthus*:

I was of opinion, and still am of opinion, that in the relative variation of commodities, any other cause, but that of the quantity of labour required for production, was comparatively of very slight effect.

(Works, Vol. II, p. 59)

Before considering Ricardo's "pet proposition" as outlined in the later editions of the *Principles*, attention should be given to the issue of the "appropriation of land" and the degree to which it occasioned "any variation in the relative value of commodities, independently of the quantity of labour necessary to production."³⁴ [?]

So far as Ricardo was concerned, Adam Smith had not effectively analyzed the consequences of the appropriation of land with respect to relative prices. While Smith had noted some of the effects which rent had upon price, his discussion had not been complete enough to allow for an analysis of the overall implications of wage changes upon the relative prices of commodities produced with land, as well as with fixed capital and labor.

Ricardo's rent discussion fell logically into three stages. First, he made a distinction between "rent" in the "strict sense," as a payment "for the use of the original and indestructible powers of the soil," and rent which includes payment "for the use of capital . . . employed in ameliorating the quality of the land, and in

³⁴ Marx claimed that only the first two chapters of Ricardo's *Principles*, "On Value" and "On Rent," were significant to the formal theory. He said that the "theoretical satisfaction given by these two first chapters, because of their originality, unity of basic conception, simplicity, concentration, depth, novelty and comprehensive conciseness, is of necessity lost as the book proceeds." (Marx, 1951, p. 207) Stigler has claimed that anyone who has read the first two chapters of Ricardo's *Principles* could write the rest of the volume. (Stigler 1953, p. 588)

erecting such buildings as were necessary to secure and preserve the produce" (*Works*, Vol. I, p. 65). He considered the latter to be a popular misconception, and his analysis of "rent" was concerned only with the "strict sense" of the word.

The second step in the analysis concerned the proof that rent, as the produce obtained by the "employment of two equal quantities of capital and labour," was always a differential (*Works*, Vol. I, p. 71).³⁵ Hence,

The most fertile . . . land will be the first cultivated, and the exchangeable value of its produce will be adjusted in the same manner as the exchangeable value of all other commodities, by the total quantity of labour necessary in various forms . . . to produce it, and bring it to market. When land of an inferior quality is taken into cultivation, the exchangeable value of raw produce will rise, because more labour is required to produce it.

The exchangeable value of all commodities . . . is always regulated . . . by the greater quantity of labour necessarily bestowed on their production . . . by those who continue to produce . . . under the most unfavorable circumstances: meaning by the most unfavorable circumstances, the most unfavorable under which the quantity of produce required, renders it necessary to carry on the production.

(*Works*, Vol. I, pp. 72-73)

In the absence of a rising supply price for a particular input, the value of a commodity was a function of the quantity of labor required to produce it. But given heterogeneous units of land, the quantity of labor required in the production of agricultural commodities would vary with the fertility of the soil, and such variations would give rise to differentials; said differentials would cause rent in the strict sense. Accordingly, "corn is not high because a rent is paid, but a rent is paid because corn is high . . ." Rent, as the by-product of varying fertility, was not something that an economy should desire, since its payment merely reflected the cornering of corn, whose production from land was niggardly in both quality and quantity. In order to show the undesirableness of such a situation, Ricardo quoted Say to the effect that "happily no one has yet been able to say, the 'wind and the sun

³⁵ Marx was the first to observe that Ricardo, in order to investigate the theory of rent, "introduces *en passant* the relation between 'market price' and 'real price' " (Marx, 1951, p. 206). As appendices to his general theory of value, Ricardo included three chapters, "On Natural and Market Price," "On Sudden Changes in the Channels of Trade," and "On the Influence of Demand and Supply on Prices." The common denominator of all three chapters was the discussion of the forces which "temporarily cause deviations" from natural price and value, or the instance of monopoly. In speaking of Lauderdale's theory of value, which was subject to variations in demand or supply, Ricardo claimed that "Commodities which are monopolized, either by an individual, or by a company, vary according to the law . . . Lauderdale has laid down: they fall in proportion as the sellers augment their quantity, and rise in proportion to the eagerness of the buyers to purchase them; their price has no necessary connection with their natural value: but the prices of commodities . . . subject to competition . . . will ultimately depend, not on the demand and supply, but on the increased or diminished cost of their production" (*Works*, Vol. I, p. 385).

are mine, and the service which they render must be paid for" (*Works*, Vol. I, p. 69).

The third step in Ricardo's discussion of rent was concerned with the policy implications of the two preceding stages. Not only was rent, in the strict sense, an indication of the existence of monopoly, but more important, rising rental income was evidence of an increase in the fund required for wages, as a proportion of total output. The payment of rent was indicative of the fact that society was required to pay a higher price for the "maintenance of labour" (*Works*, Vol. I, p. 118). Since corn was a wage good, a rise in its price caused all wages to rise and the rate of profit to fall. As Bortkiewicz noted, "a change in the conditions of production" of goods "consumed only by the wealthy class," i.e., wine, velvet, or silk, "would not bring about a change in the level of the rate of profit" (Bortkiewicz 1952, p. 32) In Ricardo's own words:

if the commodities obtained at a cheaper rate, by the extension of foreign commerce, or by the improvement of machinery be exclusively the commodities consumed by the rich, no alteration will take place in the rate of profits.

(*Works*, Vol. I, p. 132)³⁶

In the Ricardian system "the rate of profit depends only on those amounts of labour and those turnover periods which concern the production and distribution of the goods forming the real wage rate" (Bortkiewicz 1952, p. 32).³⁷ Consequently, the price of corn was of paramount significance to the functioning of the economy because its motion directly affected wages and profits, when these were understood in their Ricardian sense. This proposition, of course, had been expressed in the *Essay on Profits*. In advocating the free importation of corn, Ricardo argued that a low price of corn was an advantage, since

the division of the actual production is more likely to increase the fund for the maintenance of labour, inasmuch as more will be

³⁶ The idea that wage goods were different from other commodities carried over to the discussion of taxes ". . . taxes on necessaries . . . not only affects the manufacturer in the proportion that he and his family may consume corn, but it alters the rate of profit of stock, and therefore affects his income. Whatever raised the wages of labour, lowers the profits of stock . . ." (*Works*, Vol. I, p. 205)

³⁷ Bortkiewicz claimed that "one must understand by wages neither money wages, nor real wages, but that amount of labour which is needed to produce the complex of goods forming real wages. In Marxist phraseology, this is the (absolute) value of labour power" (Bortkiewicz 1952, pp. 34-35). With the value of labor power being measured by the amount of labor required to produce the aggregate value of the wage goods, and with the total value of all goods a function of the value of labor, the two social aggregates could move independent of one another. The value of labor power could rise, without there being any change in the value of goods. This was but another form of the Ricardian expression that when "wages change, there is no change in values;" relative values were unaffected by changes in wages, the true "Ricardo effect."

Bortkiewicz set up a strong case for his claim that Marx misunderstood Ricardo's wage-profit theory, due to his own difficulty with the "transformation of values into prices." If the rate of profit is explained by only goods which are wage goods, then the origin of profit is a function of the wage-profit relation, and not the ability of capital to increase production, as Marx believed Ricardo had argued.

allotted, under the name of profit, to the productive class, and less under the name rent, to the unproductive class.

(*Works*, Vol. I, p. 270)³⁸

Speaking again of policy recommendations, Ricardo said that those who favored a high price of corn

do not see that the end of all commerce is to increase production,³⁹ and that by increasing production, though you may occasion partial loss, you increase the general happiness. To be consistent, they should endeavour to arrest all improvements in agriculture and manufactures, and all inventions of machinery; for though these contribute to general happiness, they never fail, at the moment of their introduction, to deteriorate or annihilate the value of a part of the existing capital of farmers and manufacturers.

(*Works*, Vol. I, p. 271; the idea of the quoted passage was taken from the last paragraph of the *Essay on Profits*)

If recourse could be made to land more fertile than that currently being cultivated, the cost of wage goods would fall and profits would rise. As a consequence, the average output per acre of the economy would rise and capital could be "devoted to the production of other commodities desirable to the community." The reallocation of resources would lead to a decrease in rents and a rise in profits. Wage earners, who would receive the same real income, at lower money prices, would be maintained by a smaller proportion of the economy's total output; in Marxist phraseology, the value of labor power would fall while the labor value of wage goods would fall (Marx 1906, Vol. I, pp. 197-248). Given this "Ricardo effect," the rate of profit and accumulation would rise *pari passu*. The economy's rate of growth, being a function of the rate of profit, the net effect of the redistribution of income would be to increase total real output, even though the new output would have a lower average labor input than that of the previous output.

³⁸ "... the fall in the relative price of raw produce . . . would naturally lead to increased accumulation; for the profits of stock would be greatly augmented. This accumulation would lead to an increased demand for labour, to higher wages, to an increased population, to a further demand for raw produce, to an increased cultivation." (*Works*, Vol. I, p. 79)

³⁹ Cannan argued that Ricardo "did not profess to deal with the *production* of wealth. It [the *Principles*] was merely an attempt to offer a solution of the 'principal problem in political economy,' which is, he thought, 'to determine the laws which regulate' the distribution of the produce of a country between rent, profit and wages" (Cannan 1917, p. 31; emphasis added). What Cannan failed to note was that Ricardo did have a theory of production, namely his theory of value. What Ricardo objected to about "distribution of the produce," with rent as a category, was that the system was holding back the further accumulation of wealth and production. As Dobb remarked: "the significance of the labour-principle of value was that it gave a quantitative meaning to the original value-contribution made to the productive process in a sense which enabled it to be different from the final value of the product. As a cost-principle it evaluates a productive contribution in terms of the physical using-up of something which has to be replaced by human activity" (Dobb 1940, p. 32). The Corn Laws, in raising the price of corn, allowed a class to receive income for which it rendered no value in return.

The similarity between Keynesian and Ricardian theories is significant since it shows the affinity of the two systems. Keynes's system accounts for a change in real output and employment, measured in wage units, due to a reduction in the rate of interest and a rise in the marginal efficiency of capital. This effect is accomplished, in formal Keynesian theory, by an increase in M , where M is the total quantity of money, because the interest rate is a function of M and liquidity preference, with the latter being assumed to be an inverse function of the price level. In the Ricardian system, the change in real output was accounted for by a fall in the aggregate labor cost of the fund necessary to maintain the wage-earning class, and a rise in the rate of profit. The affinity of the formal aspects of the two systems arises from the fact that both are predicated on the assumption that the level of output will rise with the removal of a particular inelastic agent in the system; in Ricardo's theory it was the supply of land; in Keynes's the supply of money. Both systems showed the consequences of a change in a key variable in terms of the effect upon the rate of profit, and both are macro models.⁴⁰

The Reaction to Ricardo's First Edition

The art of successful theorizing depends upon making simple assumptions in a manner so that the final results are not extremely sensitive. From this standpoint Ricardo's theorizing in the first edition was not successful. His basic premise, that relative exchange values were independent of changes in the functional distribution of income, was not well substantiated by his own theoretical formulations. The "primitive" assumption, *vis-à-vis* exchange values, to the effect that commodities exchange in proportion to the quantity of labor, was "considerably" modified by the "modern" phenomena of capital accumulation. Varying quantities of fixed capital, and their respective durabilities, acted in such a way as to cause relative prices to change concomitantly with changes in wages. This result, of course, was the antithesis of Ricardo's own assumption, to the effect that a rise in the price of a wage good produced only a decline in profits, because prices were regulated by the quantity of labor involved in their production. Since only the value of wage goods had changed, there was no reason to suppose that the price of any other goods would change. Therefore, the exchange ratios of other commodities should remain as they were prior to the change in the facility of producing said wage goods. If the prices of commodities containing any portion of fixed capital were to change at the same time, and in the same direction as the rise in wages, then "profits could never really fall." The change in relative prices would merely compensate for the profit-reducing effect of the increase in wages. If when wages rose, and Ricardo meant a rise in the value of labor power, all producers could raise their prices, and general

⁴⁰ Because of Keynes's attempt to differentiate his principle from Ricardian theory, it is usually assumed there was no affinity of purpose, or direction, in the two theories. At the same time, there have been numerous attempts to associate Marxian formulations with Keynes's *General Theory of Employment, Interest and Money*. In view of Marx's avowal that his analysis was the extension of Ricardian political economy, it is not strange to find some similarity between Keynes's and Ricardo's systems.

profits would not be reduced. In some sense this meant that the distribution, or sale, of commodities would compensate, or overcome, the shift in the wage relationships which occurred because of an increase in facility of production. A change in the process of distribution would cancel out the change in the production process. If, as Malthus said, profits were regulated by both the wage relationship and the price relationship, by both value and price, the latter could easily compensate for any adverse effects occurring in the former, and profits could never really change. This was a formulation which Ricardo could never accept, since his major concern was to show that the "views of interested parties who were claiming that a rise in wages would not injure (domestic) industry" were unfounded (Bortkiewicz 1952, p. 31 n 62).

Around this point his theory of value was woven. It was designed to show that price relationships were independent of changes in wages, since values were simply a function of the total quantity of embodied labor, not just of the value of the amount of wages required to maintain the wage-earning class. Assuming that fixed capital was a variable in his system, Ricardo was not able to completely ignore the price changes that occurred in the event of a change in wages, an issue that for years he had been arguing with Malthus. Some prices did change when wages changed, and the only out for Ricardo's theory was the conclusion that they moved in opposite directions. When wages rose, the prices of commodities produced with more fixed capital than that contained in the *numeraire*, actually fell. This was the "curious effect" which he discovered when analyzing the effects of fixed capital on the relative prices of commodities when wages rose. Contrary to the expected view, that the price of commodities produced with fixed capital would rise when wages rose, there was the curious finding that the price of such commodities actually fell relative to the *numeraire*, since the latter contained only unassisted labor. If commodity *x* was produced with 80 percent variable capital and 20 percent fixed, while the *numeraire* was produced with 100 percent circulating capital, obviously the price of the former would be less likely affected by a rise in wages than the latter. Consequently the presence of fixed capital in the production coefficients of goods, other than the *numeraire*, reinforced his premise that when wages rose, profits fell. The existence of fixed capital was supportive, and substantially confirmed his "pet proposition" that a rise in wages did not raise prices of commodities produced with fixed capital.

Malthus, however, was not convinced. Ricardo had assumed that the rate of turnover of circulating capital was annual, but suppose that were not the case, and the rate of turnover was more frequent. Since the deviations in price were measured against the *numeraire* was it not possible that commodities, with a greater turnover than the *numeraire*, would rise in price? If this occurred, there would be a higher rate of profit on such commodities, and the effect of the rise in wages would be to raise profits. It was not just a question of the degrees of fixed and circulating capital, but the rate of turnover of the latter. In some trades circulating capital turned over annually two and three times, and did not this factor affect the impact of wage increases upon the relative prices of commodities? Ricardo attempted to deal

with this issue in his third edition, as he changed the conditions of production of his *numeraire*.

Ricardo's thesis was more adequate as it pertained to the influence of rent upon relative values, than with respect to the influence of wage increases upon relative prices. He was successful in showing that differentials in the quality of land did not modify the notion that the quantity of labor determined exchange values. The productivity of land was an influence to the extent that it regulated the quantity of product obtained from a given labor input, but rent in the "strict sense" was a residual, and not an active factor in price determination. Rental income rose and fell with the varying productivity of the soil and it did not upset the general rule that exchange values, and therefore prices, were a function of relative comparisons of embodied labor. Given a decrease in the facility of production of a wage good, its price would rise and the amount of the differential would rise *pari passu*, but as an effect and not as a cause. In and of itself, the increase in rental income was neither good nor bad, but rising rents were symptomatic of increasing difficulties in the production of wage goods, leading to a rise in the cost of the fund necessary to maintain the laboring class. As a result of the rise in the value of labor power, the profits of stock had to fall.

The response to the first edition of the *Principles* was varied. There were only a few favorable reviews, the most laudatory, of course, being that of McCulloch in the *Edinburgh Review*. The direction of his review was in sympathy with Ricardo's analysis of the theory of value. However, because he was so caught up with Ricardo's approach, McCulloch was not able to effectively point out that Torrens's subsequent criticism, which McCulloch tried to answer, dealt with an issue which Ricardo did not attempt to answer. Torrens claimed, for example, that Ricardo's theory of value was not adequate as an explanation of how commodities exchanged in the market, the problem later of neoclassical economics. When McCulloch reviewed Ricardo's *Principles*, he wrote as a converted Ricardian.

Of the twenty-eight pages of McCulloch's review, twenty-three were devoted to the explanation of Ricardo's first two chapters, those on value and rent. The remaining pages dealt with the Theory of Taxation, and there was no mention of the polemical chapters of Part III of the *Principles*.

In McCulloch's opinion, Ricardo had dealt with an issue that Smith had confused, namely, that

the accumulation of capital, and the payment of rent, have no effect whatever in increasing the real price of commodities; and that, in every case, the exchangeable value of such as can be increased in quantity by the exertion of human industry, and, on the production of which, competition operates without restraint, can only be augmented by an augmentation of the *quantity of labour* necessarily required to bring them to market.

(McCulloch, 1818a, p. 64; italics in original)

Suppose

the value of money to be invariable, and the quantity of labour necessary to produce 1000*l.* worth of gloves to remain the same, the gloves would continue to sell for that sum, whether the wages actually paid to [sic, by] the manufacturer amounted to 500*l.*, to 800*l.*, or to 900*l.* Commodities, in short, would continue to sell after the rise of wages, for the very same price as before, but the proceeds would be differently divided:—A greater share would belong to the labourer, and a less to the capitalist; or, what is the same thing, *the profits of stock would be diminished.*

(McCulloch 1818a, p. 68; italics in original)

Employing the neutrality-of-money assumption of the quantity theory, McCulloch demonstrated that an increase or decrease in the money supply would have no effect upon the real exchange ratios of all commodities, since *ceteris paribus* nominal prices would change proportionally. Likewise, if there was a decline in the productivity of labor in all sectors, as the amount of labor necessary to bring all commodities to market rose proportionally, there would be no change in real prices, and beaver and deer would continue to exchange at the same ratio. There would be a negative real income effect, of course, as society's labor would now produce less goods.

But, if a general and proportionable increase in the cost of producing commodities would not alter their relative values to one another, how is that to be effected by a general and proportionable rise of wages? The thing is obviously impossible. If a beaver exchanged for a deer, when wages were at 1*s.* per diem, it must do the same thing when they are *universally* increased to 10*s.* or 20*s.* The market price of the beaver and of the deer would remain unchanged; but, after wages had been increased, a *greater* share of that price would belong to the labourer, and a *less* to the capitalist than previously. The real price of commodities would, it is obvious, not be in the least affected by this increase of wages. The quantity of labour necessary to their production would not be increased; and it would, therefore, be equally easy to obtain them.

(McCulloch, 1818a, p. 69; italics in original)

The idea, that real prices were not affected by an increase in wages, was of such importance and so contrary to the previously accepted view of political economists, that McCulloch quoted Ricardo to illustrate the point.

To say that commodities are raised in price, is the same thing as to say, that money is lowered in relative value; for it is by commodities that the relative value of gold is estimated. If, then,

all commodities rose in price, gold could not come from abroad to purchase those dear commodities, but it would go from home to be employed with advantage in purchasing the comparatively cheaper foreign commodities. It appears, then, that the rise of wages will not raise the prices of commodities, whether the metal from which money is made be produced at home or in a foreign country. All commodities cannot rise at the same time, without an addition to the quantity of money. To purchase any additional quantity of gold from abroad, commodities must be *cheap*, and not *dear*. The importation of gold, and a rise in the price of all home-made commodities, by which gold is purchased or paid for, are effects absolutely incompatible. The extensive use of paper money does not alter this question; for paper money conforms, or ought to conform, to the value of gold; and, therefore, its value is influenced by such causes only as influence the value of that metal.

(McCulloch, 1818a, p. 69; italics in original)⁴¹

Ricardo's passage neatly integrated his quantity theory of money with the theory of the neutrality of a change in prices from a change in wages. Thus, when wages rose, because of the necessity to use inferior land, profits fell, and there would be no change in the ratios at which commodities exchanged with another. *Ceteris paribus*, the assimilation of the institution of the private ownership of the means of production did not disturb the exchange ratio of beaver for deer, so far as McCulloch was concerned; all that institution did was to diminish the labourer's "share of his own labour" (McCulloch, 1818a, p. 70).

As to the question of the durability of fixed capital, McCulloch observed that Ricardo showed "prices will be less or more affected by a rise of wages and a fall in profit," depending upon the degree to which fixed capital entered into the production of goods (McCulloch, 1818a, p. 71). True to Ricardo's own intent, McCulloch did not discuss the degree to which the durability of fixed capital modified the general rule that commodities exchanged in proportion to the amount of embodied labor. Instead, he stressed the significance of the "curious effect," namely, a rise in wages could not increase the profits on commodities produced with fixed capital:

in proportion to the quantity and the durability of the fixed capital employed in any kind of production, the relative prices of those commodities on which such capital is employed, will vary inversely as wages—that is, *they will fall as wages rise*. It appears, too, that no commodities whatever are raised in absolute price, merely because wages rise; that they never rise unless

⁴¹ The passage is in Sraffa's *Works*, Vol. I, p. 105, from the chapter "On Wages." In addition to adding his italics, McCulloch inserted several commas, and in the next to last sentence changed Ricardo's "with which gold is purchased" to "by which gold is purchased."

additional labour be bestowed on them; but that all commodities, in the production of which fixed capital enters, not only do not rise with a rise of wages, but absolutely fall. And it further appears, that as the employers of labourers are altogether unable to indemnify themselves by raising the price of their goods, for any increase of wages they may have to pay to their workmen, *a rise of wages* is only another name for *a fall of profits*, and *vice versa*. These things appear to us to be clearly made out in the work before us,—and it is needless to enlarge on their importance. They enter deeply into all the investigations of political economy, and give a new aspect, indeed, to the whole of that science.

(McCulloch, 1818a, p. 72; italics in original)

Certainly, so far as Ricardo was concerned, commodities produced with degrees of fixed capital reinforced his major emphasis, that when wages rose profits fell. The fact that presence of fixed capital, on the other hand, modified his general value hypothesis, where commodities exchanged in accordance with the amount of embodied labor, was of minor importance to his overall theory, and McCulloch's review supported such an interpretation. But the insignificance of value modification was not a view shared by Malthus or Torrens. Malthus, however, did not participate in any of the public discussion surrounding the publication of Ricardo's *Principles*; his criticism was made privately or in correspondence. In 1817 he was again involved in the continuing controversy caused by the uprisings of the students at Haileybury, as they were once again being disruptive.

On 9 May 1817 *The Times* had learned "with regret, but without surprise, that the temporary tranquility which had existed at the East India College . . . had been again interrupted . . . Mr. Principal [Joseph Hallet Batten (1778-1837)] is said to have been chased, with very opprobrious language, by a dog with a kettle tied to his tail."

(Quoted in James 1979, p. 322)

In addition to the latest uprising of the students, in the spring of 1817 Malthus also was seeing the fifth edition of his *Essay* in press, published 5 June 1817.

There were no surprises in Ricardo's *Principles* and Malthus knew his friend well enough to have been able to criticize his ideas with little effort, if he had wished. But it was not only a question of being engaged with other matters, it was also a problem of finding an outlet in which to publish his opinions. Very early he must have decided not to review Ricardo's volume. Obviously, Ricardo himself was concerned about a prospective review in the most important journal, the *Edinburgh Review*.

I was told by Mill that Major Torrens had applied to the editor of the *Edinburgh Review* for permission to review my book in that journal, and the answer returned was that they must first know

from Malthus whether he meant to undertake it. As I have every reason to believe that Malthus will not do it, it is probable that Torrens' offer may be accepted. I presented Torrens with one of the first copies of my book:—he was disappointed that I had not mentioned his name in it, and wrote to me to that effect, claiming some merit as the original discoverer of some of the principles which I endeavoured to establish. I had no design of neglecting his merits, and omitted to mention him because none of his doctrines appeared to me strikingly new and did not particularly come with [in the] scope of the subject I was treating. There were so [me things] in his bo[ok about] which I pointedly differed from him but refrained from [noticing] them because I knew he was sensible they were wrong, and had adopted, and was going soon to publish, more correct views to the public. In the correspondence which ensued between him and me I endeavoured to shew, and according to Mill's opinion I did shew, that on all those points which I had as I thought for the first time brought forward, his published opinions were in fact in opposition to mine, and on those which he said we agreed upon and for which he claimed the merit of originality they were all to be found in Adam Smith or Malthus, and therefore neither of us could be called discoverers. Our altercation was carried on without the least acrimony, and ended by a complete restoration of cordiality, though accompanied with rather more reserve than before. He has dined with me twice since, and the last time he met Mr. Malthus for the first time, and stoutly defended my doctrines, to which he is quite a convert, against Mr. Malthus opposition to them. You will oblige me not to mention his application to the Editor of the Review unless you hear it from some other quarter

(*Works*, Vol. VII, pp. 179-180; Ricardo to Trower, 23 August 1817; Torrens was promoted to the rank of Colonel in 1818)

Ricardo must have had good reason for thinking Malthus would not review his *Principles*, but there is no evidence to suggest the opportunity for Malthus ever arose. As discussed in Chapter VI, *supra*, after his article on Spence, Malthus did not publish any articles in the *Review* dealing with economic theory, and his subsequent pieces were devoted to conditions in Ireland and his review of Godwin's answer to the *Essay on Population*. Jeffrey, the *Review* editor, was one of Malthus's closest friends, and frequently visited Haileybury when he was in the London area. He had written to Malthus on one occasion to indicate he wished the *Review* had been given the opportunity to publish Malthus's *Observations* (James 1979, p. 257), but it is doubtful if he expressed the same desire with respect to the *Grounds*. If Jeffrey ever thought of Malthus as a possible reviewer of Ricardo's work, he probably rejected the idea on ideological and political grounds.

From all accounts, Malthus was a charming, sophisticated and brilliant man, and his friendship with Jeffrey, like that with Ricardo, was very sincere. Politics, however, was another matter, and Jeffrey undoubtedly looked for someone to review Ricardo who would be sympathetic to the views expressed, especially with respect to free trade in corn. Jeffrey probably would have preferred Horner, but unfortunately he had died of tuberculosis in Italy the preceding November. McCulloch's short note about Ricardo's work in the *Scotsman* of May of 1817 may have convinced Jeffrey that he was the one to review the *Principles*. With his growing family, of which there were eventually twelve children, McCulloch was always looking for additional income and he could well have made an overture to Jeffrey.

As indicated earlier, McCulloch's review of Ricardo's *Principles* was the first of some seventy-eight contributions to the journal over a span of nineteen years. The review not only was responsible for the first edition of Ricardo to be sold out, but it also established McCulloch as a reputable political economist despite the fact the article was anonymous. Everybody who was anybody knew the source of the authorship of the piece on Ricardo in the *Edinburgh Review*.

Meanwhile there was Torrens and though Malthus might have had certain misgivings about reviewing Ricardo the Colonel was eager to assume the task. Some five months following the publication of the *Principles*, Torrens had a review prepared and he called upon Brougham, one of the founders of the *Edinburgh Review*, to inquire about the possible publication of his article. What stood in Torrens's way was the likelihood that Malthus had already been assigned the task, but Brougham agreed to write Jeffrey about the matter (*Works*, Vol. VII, p. 179 n2). It is not known what transpired between Brougham and Jeffrey, but obviously Torrens's request was never accepted.

As Ricardo observed to Trower, Torrens felt slighted because he had not been mentioned in the *Principles*. The correspondence which passed between Ricardo and Torrens is wanting, and it is interesting that with the exception of one letter, none of the rest of the correspondence has ever been found (*Works*, Vol. XI, pp. xi-xii; Ricardo to Torrens, 15 June 1818; Torrens was a candidate for the House of Commons in the election of 1818, and Ricardo wrote in support). Not too many letters were exchanged, as evidenced by the few references to such by Ricardo, but it is significant that he did not keep any letters from Torrens. Especially is this the case, in view of Ricardo's filing all his correspondence with other individuals, and that it was not his habit to burn letters which he received, even from such minor people as Broadley and Crombie.

Torrens's complaint was that Ricardo did not mention his pamphlet on the *External Corn Trade*, though praise was given to West and Malthus, the other two pamphleteers of February 1815. To placate him, Ricardo added two footnotes in the second edition, but he told Mill:

I have mentioned Torrens twice with approbation, but on looking over his book I find so much that is wrong in it that I cannot bestow general praise on him, I commend him only for an able illustration of a particular principle, or for having maintained in a particular case a correct opinion.

(*Works*, Vol. VII, p. 333; Ricardo to Mill, 23 November 1818; the references to Torrens appear in *idem*, Vol. I, pp. 96-97 and 271n)

While Ricardo probably was not aware of it, Torrens still felt slighted and perhaps a little jealous. The slight was because he believed he should have received credit for being the first to state the law of comparative advantage. In the third edition of his *External Corn Trade* (1826), three years after Ricardo's death, Torrens claimed his first edition had contained a paragraph that described the theory of comparative advantage. "These principles," he said, "Mr. Ricardo adopted into his very valuable work on Political Economy and Taxation: and they form in some measure, the groundwork of his chapters upon foreign trade, and of his doctrines on the influence of taxation upon the export and import of commodities" (quoted in Robbins 1958, p. 31; the paragraph in Torrens's first edition is found on page 23 of Robbins). The murder was out. Ricardo's theory of comparative advantage, developed in Chapter VII of the *Principles*, was lifted from Torrens's paragraph, which had been published two years earlier. But the situation was even worse than it appeared, since in 1857 Torrens reported he had first stated the theory of comparative advantage in his 1808 attack upon Spence and Cobbett.

The principles which I propounded in "The Economists Refuted," Mr. Ricardo subsequently adopted in his great work on Political Economy and Taxation: and as my previous publication had been long out of print and forgotten, it was generally believed that it was reserved for Mr. Ricardo to correct the erroneous theory of Adam Smith to show that the benefit resulting from foreign trade consists of the increased production created by international divisions of employment.

(Robbins 1958, p. 31)

Thus, Torrens anticipated Ricardo by nine years, not two, and Ricardo's chapter on Foreign Trade took no recognition of the Colonel's originality. But it was one thing to be ignored, it was another that the person who adopted your ideas should be widely acclaimed, and here was where jealousy may have been a factor. Murray, the publisher, told Ricardo he was reluctant to bring out another book by Torrens, because the *External Corn Trade* sold less than 150 copies, even though he thought it was the Colonel's "best work" (*Works*, Vol. VII, p. 141; Ricardo to Malthus, 9 March 1817). In contrast, Murray sold out the 750 copies of Ricardo's first edition in about sixteen months.

The issue of Torrens's priority to the theory of comparative advantage has been the topic of debate on several occasions. In 1911, Seligman defended Torrens's claim (Seligman 1911), while Hollander denied Ricardo's indebtedness (J. H. Hollander 1911). Seligman's case rested solely upon Torrens's single paragraph in *External Corn Trade*, as against Ricardo's chapter. It was suggested by Hollander, in part a concession to Seligman's position, that Torrens and Ricardo may have discussed the issue prior to Torrens's publication in February 1815. Hollander should have known, however, that Ricardo met Torrens for the first time in April of

that year,⁴² and that their discussion was devoted to monetary theory, Torrens defending his anti-bullionist view. There is no evidence Torrens ever raised the issue with Ricardo of being the originator of the theory of comparative advantage.

Viner also discussed the issue of Torrens's supposed priority to the theory of comparative advantage, concluding that Torrens's claim "should not be given too great emphasis," because he was confused about the principle involved (Viner 1937, p. 444). Lord Robbins, Torrens's biographer, while conceding Viner's main point, claimed:

We may legitimately criticize Torrens for his occasional use of language suggesting that Ricardo was indebted to him. But we should not deny that, on what was doubtless a lower plane, he had a perfectly legitimate claim to independent and chronologically prior discoveries.

(Robbins 1958, p. 35)⁴³

What Robbins meant, by a "lower plane," was that Torrens's paragraph in *External Corn Trade* should not be compared with Ricardo's fuller development of the theory in his chapter. Besides, Ricardo's doctrine was fully dependent upon his own analysis of the labor theory of value, the latter being completely rejected by Torrens from the very beginning. The idea of the mutual advantage of trade between nations had been in the air since early in the eighteenth century, and though somewhat confused by Adam Smith, there was no question that he believed a nation could either produce its own necessaries and conveniences of life or purchase them from other nations. There were advantages to be gained from an international division of labor just as from any domestic division of labor. But it remained for Ricardo to articulate the specific details of the theory of comparative advantage of trade, between, say, Portugal and England.

If Portugal had no commercial connexion with other countries, instead of employing a great part of her capital and industry in the production of wines, with which she purchases for her own use the cloth and hardware of other countries, she would be obliged to devote a part of that capital to the manufacture of those commodities, which she would thus obtain probably inferior in quality as well as quantity.

⁴² See Bonar 1887, letter xxxii, where Ricardo reports on his first meeting with Torrens, Wednesday, 19 April 1815. Hollander claimed that "from the tenor of later correspondence Ricardo and Torrens were probably in association before the appearance of Torrens' *Corn Trade*, and not unlikely as far back as the bullion controversy . . ." (Hollander 1911, p. 462). Hollander, of course, was wrong on both counts, and surely he had read Bonar's edition of the Ricardo Letters. Like Horner, Hollander nodded.

⁴³ Robbins also conceded that for a supposedly early advocate of free trade, Torrens committed "heresy" when in the 1850's he became the "leading intellectual opponent of unilateral free trade" and an advocate of reciprocity (Robbins 1958, p. 187). Moreover, it was Torrens who criticized Malthus, because he "scarcely ever embraced a principle, which he did not subsequently abandon."

The quantity of wine which she shall give in exchange for the cloth of England, is not determined by the respective quantities of labour devoted to the production of each, as it would be, if both commodities were manufactured in England, or both in Portugal.

England may be so circumstanced, that to produce the cloth may require the labour of 100 men for one year; and if she attempted to make the wine, it might require the labour of 120 men for the same time. England would therefore find it her interest to import wine, and to purchase it by the exportation of cloth.

To produce the wine in Portugal, might require only the labour of 80 men for one year, and to produce the cloth in the same country, might require the labour of 90 men for the same time. It would therefore be advantageous for her to export wine in exchange for cloth. This exchange might even take place, notwithstanding that the commodity imported by Portugal could be produced there with less labour than in England. Though she could make the cloth with the labour of 90 men, she would import it from a country where it required the labour of 100 men to produce it, because it would be advantageous to her rather to employ her capital in the production of wine, for which she would obtain more cloth from England, than she could produce by diverting a portion of her capital from the cultivation of vines to the manufacture of cloth.

Thus England would give the produce of the labour of 100 men, for the produce of the labour of 80. Such an exchange could not take place between the individuals of the same country. The labour of 100 Englishmen cannot be given for that of 80 Englishmen, but the produce of the labour of 100 Englishmen may be given for the produce of the labour of 80 Portuguese, 60 Russians, or 120 East Indians.

(Works, Vol. I, pp. 134-135)

If there was any plagiarism of Torrens's paragraph, it would be difficult to locate, for Ricardo's formulation was singularly unique because it was cast in the mold of his theory of value. It was the latter of which Torrens was so critical. Failing in his attempt to review Ricardo's *Principles* for the *Edinburgh Review*, Torrens turned to the *Edinburgh Magazine*, the Tory counterattack to the *Review*. Founded in 1817 as the *Edinburgh Monthly Magazine*, it quickly became known as the *Edinburgh Magazine*, a Scottish companion to John Murray's earlier *Quarterly Review*. Both the *Quarterly Review* and *Edinburgh Magazine* were as pro-Tory as the *Edinburgh Review* was pro-Whig. The latter, however, was the more influential because of Jeffrey's superior editorial abilities and the quality of the writing. In a letter of 30 September 1818, Torrens wrote to Francis Place that he had met

McCulloch at dinner in Edinburgh, and they had agreed to debate Ricardo's theory of value in the *Edinburgh Magazine* (*Works*, Vol. VII, p. 316 n1). Torrens's contribution to the debate appeared under the title, "Strictures on Mr. Ricardo's Doctrine Respecting Exchangeable Value," and signed "R" (Torrens 1818).

In Torrens's opinion Ricardo was in error on a number of accounts. First, Adam Smith had restricted his labor quantity doctrine to the early and rude state of society, and thereafter mitigating circumstances developed to nullify the first principle. Secondly, Ricardo was in error in refusing to recognize that Smith was correct, since commodities seldom, if ever, exchanged in proportion to the amount of labor involved in their production. To prove his point, Torrens assumed the case of two commodities, each produced with 100 days labor. A wage rate of a shilling a day and a profit markup of 20 percent prevailed in both instances. For commodity A, a silk manufacturer bought raw silk, the product of 90 days labor, at a price 108s; 90s for the laborer's wages, and 18s for the 20 percent profit. The manufacturer then hired 10 days labor to work up the silk, and sold the finished product for 141.6s (Torrens's figure was 143s, obviously an error). The sale price of 141.6s equaled the 108s paid to the silk gatherer plus 10s for the 10 days labor to work up the silk, and 20 percent profit on 118s, or 23.6 s. Meanwhile, a cloth manufacturer B had purchased wool, the product of 10 days labor, for a price of 12s; 10s for labor, 2s for the profit of the wool gatherer. The cloth manufacturer hired 90 days of labor to make the wool into cloth, and sold the final product for 122.4s (Torrens's price was 122s, another error), 12s for the wool, plus 90s for wages, and 20.4s profit.

But the articles which thus sell at such different prices, have been produced by equal quantities of labour; 90 days having been employed in raising the raw silk, and 10 days in working it up; while 10 days were employed in raising the wool, and 90 in manufacturing it.

(Torrens 1818, p. 336)

To obtain his result of equal quantities of labor producing commodities with different prices, Torrens stretched out his two production functions, with one having a concentration of labor in the initial process, the other a concentration in the more recent stage. The reason for the different prices for the two commodities was the result of the compounding of profits, with the higher price of silk the result of the 20 percent profit being taken on the initial 90 days labor, as against the cloth with 20 percent profit on its initial 10 days labor.⁴⁴ If no profit was taken on the initial

⁴⁴ Torrens's analysis has a familiar contemporary ring to it. In discussing the "switching" problem of Sraffa, Dobb noted: "To clarify the reasons for this apparent paradox further ["switching"], one may represent the production-situation in this way. The cost and final price of a commodity can be conceived as the summation of a vertical series of stages of production spread out backwards in time, each consisting of a labour-input *plus* commodity inputs . . . that are products of some earlier stage; each with its labour-input having its attached date in the vertical series. . . . Manifestly everything will depend . . . upon the manner in which these labour-terms are distributed in time" (Dobb 1973, p. 253). The problem described by Dobb is what Sraffa called

labor, one continuous production function, both the silk and cloth would sell for 120s, and the products would exchange in proportion to the amount of labor involved, or equals for equals. As a corollary to his argument that commodities did not exchange in proportion to the amount of labor involved in their production, Torrens assumed a case where the silk and cloth manufacturers each obtained their raw material for 12s. The cloth manufacturer employed 90 days labor at one shilling each, but the silk manufacturer employed 45 days labor at 2s a worker, and the two commodities would exchange as equals, since both cost 122.4s. Containing unequal quantities of labor, still the silk and the cloth were of equal exchange value. Torrens did not explain why competition would not make wages the same in the two industries, as was the case with the profit rate.

Contrary to Ricardo's view that different degrees of durability in capital "modified" the general rule that commodities exchanged in proportion to the amount of labor, Torrens claimed the degree of durability actually "subverted" the general rule altogether:

the relative worth of all things is determined, not by the quantities of labour required to procure them, but by the universally operating law of competition, which equalizes the profits of stock, and consequently, renders the results obtained from the employment of equal capitals of equal value in exchange.

(Torrens 1818, p. 336)

If two capitalists each invested £2000, they would receive the same profit, regardless of the number of workers hired in the two instances. The silk manufacturer might employ 500 workers at a daily wage of one pound, use £500 to purchase fuel and £500 each for raw material and machinery, and receive a £200 profit at 10 percent. The cloth manufacturer might pay £1000 in wages, also at a wage of one pound per day, have £500 in machinery and £500 in raw material. He also would earn a 10 percent profit of £200. Even though the second capitalist hired twice the number of workers, they both would receive the same profit, as the two commodities would be of equal exchange value. Given a class of laborers and a class of capitalists, there was only one instance wherein commodities would exchange in proportion to the amount of labor employed in their production, namely when equal quantities of capital happened "to give employment to equal quantities of labour," and that would be an "extremely rare occurrence." (Torrens 1818, p. 337)

Torrens contended that his analysis was

a clear and complete demonstration, that, when capitalists and labourers become distinct, it is always the amount of capital, and

"Reduction to Dated Quantities of Labor" (Sraffa 1960, pp. 39-40). Sraffa, of course, cites Torrens's "Strictures" (pp. 94-95).

never the quantity of labour . . . which determines the exchangeable value of commodities.

(Torrens 1818, p. 337)

Accordingly, Adam Smith was correct, and Ricardo was wrong:

no proposition, physical or moral, can admit of a more rigid demonstration than the principles laid down by Dr. Smith, that, after stock has accumulated in the hands of particular persons who set industrious people to work by advancing them wages and material, the quantity of labour employed in production is not the circumstance which determines the exchangeable value of commodities.

(Torrens 1818, p. 338)

Anticipating the debate between Torrens and McCulloch over Ricardo's theory of value, Mill thought it would "promote the reputation both of the doctrine and its author" (*Works*, Vol. VII, p. 316; Mill to Ricardo, 26 October 1818).⁴⁵ But when McCulloch's answer to Torrens appeared the following month, Mill was "not satisfied," and was glad to know that Ricardo himself would prepare an answer, which he did but never published. Meanwhile, McCulloch's reply to Torrens (McCulloch 1818), attempted to defend Ricardo.

McCulloch's first line of defense was to the effect that the amount of labor employed in producing a commodity involved not only the direct labor, but also the labor "expended in forming the capital which has been necessarily consumed in furtherance of the same object." Although he did not use the terminology, commodities derived their value from stored labor as well as living labor. He wrote that,

if we suppose that three days' labour are necessary to procure the implements used by the deer hunter, and that only one day's labour is necessary to procure those of the salmon fisher, and that each set of implements are calculated to last one day, then, instead of a salmon being worth a deer, it will only be worth half a deer: For although, *after the implements necessary to effect the destruction of the animals have been provided*, an equal number of deer as of salmon are caught in one day, yet as the implements employed in the deer hunting cost *three* days' labour, while those employed in the salmon fishing cost only *one*, the *total quantity of labour* expended on the deer is equal to *four*, and that expended on the salmon equal only to *two*, so that in fact one deer is worth two salmon.

(McCulloch 1818b, p. 430; italics in original)

⁴⁵ Mill believed the exchange would be published in *Blackwood's Edinburgh Magazine*, whereas it actually appeared in the *Edinburgh Magazine*, a separate journal.

McCulloch rightfully observed that Ricardo had recognized that the durability of fixed capital modified the "general rule" wherein the quantities of labor determined exchange values. He also called attention to Torrens's splitting of the production process, in which one commodity was manufactured by a single set of 100 laborers, while the other process involved the product of 50 laborers being sold to a manufacturer employing another 50 workers, upon whose labor a profit would be added. Assume one manufacturer employs 100 days of labor at a wage of a shilling and a profit of 20 percent. The 20 shillings' profit is on an annual basis, and since the production process required 100 days, the product only includes a profit for that time, and sells for 105.4s ($20s / 365 \times 100 = 5.4s$). Another manufacturer employs 50 days of labor and the 20 percent annual profit comes to 1.37s for 50 days, and the cost to the second manufacturer is 51.37s. He advances another 50 days labor, for a total cost of 101.37s, plus a 50 day profit of 2.78s, and a sale price of 104.15s (McCulloch calculated 104.12, an obvious error). The price of the commodity produced with two sets of laborers, 50 days each, comes to 99 of the price of the commodity produced with the 100 days labor. Using Torrens's method of calculating the two prices, the price of the commodity produced with 100 days labor would be 120s, while splitting the work force in half and taking a markup of 20 percent at each stage, the price would be 132s, about 9 percent above the price of 120s for the first commodity. The McCulloch procedure produced a lower price for the split production function because he adjusted the 20 percent annual profit rate for the number of days the capital was being employed. Correspondent "R", Torrens, was incorrect, according to McCulloch

inasmuch as the rate of profit is assumed to be 20 per cent. . . .
 [and] your correspondent increases in that ratio every sum
 advanced by the respective capitalists, although, perhaps, they
 have only been deprived of its productive services for a single day!
 (McCulloch 1818b, p. 431)

McCulloch likewise called attention to "R's" assumption of two wage rates, one each for silk and cloth, for in "all the investigations of political economy, the rate of wages . . . must be considered as quite uniform and general" (McCulloch 1818b, p. 431)

To sum up his argument, McCulloch claimed that all "R" had proved was that the exchangeable value of commodities was regulated by the amount of capital expended on their production. But was this not admitting the truth of Ricardo's principle?

What is capital but *accumulated labour*? And to tell us that the value of commodities depends on the amount of capital consumed in their production, is only another, but an extremely cumbersome, roundabout and incorrect way of telling us, that their value depends on the *total quantity of labour* required to bring them to market.

(McCulloch 1818b, p. 431; italics in original)

There is little doubt that Torrens struck at the heart of Ricardo's theory of value. Although he misrepresented the degree to which Ricardo himself had qualified the labor quantity doctrine, he raised the significant questions. He had shown that, except in a rare case, the prices of commodities were not equal to the amount of labor involved in their production, and that the amount of capital in circulation in producing commodities was a better indicator of prices than the quantity of labor. McCulloch's answer, to the effect that capital was but accumulated labor, did not seem too convincing. On the other hand, the method of calculating the profit markup on capital, for only the period of circulation, did reduce the degree to which prices deviated from labor values. This left Ricardo's modification, due to degrees of durability of capital, of less significance than if calculated by Torrens's method. Ricardo himself was too busy preparing to enter Parliament and bringing out a second edition of the *Principles* to publish an answer to Torrens. He did outline his thoughts on the subject in a long letter to Mill.

The fact is that Torrens does not represent Smith's opinion fairly he makes it appear that Smith says that after capital accumulates and industrious people are set to work the quantity of labour employed is not the only circumstance that determines the value of commodities, and that I oppose this opinion. Now I want to shew that I do not oppose this opinion in the way that he represents me to do so, but Adam Smith thought, that as in the early stages of society, all the produce of labour belonged to the labourer, and as after stock was accumulated, a part went to profits, that accumulation, necessarily, without any regard to the different degrees of durability of capital, or any other circumstance whatever, raised the prices or exchangeable value of commodities, and consequently that their value was no longer regulated by the quantity of labour necessary to their production. In opposition to him, I maintain that it is not because of this division into profits and wages,—it is not because capital accumulates, that exchangeable value varies, but it is in all stages of society, owing to only 2 causes: one the more or less quantity of labour required, the other the greater or less durability of capital:—that the former is never superseded by the latter, but is only modified by it. But, say my opposers, Torrens, and Malthus, capital is always of unequal durability in different trades, and therefore of what practical use is your enquiry? Of none, I answer, if I pretended to show that cloth should be at such a price,—shoes at another—muslins at such another and so on—this I have never attempted to do,—but I contend it is of essential use to determine what the causes are which regulate exchangeable value, although they may be so complicated, and intricate, that practically, the knowledge may be very little useful.

(*Works*, Vol. VII, pp. 377-378; Ricardo to Mill,
28 December 1818)

From Ricardo's formulation it can be concluded that his major purpose in developing a labor theory of value was to substantiate his hypothesis that a distribution of income between wages and profits had no great effect upon the "real" price of commodities. McCulloch's reply to Torrens's criticism had really missed the point, since Ricardo had not claimed that capital was accumulated labor, but merely that the existence of profits did not eliminate the major cause of the basis upon which commodities exchanged with one another. Leaving aside the rare statutes and pictures, commodities which were "increased in quantity by the exertion of human industry" (McCulloch 1818a, p. 64 [see also *Works*, Vol. I, p. 12]), and subject to the rules of competitive markets, exchanged in accordance to relative value for two reasons. First, and the dominant cause of such changes, was the alteration in quantity of labor time required to produce them; and second, the alterations in the durability of the capital employed in such production. The second cause of the alterations could never supersede the first, being only a modifier.⁴⁶

Torrens's criticism in the *Edinburgh Magazine* was not of such a nature that Ricardo had to "retreat" from the labor theory of value; Torrens had merely reiterated what Ricardo himself had claimed in the first edition of the *Principles*. However, Ricardo's major point was that the durability of fixed capital was only of secondary and minor influence upon the value of commodities; the primary regulator, in advanced societies, was the amount of labor, though in rude societies it was the only regulator. If one wished to explain the degree to which the exchange value of cloth for silk was influenced by the minor influence, that of durability, and the extent to which it was regulated by the quantity of labor, then Ricardo admitted his value discussion had little practical significance. The delineation of differences in individual prices had not been his purpose; all he had attempted to do was to set out the cause which "regulates exchange value" in the long run. Ricardo was convinced, both intuitively and by his own theoretical analysis, that the major cause of value was the different quantities of labor involved in production; and constructed a schema which emphasized such an influence, as against a minimization of other causes. His primary purpose, which should never be lost sight of, was to demonstrate that a rise in the cost of producing wage goods could not be offset by a price rise for such goods *vis-à-vis* other commodities. It was necessary to minimize the "price effect" for the movement of the total system, not its individual segments, and at this level of analysis he preferred to pitch camp in defense of his theoretical system.

Torrens's private controversy with Ricardo⁴⁷ took a somewhat different form from what was printed in the *Edinburgh Magazine*. In their private discussions

⁴⁶ Ricardo was not the only writer who claimed that the durability of fixed capital "modified" his labor theory of value. But he was the first to claim such a distinction. In describing Rudolf Hilferding's defense of Marx's analysis of prices of production, against the claims of Böhm-Bawerk that Marx's prices of production denied the labor theory of value, Sweezy claimed that Hilferding held "that price of production is merely a *modification* of value and hence that the two theories are logically related and in no sense contradictory" (Sweezy 1949, p. xxiii).

⁴⁷ As indicated above, the Ricardo-Torrens correspondence is missing. But after the Torrens-McCulloch exchange in the *Edinburgh Magazine*, Ricardo prepared his own answer to Torrens's "Strictures," which he

Torrens apparently claimed Ricardo's analysis had considered but two causes in the variation of price, (1) the effect of different quantities of fixed capital, and (2) their respective durability. He claimed a third variable should be added, the variation in the quantities of circulating capital. In Ricardo's system this type of capital included not only wages but also the cost of raw materials. Ricardo had not drawn a specific line of demarcation between fixed and circulating capital, and suggested they melded, so differences were a matter of degree.

The significance of the Torrens-Ricardo exchange was that Ricardo "leaned in the direction" [?] of admitting his theory required him to count only wages as circulating capital, and this would have enabled him to reject Torrens's third cause of variation. He wrote in his commonplace book:

It appears then that everything is fixed capital which is employed in production except that which resolves itself into wages. If with a capital of £1000 I manufacture commodities made of Iron that part of my capital only can be considered as circulating which is exclusively devoted to the payment of wages.

(Works, Vol. IV, p. 312)

This particular distinction, between fixed and circulating capital, was temporary, as Ricardo crossed out the passage. Had he retained the paragraph it would have removed the need to include the variation in circulating capital, as Torrens suggested. In that case, Ricardo's limitation of circulating capital to include only wages would have meant that his classification was the same as Marx's, where variable capital was wages only, all other expenditures being covered under constant capital (Marx 1951, pp. 215-216; see Sraffa, *Works*, Vol. IV, p. 306).

The long passage to Mill, where Ricardo gave his own answer to Torrens's piece in the *Edinburgh Magazine*, suggests that he remained convinced of his view that changes in the distribution of income did not radically affect relative prices. In the first place, rent did not enter the analysis, being a result and not a cause of value. Whether the division between wages and profits, or the change in that division, affected relative values was not quite so clear. There were commodities which experienced a price effect when wages changed, and this was the reason the labor theory of value in the first edition of the *Principles* was threatened by Torrens's criticisms.

Malthus's criticisms of Ricardo's *Principles* were extensive, though not well revealed at the time. Malthus did claim he was "meditating a volume" to answer Ricardo (*Works*, Vol. VII, p. 215; Malthus to Ricardo, 3 December 1817), and the latter anticipated it would "differ materially" (*Works*, Vol. VII, p. 221; Ricardo to

sent to Mill. As the correspondence with Mill suggests, Ricardo had no inclination to publish his own answer to Torrens, the reason being open to conjecture. What Ricardo did was to enter in his commonplace book those portions of Torrens with which he disagreed, and to give his own reply. He then prepared a short summary of his differences with Torrens, to which the latter wrote out his short reply. The fragments are published with an introductory note by Sraffa (*Works*, Vol. IV, pp. 305-318).

Trower, 10 December 1817) from his own view. Ricardo continued to be concerned about his writing abilities, and wished there were someone with "an able pen on my side to put my opinion in a clear light" (*Works*, Vol. VII, p. 222; Ricardo to Malthus, 16 December 1817). Torrens, whom Ricardo had once thought of as being that person, was now out of the question. As Trower told Ricardo, his problem was not one of composition or writing style, but the difficulty of the "*nature of the inquiry*," since most people were not capable of understanding the issues (*Works*, Vol. VII, p. 256; Trower to Ricardo, 28 February 1818 italics in original). Nor was Malthus of the opinion that Ricardo's problem was that of being able to express himself. The problem arose because his theories were wrong to begin with on almost every point. He disputed Ricardo's value theory, the theory of rent, the advantages of manufactures over agriculture, free trade and the relevance of Say's law. At no time did Malthus set forth all of these criticisms together, but each of the points emerged in their correspondence between the dates of publication of Ricardo's first and second editions, a period of about two years. In order to put all of his criticisms of Ricardo together, Malthus was writing, and in October of 1818 he had finally determined a title, "The Principles of Political Economy considered, with a view to their practical application." (*Works*, Vol. VII, p. 312; Malthus to Ricardo, 21 October 1818). The book was advertised in November 1818 as being in press, but was not published until April 1820. Ricardo told Mill, as early as December 1818, that Malthus's book was delayed, in part, "from doubts which he cannot help entertaining of the correctness of his opinions" (*Works*, Vol. VII, pp. 379-380; Ricardo to Mill, 28 December 1818).

In Malthus's initial reaction to Ricardo's *Principles*, he said he could not agree that labor alone was either in theory or in fact "the best measure of exchangeable value; or that the state of the land practically determines the existing rate of profits in different countries" (*Works*, Vol. VII, p. 176; Malthus to Ricardo, 17 August 1817).⁴⁸ The next occasion for a mention of the value theory was after Ricardo learned that Malthus, Lord King (an early bullionist) and John Whishaw (a Whig politician and Commissioner of Audit) were studying and discussing his volume:

I confess it fills me with astonishment to find that you think, and from what you say they appear to agree with you, that the measure of value is not what I have represented it to be; but that *natural price*, as well as *market price*, is determined by demand and supply,—the only difference being that the former is governed by the average and permanent demand and supply, the latter by the accidental and temporary.—In saying this do you mean to deny that facility of production will lower natural price and difficulty of production raise it? Will not these effects be produced; after a short interval, although the absolute demand and supply, or the

⁴⁸ Malthus's late reply to Ricardo's book, which had been published in April, was explained by Ricardo having been in France for much of the summer, while Malthus was in Ireland. Malthus's comment came after a second reading of Ricardo's volume.

proportion of one to the other, should remain permanently the same? At any rate then demand and supply are not the sole regulators of price. I should be glad to understand what Lord King and you mean by supply and demand. However abundant the demand it can never permanently raise the price of a commodity above the expence of its production, including in that expence the profits of the producers. It seems natural therefore to seek the cause of the variation of permanent price in the expences of production. Diminish these and the commodity must finally fall, increase them and it must as certainly rise. What has this to do with demand?

(*Works*, Vol. VII, pp. 250-251; Ricardo to Malthus, 30 January 1918; italics in original)

Torrens's criticism of Ricardo was limited to the nature of production functions, and he did not mention the role of demand, since he also was concerned with the long run. Malthus's short-run orientation apparently led to the conclusion that demand always was an influence upon price, even in the long run. But given Ricardo's assumption of constant cost under competitive conditions, demand could play no role in determining exchange values. Demand would determine the relative quantities of goods produced, but not affect their relative costs of production. Malthus himself must have recognized something of this argument, for in his next letter he conceded that Ricardo's theory was true "*ceteris paribus*." He held to his general position, however, that variations in price were much more common "than variations in value arising from different quantities of labor employed in producing corn." In fact, he claimed that for the past 25 years there had been no marked increase "in the quantity of labour necessary to produce corn at home" (*Works*, Vol. VII, pp. 214-215; Malthus to Ricardo, 3 December 1817).

If Malthus were correct, and he certainly believed he was, then the whole debate over the corn laws was deprived of any practical importance. Ricardo's answer that while there may not have been any significant rise in the difficulty of producing home-grown corn, due to the improvements in domestic agriculture, still the nation's output of goods would have been even greater over the previous 25 years, if corn had been imported. He did not deny that wealth had increased, nor that there had been significant capital accumulation, but that a large portion of that wealth had been transferred to the landlord class. In the absence of that transfer there would have been greater profits and "our wealth would have increased in a still greater ratio than it now has done" (*Works*, Vol. VII, p. 271; Ricardo to Malthus, 24 June 1818). Since rent was a transfer,

before it is paid to the landlords as rent it must have constituted the profits of stock, and a portion is made over to the landlord only because lands of a poorer quality are taken into cultivation.

(*Works*, Vol. VII, p. 283; Ricardo to Malthus, 20 August 1818; the same views are expressed in a letter of 24 June 1818, pp. 270-271)

The notion that rent was a transfer and never a creation of wealth was dependent upon the assumption there always was land in cultivation which yielded no rent. On no-rent land there were ordinary profits at the same rate as in any other agriculture. Rent was the differential between the facility of growing corn on inter-marginal land and the land at the margin of cultivation. In Ricardo's view, the need to increase corn output, from a rising population and accumulation of capital, meant it was necessary to have recourse to still more inferior land. What previously had been no-rent land now became inter-marginal land, and rent as a category of income rose, with a greater transfer to the landlords.

The first contemporary writer in Ricardo's time to dispute the idea of no-rent land was Say, in his notes to the unauthorized translation of Ricardo's *Principles*. In his second edition, Ricardo observed that Say:

has endeavored to shew that there is not at any time land in cultivation which does not pay a rent, and having satisfied himself on this point, he concludes that he has overturned all the conclusions which result from that doctrine. He infers . . . I am not correct in saying that taxes on corn . . . fall on the consumer, and do not fall on rent.

(*Works*, Vol. I, p. 413 and 413n; see Say 1819)

If all land paid rent, a tax on corn would reduce the rent on marginal land and proportionally the rent on all inter-marginal land as the tax could not be shifted. If marginal land bore no rent, a tax on corn would either raise the price to the consumer or lower profits. It was this formulation which provided the essence of Ricardo's theory of taxation.

Ricardo learned in early December of Say's translation from his publisher Murray, who immediately sent him a copy. The book created quite some excitement, in part because no one was aware of Say's activities and also because of the criticisms of almost all of Ricardo's theory of value and rent. Ricardo's suspicion that Say was "not quite friendly towards me" was substantiated once he saw the translation and critique of his *Principles*. Malthus visited Gatcomb Park for four or five days before Christmas, and probably arrived about the same time as Say's book from Murray. The two friends were alone, as all of Ricardo's family were away, and obviously they discussed and read Say and other topics of political economy. In reading Say's criticisms, Malthus found support for much of his objection to Ricardo's *Principles*. What Ricardo found so strange was Malthus's agreement with Say that there was no land which did not yield a rent.

Is it not wonderful that after Malthus publication on rent, after acknowledging the same principles as I contend for, he should now agree with Say, and contend that there is no corn grown in any country which does not pay a rent?—he says that he committed an error in saying otherwise, and that I have followed

him in it, and by the conclusions which I drew from it, have proved the incorrectness of the principle.

(*Works*, Vol. VII, p. 379; Ricardo to Mill,
28 December 1818)

Malthus's *Inquiry into Rent* was a theoretical piece, and while published at the time of the corn law debate of 1815, it was not intended to provide any basis for a policy decision. Malthus himself said it was "ephemeral," and his Haileybury colleague, Mackintosh, deemed it "too philosophical" (James 1979, p. 282). For Ricardo there was nothing temporary or metaphysical about the theory of differential rent; it provided the foundation for his hypothesis that profits were the source of the ever-crucial fund necessary for investment. Although Ricardo himself had developed some notion of the idea of differential rent it was upon Malthus's formulation that he depended, and to whom he attributed the concept, along with West. It must have been extremely frustrating to learn, in December 1818, that Malthus repudiated his own concept of rent as an effect, and not a cause, of price.

Malthus must have realized that his conceptualization of rent had been used in a fashion he never intended, namely to provide a framework which showed that the preservation of an agricultural society was detrimental to the further accumulation of wealth. He had always despised a society dominated by manufacturing, for who could admire a nation dominated by the deprivation of life in a Manchester or a Lancaster, but in Ricardo's hands Malthus's theory of rent was shown to be the major barrier to the attainment of such a society, one in which the wealth of nations would be advanced. Given his fundamental religious and philosophical orientation, Malthus had no alternative but to deny his theory of rent, and to agree with Say that rent was a cause of price, since all land yielded a rent, even at the margin.

Despite his deep respect and admiration for the abilities and achievements of his dear friend Ricardo, Malthus nonetheless must have been concerned about the notoriety which the *Principles* enjoyed. Apropos of the article in the *Edinburgh Review*, he said he "hardly ever met with an article in that journal, which so entirely approved of the work under consideration" (*Works*, Vol. VII, p. 278; Malthus to Ricardo, 16 August 1818). Typically reviews in the journal showed where the author was in error or where some aspect of the subject had been ignored, but the article in the *Review* gave no suggestion of any such criticism, and Malthus even believed the absence of such critical evaluation might have even detracted from the effectiveness of the article. The writer might have given some evidence of an "appearance of thinking more for himself," instead of agreeing "with you on every point" (*Works*, Vol. VII, p. 278 italics in original). He was of the opinion, therefore, that the review must have been written by Mill. When informed that McCulloch was the reviewer, Malthus made no response. He knew of McCulloch, since he also had received a copy of an *Essay on the Reduction of the Interest on the National Debt*, a volume in which he had been described as a writer of "wonted perspicuity." Although Ricardo agreed that McCulloch's review might have "told more if the writer had mixed with it an objection here and there," he was gratified with the praise, more so than if Mill had written the review (*Works*, Vol. VII, p.

282, Ricardo to Malthus, 29 August 1818). As Malthus knew only so well, the support of the *Edinburgh Review* was tantamount to success, since his own 1803 edition of the *Essay on Population* had not been reviewed and his review of Spence had detracted from his reputation as a writer for the *Review*.

Besides his growing reputation arising from McCulloch's articles in the *Scotsman* and the *Edinburgh Review*, Ricardo was also being read by influential Whig politicians. Probably through the efforts of Pascoe Grenfell, Ricardo's book came to the attention of William Wyndham Grenville (1759-1834), former speaker of the House of Commons, Prime Minister during the "Ministry of All the Talents" (1806-1807), and one of the most influential Whigs. By 1818 he was Lord Grenville. He not only read Ricardo's *Principles*, but studied the volume. In December 1817 Ricardo was invited to meet with Grenville, and the following March the meeting took place. Ricardo wrote to Trower that

in an interview which I lately had with Lord Grenville I received from him the most flattering testimony of his favorable opinion of my endeavours to throw additional light on the science of Political Economy. Praise from Lord Grenville on this subject is particularly gratifying to me, because he has given many proofs his persevering attention to it, and on all great discussions, of the correctness of his opinions.

(*Works*, Vol. VII, p. 259; Ricardo to Trower,
22 March 1818)

There seems to be no question that Grenville's support was instrumental to Ricardo's decision to enter Parliament, even though he did not intend necessarily to support the Whig cause. Besides Grenville there was also Francis Place (1771-1854), "the radical Tailor of Charing Cross" and in part a Whig supporter, though not a member of Parliament. A close friend of Bentham and Mill, Place studied Ricardo's *Principles*, and his Notes were nearly as long as the book itself (*Works*, Vol. VII, p. 183 n3).

Malthus knew both Grenville and Place, of course, and was aware of the growing support for Ricardo's ideas among the Whigs. So far as Ricardo was concerned, England's prospects for the future were bright and as always he was optimistic. After the harvest of 1817, he wrote Malthus:

Our harvest in this part of the country is almost entirely got in. The crops are I believe generally good and we are very grateful for the fortunate change in the weather which enabled us to reap and house them in a state of perfection.—We shall now I hope for some years sail before the wind. You and I have always agreed in our opinions of the power and wealth of the country,—we were not in a state of despair at the discouraging circumstances with which we were lately surrounded. We looked forward to the revival which has taken place.

(*Works*, Vol. VII, p. 192; Ricardo to Malthus,
10 October 1817)

The previous year the crop prospect had been extremely poor, and Mill feared as much as a third of the population in his region would die of starvation and "it would be a blessing to take them into the streets and highways, and cut their throats as we do with pigs" (*Works*, Vol. VII, p.62; Mill to Ricardo, 14 August 1816). Mill's expectations were of an extreme character, and he almost was as pessimistic as Malthus, who once had written that mother nature did not have enough place settings for all in need. And, in each instance starvation was the ultimate solution. From his study of India, Mill knew the consequences of starvation, and the horrible death which came from such deprivation. A quick death was preferable to one prolonged, and hence his suggested solution. For Ricardo, the expected distress, after the harvest of 1816, had never been as severe as others envisioned, and he claimed the commercial and agricultural difficulties were temporary. In part, the problems were a consequence of the transition of the economy from war conditions to peace.

The continuance of the cold and wet weather does not afford us a very good prospect for the harvest, and I am very much afraid that the poor will have much to suffer during the next winter. I cannot however relinquish my hope that they will not long continue without work. The actual capital of the country,—the funds for the maintenance of labour cannot have been much impaired in consequence of the change from war to peace, and it appears to me that a sufficient time has elapsed to make that new distribution of employments which our altered circumstances have made necessary. The duration of the intervals between marked changes are often much longer than is generally supposed. It proceeds from the opposition which is naturally given to such change. Thus a reduction in the amount of the circulating medium should speedily operate on prices, but the resistance which is offered—the unwillingness that every man feels to sell his goods at a reduced price, induces him to borrow at a high interest and to have recourse to other shifts to postpone the necessity of selling. The effect is however certain at last, but the duration of the resistance depends on the degree of information, or the strength of the prejudices of those who offer it, and therefore it cannot be the subject of any thing like accurate calculation.

(*Works*, Vol. VII, pp. 66-67; Ricardo to Mill,
8 September 1816)

Mill's expectation of distress did not materialize, and while prices of agricultural goods rose during the winter of 1816, the rise did not precipitate wholesale starvation. In a country where better than half the invested capital was in agriculture, it was not surprising that impending distress in such an industry would portray bad times for all sectors of the economy. It was because of the sudden turnaround from poor to good harvests that Ricardo was so enthusiastic in 1817;

England would now be able to "sail before the wind." Malthus, the pessimist, was not so sanguine. Even with the prospect of good crops, Britain could not look forward to clear sailing, as Ricardo's formulation predicted. Malthus told his friend:

I hear the sale of your work goes on swimmingly, and that you are preparing another edition; but pray don't render all my fine arguments useless. I am inclined to think that where we shall most essentially differ in our practical conclusions is on the point where Say and Mill are distinctly with you. Your conclusions however naturally follow from your original definition of value in exchange and your too decided separation of wealth and value, which I have always thought fundamentally wrong. You have quite overlooked the consideration of *value* as the prime power of industry and the grand stimulus to production.

(*Works*, Vol. VII, p. 312; Malthus to Ricardo,
21 October 1818; italics in original)

Ricardo was thus warned, and he had not heard the last from his severest critic, for despite "Mr. Mill's principle," or Say's Law, an industrial society was prone to underconsumption, since the "desire" for additional industrial goods was naturally satiable. Since desire was necessary for demand, the problem of value would arise. Hence, Malthus's argument for agricultural protection took on a new dimension. It was no longer a matter of being dependent upon a potentially unfriendly foreign power for food in the event of war, it was no longer a question of a poor harvest in a nation upon whom one was dependent for imports; it was now a question of whether a predominantly industrial economy could sustain the requisite level of demand to ensure continuous prosperity and provide the stimulus for further capital accumulation. In October 1818, Malthus shifted his ground of opposition to Ricardo's system. The essence of the *Essay on Population* had been the argument that society could not provide a sufficient supply for the needs of an expanding population, while the new line of defense was that society could not provide the requisite desire for the industrial goods which a future economy could produce. It might seem there was somewhat of a dichotomy associated with the shift in emphasis, but that was not the case. The beneficiary in both instances was the landlord class, a class that gained when society could not provide enough subsistence and a class needed when society could not provide a sufficient level of consumption needs. In the latter instance, the landlord class would sustain the economy with "unproductive consumption," a phenomenon which Ricardo believed was as useful as a good fire.

Ricardo's *Principles* enjoyed a great deal of success, but events did not go as "swimmingly" as Malthus claimed. Torrens's "Strictures" raised significant problems, and the private criticisms raised by Malthus were not limited to Ricardo alone, as Malthus set forth his objections in other circles, particularly with his

Haileybury colleagues. Then there was Say, who though he wrote in a foreign tongue had considerable influence because of his reputation; a reputation that probably was not deserved. In addition, there was the *British Review*, where a reviewer accused Ricardo of "ignorance and absurdity." The article actually was a review of Ricardo's *Principles* and Say's *Traite* (Anonymous 1817), and Say came off pretty well, inasmuch as the reviewer was favorably impressed with his presentation and argument. Ricardo's ideas were another matter. The reviewer thought the assumptions of a product being produced with no labor, or of a machine which would last a hundred years, were absurd. Both assumptions were part of Ricardo's analysis of the different effects upon price of a rise in wages when products were produced with different degrees of durable capital. At one extreme was production with all labor, the other extreme being production with all capital, and a rise in wages would have zero effect on price in the latter case (*Works*, Vol. I, pp. 59-61). The review also thought Ricardo's assumption of no-rent land showed ignorance of the literature, since Adam Smith had said that "the most desart [sic] moors in Norway and Scotland . . . afford some small rent to the landlord" (Anonymous 1817, p. 315).⁴⁹ As Ricardo told Malthus, they were both accused of obscuring the nature of rent, which in Smith's analysis had been "so clear" (*Works*, Vol. VII, p. 222; Ricardo to Malthus, 16 December 1817).

The attack in the *British Review* obviously upset Ricardo, as he mentioned the review to all his correspondents: Mill, Trower, Say, and, of course, Malthus. McCulloch defended Ricardo's use of assumptions, such as a machine which would last 100 years, on the grounds they were intended "for the sake of illustrating his general principles," and the foundation of his theoretical analysis (McCulloch 1817a, p. 343). All of Ricardo's friends told him to ignore the article, and Trower even suggested the piece might have been desirable, because it provided McCulloch the opportunity to produce such an adequate reply (*Works*, Vol. VII, p. 256; Trower to Ricardo, 28 February 1818).

Indirectly, Ricardo was also attacked in *Blackwood's Edinburgh Magazine* ([Lockhart] 1818). The author of the article, who signed himself "J.G.," was undoubtedly J. G. Lockhart, the editor of the journal. There is no evidence Lockhart actually read the *Principles*, as he quoted only from McCulloch's article in

⁴⁹ The reviewer did not quote Smith's full passage, however, which reads: "The most desart [sic] moors in Norway and Scotland produce some sort of pasture for cattle, of which the milk and the increase are always more than sufficient, not only to maintain all the labour necessary for tending them, and to pay the ordinary profit to the farmer or the owner of the flock; but to afford some small rent to the landlord" (Smith 1937, pp. 146-147). Malthus and Ricardo, of course, were speaking of land on which to grow corn. That there was some land where cattle could not graze was open to question, and in 1776 such land may not have been at a margin of cultivation, as was the case during the Napoleonic Wars. Besides, Malthus and Ricardo were speaking of land on which corn could be raised, not near marginal pasture land. In Smith's day, farmers may not as yet have moved to marginal pasture land, a situation which neither Britain nor Normandy had yet reached.

the *Edinburgh Review*. Lockhart had a single point of departure, namely McCulloch's statement to the effect that

It follows from these principles, that the interest of Landlords is always opposed to that of every other class of the community.

([Lockhart] 1818, p. 58)⁵⁰

Lockhart rejected such an interpretation, for to question the right of landed property was to strike at the very heart of the integrity of society. Rather than classes being opposed to one another, they were "linked together by an invisible adamantive chain, which no ages nor oceans can interrupt." The adamantive link was "formed and sustained by Him," for it

is the natural and necessary consequence of inequality of property, which inequality is the natural and necessary consequence of the idea of property being at all admitted among men. I talk of civilized life. Wherever there is property there must be power, and where there is inequality of property there must be inequality of power. And this I look upon as the most natural, the surest, and safest *basis* of government,—whatever may be the *superstructure*.

([Lockhart] 1818, p. 60; italics in original)

Private property and inequality were one and the same, regardless of the superstructure, a class analysis with which Marx would have readily agreed. Moreover, the basis of society was dependent upon landed property, a class more essential to society than either the mercantile or stock-holder classes, with labor ignored. What the editor of *Blackwood's* objected to was the exclusion of peers from the House of Commons, for it was the great landed families of Britain which provided the basis of the pyramid of society. What was happening in Britain was the gradual reduction of the influence of the landed interests, as the monied interests grew in importance. Thus, Cobbett was quoted:

An English Peer has scarcely any other influence than an English Gentleman of equal fortune, and scarcely any other interest to maintain it. *The whole landed interest, including the peerage, is scarcely a match for the monied interest either in Parliament or out of it; and, as it is the basis of a more steady and permanent, as well as a more liberal and exalted dependency, we wish to see Peers concerned in elections rather than Stock-jobbers and Nabobs.*

([Lockhart] 1818, p. 60; italics in original)

⁵⁰ McCulloch's wording was a bit different: "It follows, from these principles, that the interest of the landlord is always opposed to that of every other class in the community." McCulloch 1818a, p. 81.

What the reviewer in the *Edinburgh Review* was proclaiming was class conflict, and "none can be injured, in the first instance, but the rest must ultimately suffer." Rather than fostering a belief that the landed interests were opposed to the other classes, the *Edinburgh Review* should be advocating the unity of classes. Books, such as that of Ricardo, fostered a strong "tendency to make mankind unhappy and discontent with their situation." It was from such sources that anarchy would spring.

The article in *Blackwood's*, Ricardo believed, was "very paltry" and "unworthy of notice" (*Works*, Vol. VII, p. 332; Ricardo to Murray, 23 November 1818). The journal was known as a voice of a tired and dying aspect of Toryism and very few paid it much attention. Nevertheless, Lockhart's indirect attack upon Ricardo was one of the first to raise the advisability of questioning the right of property, for if the legitimacy of landed property was raised, what of the right of all private ownership of the means of production? It was that question which was to become the basis of arguments of the Ricardian socialists, as well as of their opponents, in the next decade.

To sum up the reaction to the first edition of Ricardo's *Principles*, he had a few converts to add to his old friends, Mill and Trower. Most important, of course, was McCulloch, because of his journal articles. There was also Lord Grenville and Francis Place, and they would count in the future. In influential Edinburgh, the home of political economy, Ricardo was reported to have few converts:

Smith was here worshipped as a demigod; and when your work appeared it was reckoned little better than petty treason to presume to doubt one of his dogmas—This thorough paced belief in the accuracy of *all* that is stated in the Wealth of Nations, has now, however, been a good deal modified—and although there are a considerable number who continue as warm and as indiscriminating in their praise as ever, I am confident that at no distant period it will be generally admitted that it is to *your* work, and to Smith's, that those who wish to cultivate an acquaintance with the real doctrines of the science must have recourse—

(*Works*, Vol. VII, p. 295; McCulloch to Ricardo;
italics in original)

On theoretical grounds there were the critical views expressed by Torrens and Say; probably more significant were the private opinions of Malthus, and his colleagues at Haileybury, who called into question not only the theoretical foundation of the *Principles*, but the policy conclusions which followed from that premise. McCulloch claimed David Buchanan was going to attempt to overthrow Ricardo's system, "*de fond en comble*." The work never materialized and it was Malthus who finally wrote a volume with such an intention. Meanwhile, the first edition of Ricardo was sold out, and Murray wanted to satisfy the demand rather than have the volume fall into the category of "rare statues and pictures, scarce books and coins" [?].

Changes in Ricardo's Second Edition

The first mention of a second edition of the *Principles* came within three months of initial publication, when Ricardo informed Trower that Murray claimed a second edition "will most assuredly be required" (*Works*, Vol. VII, p. 162; Ricardo to Trower, 15 June 1817). It was not until the autumn of the following year, however, that Ricardo was asked to make whatever changes he believed necessary in order to bring out a new edition. He attributed a portion of the success of the book to McCulloch, saying

its sale it seems has been much accelerated by the distinguished notice which you took of it, and Mr. Murray is so much of a political economist as to know that it is his interest to increase the supply with the demand, and he seems also to be aware that the demand for some articles is very much governed by caprice.

(Works, Vol. VII, p. 337; Ricardo to McCulloch,
24 November 1818)

Although Murray's interest may have been financial, that was not the case for Ricardo, who took no royalties. His interest was to influence public opinion, the prime concern of the vast majority of true intellectuals.

As many authorities have noted, the major changes in the second and third editions of the *Principles* occurred in the first chapter. Ricardo observed that there were numerous complaints about the chapter, since it was too long and complicated. In the second edition he attempted to deal with such criticisms by dividing the chapter into five sections, with a summary statement of the point to be made in the succeeding pages. When it came to the third edition, he extended the division into seven sections and rewrote the last half of the chapter. A new section II was inserted in the second edition summarizing the point that labor of different qualities, being differently rewarded, did not cause any variation in relative values, the text itself being unaltered. Also a new section was added in the third edition, "On an invariable measure of value," and it was the inclusion of this section which required Ricardo to recast the last half of the chapter.

The new section headings of Chapter I were sent off to Murray in late November with a request he send a messenger to Mill with the suggestions subject to his approval. There also was an instruction that the messenger should wait while Mill read the insertions (*Works*, Vol. VII, p. 333; Ricardo to Murray, 23 November 1818). The instruction for the messenger to wait for Mill's approval suggests several things. First, that Ricardo did not consider the changes to be of monumental proportion, and, second, the approval was somewhat in the form of a concession to Mill, since obviously he could not assimilate the full implication of the changes while a messenger waited in the foyer. As might be predicted, Mill offered no objections, probably figuring he could always make changes in the printer's page proofs, the procedure he had followed with the first edition of Ricardo's *Principles*.

Besides the division into sections, Ricardo made two additional changes in the first chapter. He added a footnote, to deal with the *British Review*:

I have supposed a machine to do work without any assistance from human labour, which is evidently impossible. A writer in the *British Review* has absurdly argued as if this supposition was essential to the truth of the principle. But it is obvious that similar results, though not equal in degree, will take place when both manufactures employ labour, and machinery or other capital, if the latter be of unequal durability.

(*Works*, Vol. I, pp. 60-61 n1)

The other textual change in the first chapter was to concede that changes in the durability of circulating capital would also affect the degree of a change in price when wages changed. The effect of the frequency of the changeover in circulating capital would be the same as the effect of the durability of fixed capital (*Works*, Vol. I, pp. 60-61 n1). This change occurred because of the discussions with Torrens, who had argued that variations in the durability of circulating capital were of like consequences, and Ricardo conceded his point but without reference, which probably disturbed Torrens because he was not referred to at all.

Besides the notes added by Ricardo in order to placate Torrens, he also added two notes at McCulloch's request. The latter had recently published two articles in the Supplement to the *Encyclopaedia Britannica*, one on the "Corn Laws and Trade," the other on the "Cottage System."⁵¹ He suggested to Ricardo that if he "could contrive to make reference" to the article on corn

This would stamp it with an authority to which it cannot otherwise have any pretensions, and might in other respects be of considerable service to me—

(*Works*, Vol. VII, p. 354; McCulloch to Ricardo,
6 December 1818).

Ricardo obliged, without identifying McCulloch, observing that the article was well worthy of attention and that the author was a complete master of the subject (*Works*, Vol. I, pp. 267, 318, notes). Ricardo's long quotation from McCulloch's article in the Supplement could just as easily have come from his pamphlet on *Reducing the Interest on Debt*, since the wording was almost identical.

Besides his request for a citation to his own Corn article, McCulloch made numerous suggestions for changes in the second edition, some of which Ricardo accepted, and others he rejected. Of all the readers of Ricardo's first edition,

⁵¹ The six volume Supplement to the fourth, fifth and sixth editions of the *Britannica* was published between 1815 and 1824, with articles from many of the most outstanding authorities of Britain and France. McCulloch's articles appeared in Vol. III of the Supplement, 1818, pp. 363 and 375. Edited by Macvey Napier (1776-1847), the Supplement contained numerous contributions by Mill and Jeffrey, as well as those by McCulloch, Malthus, Ricardo and Walter Scott.

McCulloch was probably more familiar with the content than anyone else, and he wanted to strengthen the impact and to stress the policy implications. Mill was too busy with his own book on India, while Torrens and Malthus had other intentions.

One aspect of Ricardo's volume, which particularly bothered McCulloch, was the view that while taxes should be reduced, nevertheless "a country could bear a very great addition to its burdens without infringing on the integrity of its capital" (*Works*, Vol. I, p. 242 n). The statement in the Scot's view, was an open invitation for finance ministers to increase the tax burden:

All governments are but too much inclined to tax . . . and when a philosopher has pointed out the bad effects of excessive taxation in general, it is quite uncalled for and can serve no good purpose for him to attempt by afterwards modifying his expressions to apologise for the mischief by which it must in every case be attended . . . [hopefully] you will see the impropriety of contaminating a work destined to be immortal, with any thing that can be construed into an excuse or palliation of that system of profligate extravagance according to which the economical affairs of the different European nations have long been managed.

(*Works*, Vol. VII, p. 281; McCulloch to Ricardo,
15 July 1818)

In the process of revision, Ricardo told his friend in Edinburgh that he had been looking for places in the book where he had held out an apology for ministers to increase taxes, but could find only one. He would, therefore, delete the statement about a country being capable of carrying a heavier burden of taxation and suggest instead that ministers should never neglect Say's golden maxim:

the very best of all plans of [public] finance is to spend little, and the best of all taxes is that which is the least in amount.

(*Works*, Vol. VII, p. 338; Ricardo to McCulloch,
24 November 1818; the statement appears in the
Principles, *Works*, Vol. I, p. 242)

Since Ricardo already had quoted Say's golden maxim, several pages preceding the above insertion (*Works*, Vol. I, p. 235), he really did not add very much, but enough to satisfy McCulloch. As Mill pointed out, McCulloch would have liked to list Ricardo's name amongst those who were "against excessive taxation," and so would he, but it was for Ricardo to decide "whether this work is the place for the peculiar incalculation of that doctrine" (*Works*, Vol. VII, p. 349; Mill to Ricardo, 4 December 1818)

Again on the question of taxation, McCulloch did not believe Ricardo had been clear enough in showing that taxes impeded capital accumulation. Certainly, he had demonstrated that taxes could reduce the amount of private capital accumulation, but at the same time he had said that Britain had a higher standard of living than ever before, despite the heavy taxation of the past twenty-five years.

McCulloch's point was that the standard of living could have been even higher than it was, but for the excessive taxation of the war years. Accordingly, he suggested the following insertion:

Still however it is certain that but for taxation this increase of capital would have been much greater—There are no taxes which have not a tendency to lessen the power to accumulate—All taxes either must fall on capital or revenue—If they encroach on capital, they must proportionably diminish that fund by whose extent the extent of the productive industry of a country must always be regulated; and if they fall on revenue they must either lessen accumulation, or force the contributors to save the amount of the tax by making a corresponding diminution of their former consumption of the necessaries and luxuries of life—Some taxes will produce these effects in a much greater degree than others; but the great evil of taxation is to be found, "not so much in any selection of its objects as in the general amount of its effects taken collectively."

(*Works*, Vol. VII, p. 353, McCulloch to Ricardo, 6 December 1818); the quotation in McCulloch's passage is from the *Principles*, *Works*, Vol. I, p. 152)

Ricardo accepted the suggested wording, verbatim (*Works*, Vol. I, p. 152). Actually, the idea that even though Britain enjoyed a high standard of living, it could be even better, had been used by Ricardo himself in his discussion of the disadvantages of the corn laws in the first edition. Accordingly, in the second edition, lower taxes and lower corn prices, were both shown to be conducive to further capital accumulation.

McCulloch, in his advice to Ricardo, returned to his pet project, the adverse consequences of the national debt and the interest payment it required. Ricardo had convinced him that paying off the national debt was no solution, as in the *Principles* he explained:

By cancelling the national debt, one man's income might be raised from 1000*l.* to 1500*l.*, but another man's would be lowered from 1500*l.* to 1000*l.* These two men's incomes now amount to 2500*l.*, they would amount to no more then. If it be the object of Government to raise taxes, there would be precisely the same taxable capital and income in the one case, as in the other. It is not, then, by the payment of the interest on the national debt, that a country is distressed, nor is it by the exoneration from payment that it can be relieved. It is only by saving from income, and retrenching in expenditure, that the national income would be increased, nor the expenditure diminished by the annihilation of the national debt . . . it is error and delusion to suppose, that a real

national difficulty can be removed, by shifting it from the shoulders of one class of the community, who justly ought to bear it, to the shoulders of another class, who, upon every principle of equity ought to bear no more than their share.

(*Works*, Vol. I, p. 246)

But McCulloch believed there were external consequences associated with the existence of a national debt:

By laying the foundation of a pernicious system of gambling and agiotage it enables a few individuals dexterously to avail themselves of the fluctuations in the price of the funds, and to acquire immense fortunes not by the exertion of a steady and persevering industry, but chiefly by dint of superior sagacity in taking advantage of the errors of less fortunate speculators— These fluctuations too, inasmuch as they flatter the confidence which every person has in his own good fortune, combined with the facility of immediately selling out stock, attach an inordinate proportion of the national capital to the trade of the funds,—a trade which cannot possibly be of any public advantage . . .

(*Works*, Vol. VII, p. 352, McCulloch to Ricardo,
6 December 1818)

This was the same sentiment McCulloch had expressed in the second edition of *Reducing the Interest on the Debt*, only this time he did not refer to the "nefarious practice of stockjobbing" (McCulloch 1816b, p. 181). At the time McCulloch presented these views to Ricardo, the ex-stockjobber, they had exchanged a total of only nine letters over the course of a year and a half. They had never met, of course, and there is no way of knowing whether McCulloch was aware of Ricardo's activities in the stock exchange and that in fact he was one of those who "by dint of superior sagacity" had benefited at the expense of "less fortunate speculators." Ricardo did not incorporate in the revision of his *Principles* McCulloch's views regarding the evils of trading in the national debt, since agreement would have implicitly acknowledged his own "past immoral behavior" [?], not to mention his current trading in the French securities. He could, obviously, also have pointed out that stock market speculation began with the trading of East India securities, and that Sir Josiah Child was the original stockjobber.

McCulloch was so convinced about the evils of the national debt, he believed the Government should default. Such an act might well cause a national bankruptcy, but it would have no effect whatsoever upon "the productive capital of the county," by which he must have meant the physical capital. By reducing the need to pay taxes on the debt, the benefits of defaulting could "not be disputed," and "after the first frottement had been got over, [it would] be attended by an increasing demand for labour, and by an increase of national wealth" (*Works*, Vol. VII, p. 352). The only persons to suffer from the default would be the current holders of

the national debt, but since they had acquired their wealth by evil practices, like stockjobbing, their discomfort "could not be reckoned very disadvantageous" [?].

In expressing his appreciation for McCulloch's numerous suggestions for improving his book, Ricardo nonetheless disagreed with the suggestion for a default on the national debt. In his view, the only equitable solution for removing the burden of the debt was for the Government to pay it off, by having taxes exceed expenditures for the requisite number of years. While he might agree with McCulloch about the evils of the debt, including the gambling in stock, he disagreed "as to the remedy" (*Works*, Vol. VIII, p. 4; Ricardo to McCulloch, 3 January 1819).

Another of McCulloch's suggestions was the timeliness of Ricardo's second edition and its association with the forthcoming Parliamentary debates on the resumption of specie payments by the Bank of England. Under the terms of the Bank Restriction Act of 1797, the Bank was to return to specie payment within two or three years following the end of the war. The first serious consideration of a return to the gold standard had arisen in April of 1818, but Vansittart, Chancellor of the Exchequer, urged the temporary continuation of the suspension of cash payments. He told the Commons that the French Government had already borrowed £12 million from London bankers in 1818, and negotiations were going on for a loan of an additional £20 million. He had reason to believe that if the Bank of England was now required to redeem its Notes in bullion, there would be a great export of specie. His reason for assuming this possibility was the experience of the preceding October, when the Bank offered to redeem all notes dated prior to January 1817. At that time the Bank paid out £2.6 million in bullion, and "hardly any part remained in circulation" in England, as specie was exported to pay for the importation of corn. He called attention to the very poor harvest of 1816, and the average one in 1817, claiming they were the cause of the export of specie. With the large loans now being negotiated with the French Government, there would again be an export of bullion, if the Bank was forced to redeem its Notes. Given these facts, he requested another year's moratorium. George Tierney, the Whig leader, and Pascoe Grenfell spoke in opposition to Vansittart's motion, but to no avail (*Debates of Parliament*, House of Commons, Vol. xxxvii, April 10, 1818, pp. 1229-1254).

The Bank Directors, of course, always claimed they did not hold sufficient bullion to redeem their bank notes, fearing a run would cause a national financial crisis. Ricardo, in his *Secure Currency*, had suggested a plan for the redemption of notes in excess of 20 ounces, a policy which would restrict the need of holders of small notes to demand bullion. Those who held large notes, which would require the payment of more than 20 ounces of bullion would be reluctant to request redemption, and there would be no need to request the minting of gold coin. Under Ricardo's plan the Bank Directors would be reluctant to further increase the amount of the paper currency, since they would have to maintain some ratio between bullion holdings and the quantity of their bank notes. So long as there was the requirement that they had to redeem notes of a value in excess of 20 ounces of gold, priced at a fixed rate of £3 17s 10½d to an ounce, Bank Directors would be

restrained, and gradually they would reduce the quantity of bank notes. Such a procedure would over time reduce the high price of bullion, and restore the equilibrium between the market price and the mint price of bullion.

McCulloch had mentioned Ricardo's plan in the *Scotsman*, urging Parliament to adopt it, when the matter came up for debate in the spring of 1818 (McCulloch 1817b, p. 333). He also wrote a long article, "Economical and Secure Currency", published in the *Edinburgh Review* (1818c),⁵² in which he traced the history of the Act of 1797, the theory of paper currency, and reasons why Ricardo's plan should be adopted. His only modification of Ricardo's suggested plan was that payments should be limited to 500 or 1000 ounces, as against Ricardo's 20 ounces (McCulloch 1818c, p. 71). He apparently believed the 20 ounce limit was too low, and such a level of required redemption could precipitate a run.

Panics generally operate with the greatest effect on the lower classes, or the holders of small notes; and it is they that . . . press to the Bank to demand payment. Extensive merchants and money dealers are aware that no Bank . . . could retire all its notes in the short space of eight to ten days; and they are also aware that the maintenance of their own credit is intimately connected with the prosperity of the Bank [of England] . . . the drain upon the Bank in 1783, and the crises of 1797, were chiefly brought about by the prevalence of a panic among the retail traders and small farmers. But by fixing the minimum quantity of bullion to be given by the Bank in exchange for its notes at 500 or 1000 ounces, it would not be in the power of the holders of small notes to make any sudden run.

(McCulloch 1818c, pp. 71-72)

Because of his article in the *Edinburgh Review*, McCulloch believed Ricardo should include a portion of his *Secure Currency* in the revision of his book. Accordingly, Ricardo enlarged Chapter XXVII (XXX in the first edition), "On Currency and Banks," by inserting four pages of direct quotation from his *Secure Currency*, the insertion being placed within brackets and inverted commas (*Works*, Vol. I, pp. 356-361).

Ricardo was very pleased with McCulloch's article in the *Edinburgh Review* and claimed he would

be puzzled to account for the obstinate prejudices of those who no doubt will continue to refuse their assent to doctrines so mathematically demonstrated.

(*Works*, Vol. VIII, p. 1)⁵³

⁵² The article ostensibly was a review not only of Ricardo's pamphlet, but also of Prinsep 1818. Prinsep was not mentioned in McCulloch's article but at least he was listed in the *Edinburgh Review*, and perhaps that was sufficient.

⁵³ The reference to a mathematical demonstration is confusing, since McCulloch's article was hardly of such a character. The piece was tightly reasoned, but there were no mathematical propositions or equations. Ricardo

Even though the second edition was at the printers, Ricardo wrote to Murray and suggested the insertion from his *Secure Currency*, because his plan had been recommended in the *Edinburgh Review* and might be adopted by Parliament (*Works*, Vol. VIII, p. 5; Ricardo to Murray, 3 January 1819). Murray, of course, acquiesced and inserted the long passage. Ricardo told Mill that nothing new could be said about the need for the Bank to resume payment in specie, "but to arrange it skilfully is a work of merit" (*Works*, Vol. VIII, p. 6; Ricardo to Mill, 13 January 1819). Ricardo's scheme for the resumption of specie payments was adopted by Parliament in Peel's Act of 1819, but, in Ricardo's view, was sabotaged by the Bank of England.

Meanwhile there was one additional change in the second edition of the *Principles*, this one because of the acerbic pen of George Ensor (1769-1843). Of English ancestry, but born in Dublin, Ensor spent most of his literary career defending Irish culture and society. He was particularly critical of British misrule in Ireland and attributed most, if not all, of the country's problems to the administration from Westminster. While he devoted his time exclusively to writing, he was well known, a friend of Bentham and probably Mill, and hence was read by Ricardo. In 1818 he published a volume which was highly critical of Malthus's *Essay on Population* (Ensor 1818) and attacked Ricardo for his view that the Irish were lacking in a desire to accumulate and to improve themselves. Ricardo had written in his first edition:

The facility with which the wants of the Irish are supplied, permits that people to pass a great deal of their time in idleness: if the population were diminished, this evil would increase, because wages would rise, and therefore the labourer would be enabled, in exchange for a still less portion of his labour, to obtain all that his moderate wants desire.

Give to the Irish labourer a taste for the comforts and enjoyments which habit has made essential to the English labourer, and he would be then content to devote a further portion of his time to industry, that he might be enabled to obtain them. Not only would all the food now produced be obtained, but a vast additional value in those other commodities, to the production of which the now unemployed labour of the country might be directed.

(*Works*, Vol. I, p. 100n)

Ensor was critical of Ricardo's view of Irish culture, claiming the Irish were no different than other humans, and it was the administration of British law which denied them the desire for the tastes which would stimulate additional economic activity. "Is it supposed," he asked, "that the Irish are unlike other human beings,

raised half a dozen objections to "trifling" points, but was "very proud of the favourable opinion which you have formed of my speculation." For Ricardo's objections, see *Works*, Vol. VIII, pp. 1-3.

so that they actually choose a life of privation and misery?" (Ensor 1818, pp. 264-265). Ensor's criticism struck home. As Ricardo told Mill:

I have been looking carefully at the passage which displeased Mr. Ensor, and as I have doubts whether my opinion was correct I have altered it, by referring the evils to which some poor countries are subject to bad government, insecurity of property, and a want of education in all classes. I have not mentioned Ireland, but have spoken generally. I hope that I shall disarm him of any future censure.

(*Works*, Vol. VII, p. 334; Ricardo to Mill,
23 November 1818)

The changes in the second edition reflected more than anything else Ricardo's sensitivity to the wishes of others, regardless of whether they agreed with him or not. He was just as responsive to Torrens's desire for recognition, as he was to McCulloch's need for acclaim. In addition, he accepted the latter's suggestions for more precise policy recommendations, as these pertained to the need for reduced taxes and a return to partial specie payment. In turn, Ensor's defense of the Irish led to Ricardo's softening of his denunciation of their lack of initiative. He never was able to endorse a society which lived on the potato, and while he favored Catholic emancipation, he could not advocate a system of religious orthodoxy of any variety. On the other hand, he did not want to offend, and so he deleted his reference to the Irish.

So far as the theoretical aspects of the *Principles* were concerned, the second edition reflected no changes of any substance. The insertion of section headings in the first chapter was intended as a guide and help to the reader in following the tight logic of Ricardo's reasoning: something which always seemed to represent a problem. It was a problem which Ricardo attributed to his inferior ability to communicate; whereas Trower attributed it to the difficulty of the subject matter and Malthus suggested it was caused by his friend's numerous erroneous assumptions.

The Theory of Value in the Third Edition

Ricardo's second edition was published on 27 February 1819, the third edition 21 May 1821. In the interim, two new volumes on political economy appeared, the efforts of Sismondi (1819) and Malthus (1820). The former was published in the spring of 1819, the latter in the spring of 1820. Both authors attacked Ricardo's *Principles*, primarily his views on the unlimited benefits derived from a continuous capital accumulation, and his "peculiar" theory of value. Because of the dates of their respective publications, both Sismondi's and Malthus's references were to Ricardo's second edition, not the third. Ricardo, on the other hand, made revisions in his third edition which muted much of their criticism, especially through rewriting the first chapter and the inclusion of the new chapter "On Machinery."

But in his third edition Ricardo had no references to Sismondi's *Nouveaux principes* (Sismondi 1819), which seems strange. That he read the volume is attested to by his correspondence with Mill (*Works*, Vol. VIII, p. 57; Ricardo to Mill, 6 September 1819), Trower (*Works*, Vol. VIII, p. 80; Ricardo to Trower), and McCulloch (*Works*, Vol. VIII, p. 22; Ricardo to McCulloch, 7 April 1819). As he anticipated, after his initial meeting with Sismondi, the latter's book was "a very poor performance." But ever the optimist, Ricardo told Trower that Sismondi's "errors will be of use to the diffusion of correct opinions" (*Works*, Vol. III, p. 80). Both Sismondi and Malthus took an underconsumption approach, extensively developing the view that there were demand limits to continuous capital accumulation. Neither of their respective volumes were ever reviewed in the *Edinburgh Review*, the only journal which really mattered, but Sismondi's ideas were attacked, *en passant*, in an article dealing with "Mr. Owen's Plans for Relieving the National Distress" ([Torrens] 1819).⁵⁴ Because the authorship of the article on Owen has been a matter of dispute, some of the circumstances which led to its publication are important.

As a successful manufacturer of Lancastershire, a prominent social reformer, and a member of the House of Commons, Owen enjoyed the support of numerous prominent individuals, particularly the Duke of Kent (1767-1820), the fourth son of George III and the father of Queen Victoria. He was one of the vice-presidents of the Westminster Provident Institution and, while a bit of a rake, was genuinely concerned with the status of the poor. In the summer of 1819, the Duke of Kent was responsible for a series of open meetings to consider Owen's plans for a new society.

On 26 June 1819, Ricardo attended the first of Kent's meetings at the Freemason's hall, and although he doubted whether Mr. Owen's plan for "ameliorating the condition of the lower classes" had any chance of success, he finally was persuaded to serve on a Committee to investigate Owen's ideas (*Works*, Vol. V, p. 468). He told Trower that he had initially successfully resisted being appointed to the Committee, but finally gave way to the strong admonitions from the Duke of Kent and Mr. John Smith. The latter was a London banker, an Owen advocate, an M.P. from Midhurst, and one of the first five persons elected to membership in the Political Economy Club, after its organization on 30 April 1821.

It was in vain that I protested I differed from all the leading principles advanced by Mr. Owen,—that, I was told, was no objection, for I was not bound to approve, only to examine.

(*Works*, Vol. VIII, p. 45; Ricardo to Trower,
8 July 1819)

Apparently the next meeting of the Committee to consider Mr. Owen's Plan was held on 26 July 1819, at the London Tavern in the City. As a Committee

⁵⁴ The author dealt with four of Owen's pamphlets: "A New View of Society" (London, 1818a), p. 83; "Observations on the Effects of the Manufacturing System" (London, 1818b), pp. 264; "Two Memorials on Behalf of the Working Classes" (London, 1818c), pp. 27; and "Three Tracts; and an Account of Public Proceedings relative to the Employment of the Poor" (Lanark, 1818d), p. 165.

Member, it would not have been very appropriate for Ricardo to speak against Owen's Plan, so he persuaded Torrens to attend the meeting with him so that he could present the political economy view on the subject, a surrogate for the Ricardian line (Robbins 1952, pp. 129-130).⁵⁵

Whether Ricardo suggested to Torrens that he should send a copy of the speech to McCulloch or whether Torrens himself took the initiative, there is no evidence, but the speech was reported in full in the *Scotsman* (21 August 1819). In commenting to Ricardo about the speech, McCulloch noted:

Mr. Torrens speech at the meeting at London on the subject of Owen's visionary and utopian schemes seemed to me to be extremely good, and indeed one of the best things that I ever recollect to have met with.—It is astonishing that a person who could write the Essay on the Corn Trade, and make the speech in question, should have opposed, and on such untenable grounds the plan of Bullion payments—

(*Works*, Vol. VIII, pp. 82-83; McCulloch to Ricardo, 25 September 1819)⁵⁶

The account of Torrens's speech, as reported in the *Scotsman*, was followed by a more extensive article in the *Edinburgh Review*. Owen's idea of building "quadrangular" communal villages was rejected by the author and by Ricardian political economists on the ground that there was no need to change the structure of society in order to relieve the distress. The article claimed that the economic problem of 1819 was rooted in three causes: first, the extension of the tillage to inferior land; second, the "barbarous restrictions upon Commerce;" and third, the heavy burden of taxation. Relieve those burdens, it was argued, and England "for ages to come, might continue to be the great workshop and emporium of the world" ([Torrens] 1819, pp. 462, 476).

In large part, Owen's argument for the need to reorder the existing system was dependent upon an underconsumption view.

It appears by the context, that he [Owen] conceives that when competition is unchecked by any artificial regulations, and industry permitted to flow in its natural channels, the use of machinery may increase the supply of the several articles of wealth beyond the demand for them, and, by creating an excess of all commodities, throw the working classes out of employment. This is the position which we hold to be fundamentally erroneous; and as it is strongly insisted on by the celebrated M. de Sismondi in his '*Nouveaux Principes d'Economie Politique*,' we must entreat the indulgence of our readers while we endeavor to point out its fallacy, and to demonstrate, that the power of consuming

⁵⁵ Robbins claimed that Torrens accompanied Ricardo to a meeting of the Committee, which must have been on 26 July, and not the first meeting Ricardo attended, on 26 June. Torrens spoke at the July meeting.

⁵⁶ Torrens at the time was still an anti-bullionist and was opposed to Ricardo's proposal for a Secure Currency, primarily his Ingot scheme.

necessarily increases with every increase in the power of producing.

([Torrens] 1819, p. 470)

There followed a long discourse on why total demand could never be less than total supply, even though the author conceded there could be gluts of particular commodities. But so long as there was a desire, either for consumption or capital accumulation, it was "impossible" for the use of machinery "to increase the supply of commodities beyond what the regulations of society permit to be consumed." If, because of export or import restrictions, the government interfered with the free flow of commodity exchange, then demand and supply might not be "truly correlative and convertible terms." In the absence of such interference, total demand and total supply were always equal.

The important and fundamental principle, that increased demand is created by increased supply, appears to have been first noticed by the celebrated M. Say in his *Trait d'Economie Politique*, and by Mr. James Mill, in his pamphlet in answer to Mr. Spence, entitled, '*Commerce Defended*.' We conceive that on this subject the reasoning of the latter gentleman is the most clear and conclusive; and to his able Tract we beg to refer those amongst our readers who, upon questions of this sort, prefer synthetical demonstration from general principles, to that analytical induction from particular cases which we have here attempted to employ. We shall merely add, in this place, that the late glut of British goods in the markets of Europe and America, to which M. de Sismondi refers as a practical proof of his paradox, that poverty may be occasioned by the superabundance of wealth, furnishes no solid objection to the doctrine that a balance necessarily exists between consumption and production.

([Torrens 1819], pp. 473-474)

In response to the *Edinburgh Review*, Sismondi suggested the journal had become such a convert to Ricardo's views, it would not publish an article in support of an alternative formulation of political economy. In fact, he accused Ricardo and his followers of having become a cult.

It is said that the head of the new school, Monsieur Ricardo, has stated that there were not more than twenty-five persons in England who had understood his book. Perhaps that obscurity, which he has conceded, has made those who understand him, consider themselves experts and carry on like a cult, most obstinate to sustain the totality of his system almost exclusively in his very own words.

(Sismondi 1820, p. 112; translated⁵⁷)

⁵⁷ Sismondi text reads as follows: "Le chef de la nouvelle école, M. Ricardo, a dit, déclare lui-même qu'il n'y avait pas plus de vingt-cinq personnes en Angleterre qui eussent entendu son livre. Peut-être de ce qu'il a

Ricardo probably believed he had only a few supporters, and he may have been correct, but undoubtedly he would not have wanted it said in the *Edinburgh Review* or *Annales de Législation*. Sismondi's source, more than likely, was Malthus. On the other hand, Ricardo himself could well have expressed the same view, when he first met Sismondi in April 1819. Ricardo was not one to take personal umbrage with those who disagreed with him, and the reason he did not mention Sismondi's *Nouveaux principes* in his third edition is a matter of conjecture. He may have believed that Sismondi's underconsumption notions had been disposed of in the *Edinburgh Review* article. On the other hand, he had revised his own opinion on the effects of machinery on the laboring classes and, whether or not he realized it, he was now closer to Malthus and Sismondi on the question of machinery than he was to either McCulloch or Torrens. Obviously, he was not an underconsumptionist, but he now admitted his earlier views needed to be altered, an issue discussed below.

Initially, Malthus believed the article on Owen's Plan had been written by McCulloch, but after he visited with Ricardo in London in February he was informed that Torrens was the author. Ricardo reported that Malthus "could hardly believe that Col. Torrens agreed so completely with the doctrines you and I have advocated" (*Works*, Vol. VIII, p. 159; Ricardo to McCulloch, 28 February 1820). That Malthus was convinced of Torrens's authorship is attested to by a letter to Sismondi in which he informed him that Torrens wrote the article on Owen's Plan.

The *Edinburgh Review* has so entirely adopted Mr. Ricardo's system . . . that it is probable neither you nor I shall be mentioned in it . . . The article . . . which you have so ably controverted [Sismondi 1820] was written by another convert by the name of Torrens.

(*Works*, Vol. VIII, p. 376; Malthus to Sismondi, 12 March 1821)⁵⁸

fait profession d'obscurité, est-il résulte que ceux qui l'ont entendu, ou qui ont cru l'entendre, se sont déjà regardés comme des adeptes, et ont apporté un esprit de secte plus obstiné à soutenir, presque exclusivement avec ses propres paroles, tout l'ensemble de son système."

Sismondi's reference to the extensive quoting from Ricardo may have been due to his reading of McCulloch's review article in the *Edinburgh Review*, and the fact that there were no criticisms of Ricardo's ideas. The issue of excessive quotation had been raised by Malthus and he may have called Sismondi's attention to McCulloch's review article.

⁵⁸ Despite the fact Ricardo referred to Torrens as the author of the article on "Mr. Owen's Plan" in the *Edinburgh Review* (1815), several recent and contemporary writers have disputed the authorship. Ricardo was so convinced Torrens wrote the article, that he mentioned it on three separate occasions: to McCulloch (28 February 1820), to Trower (13 March 1820), and to Malthus (4 September 1820). In February 1820, Malthus initially was convinced that McCulloch wrote the article, but Ricardo persuaded him otherwise in the course of a long discussion, and Malthus so informed Sismondi, as indicated above. Malthus originally believed McCulloch had to be the author, because the piece was so Ricardian in approach and he did not think there was anybody, except McCulloch and Mill, who would take such a strong stance in favor of Say's Law. But as he wrote Sismondi, Torrens indeed was another such convert.

There have been any number of reasons advanced by recent and contemporary writers as to why Torrens was not the author of the 1819 article in the *Edinburgh Review*. First and foremost, Torrens's speech against Mr. Owen's Plan, reported "in full" in the *Scotsman* (21 August 1819) did not contain a six-page passage on the Say-Mill law of markets, but there was such a passage in the *Edinburgh Review* article. In the disputed

passage, the author attacked not only Owen but Sismondi as well, the latter attack being the reason it has become known as the "Sismondi digression." Secondly, in his London speech, Torrens concluded his remarks by suggesting that colonization was a better solution to the current "misery" of the laboring classes than Mr. Owen's Plan for a restructuring of English society. In the *Edinburgh Review* there was no mention of colonization, a policy Torrens continued to advocate, and for which he became famous. Accordingly, it has been alleged that McCulloch lifted a large portion of Torrens's speech, added the six-page passage on the Say-Mill law of markets containing the attack on Sismondi, and deleted Torrens's colonization argument. Was McCulloch the author of the *Edinburgh Review* article, or was it in fact written by Torrens, as Ricardo persistently claimed?

The first scholar to question Torrens's authorship was Viner. In 1937, he claimed the piece on "Mr. Owen's Plan" was "more probably written by McCulloch," Ricardo to the contrary (Viner 1937, p. 194 n27). Sraffa undoubtedly read Viner's classic discussion on the Bullionist Controversies and, noting his comment about McCulloch and the 1819 article, raised the issue with him in 1943. The Sraffa-Viner correspondence has not been published, but Donald Winch, who is writing a biography of Viner, has provided the essence of Viner's six reasons for believing that McCulloch wrote the disputed article. (Cited by O'Brien and Darnell 1980, pp. 384, 413). Viner's grounds were: (1) a reference in the Owen article to a piece in "our former Number," an article McCulloch had published in the July 1819 *Edinburgh Review*; (2) McCulloch's claim that he had a monopoly on political economy articles in the *Review* between 1819-1829; (3) Sismondi's reference to McCulloch as the author (Cf. *Works*, Vol. VIII, p. 376 n1); (4) the reference to Mrs. Marcet, because Leonard Horner had suggested to McCulloch that he refer to her in the *Review*; (5) the disputed article was too Ricardian with respect to the Say-Mill law of markets, because Torrens later questioned such a strict interpretation; and (6) the fact that the disputed article contained a four word phrase, "territorial division of labour," which McCulloch claimed to have coined.

Sraffa did not convince Viner, nor vice versa. In the Ricardo *Works* there is no suggestion that any one but Torrens wrote the *Edinburgh* article, other than Malthus, of course. Sraffa probably believed that Ricardo knew more about the authorship of articles published in 1819, than Viner did in 1937 or 1943, and he did not mention his differences with Viner on the subject.

In 1966, John S. Chipman attributed the article on "Mr. Owen's Plan" to Torrens, but only after noting Viner's 1937 statement, and suggesting that because McCulloch "was a notorious plagiarizer" he might have written the article (Cited, Chipman 1966, pp. 710-711 n11). The reason Chipman settled on Torrens was because the "digression on Sismondi" contained numerous arithmetical examples for the purposes of explaining the law of markets, a method of exposition not common to McCulloch. Robbins claimed that Torrens "carried the Classical habit of arithmetical illustration to lengths which were often repulsive. The heart sinks when, having waded through a complicated argument of this sort, the eye encounters the cheerful sentence, 'Let us take another example . . .'" (Robbins 1958, p. 2). In the digression on Sismondi there were three such arithmetical examples and in his "Structures on Ricardo" there are any number of such illustrations. Torrens repeated the argument against Say's law in his *Production of Wealth* (1821, pp. 372-378), but those who believe McCulloch plagiarized Torrens in 1819 also claim Torrens plagiarized McCulloch in 1821.

Chapman sent reprints of his articles to Viner, who then told him about his 1943 exchange with Sraffa over the disputed article, forwarding copies of the correspondence to Chipman. Viner did not convince Sraffa, but apparently he convinced Chipman, at least in part. In an unpublished letter to Viner, 2 June 1966, Chipman concluded that the article might have been "a collaborative effort by professional colleagues." (Cited in Thweatt 1980, p. 400).

Knowing nothing of either the Viner-Sraffa or the Viner-Chipman correspondence, William O. Thweatt published a 1974 article which supported the view that McCulloch wrote the disputed article (Thweatt 1974). Thweatt was persuaded that McCulloch not only wrote the section on Sismondi, but also deleted Torrens's reference to colonization as the solution to the redundant population and the redundant capital. He also raised several of the same points that Viner had raised with Sraffa, particularly Sismondi's statement that McCulloch wrote the article, the reference to the article in "our former Number," and the four word phrase, "territorial division of labour."

In rebuttal to Thweatt, O'Brien (McCulloch's biographer) and Darnell (1980) countered with both conventional literary evidence and a computer analysis of the writing styles of Torrens and McCulloch, concluding that Torrens was the author of the 1819 article.

Thweatt was convinced by neither the O'Brien-Darnell literary evidence nor the reliability of the computer results, because the value of the x^2 's was not very high (Thweatt 1980). By 1980, Thweatt had the Viner-Sraffa and the Viner-Chipman correspondence to support his interpretation that McCulloch and not Torrens wrote the article on "Mr. Owen's Plan," including the "digression on Sismondi." In rejoinder, O'Brien and

Although Sismondi was not pleased with the treatment he received in the *Edinburgh Review*, his work was mentioned twice, and some six pages devoted to disposing of his and Owen's underconsumptionist view. The fact that his work was not listed in the title to the article, along with those of Owen, is what has led to the suggestion that the last six pages of Torrens's article was a "digression on Sismondi" (Sowell 1972, p. 11n). But at least he was treated to a digression, while Malthus's *Principles* was not even mentioned in the *Edinburgh Review*. That the work of such a well-known political economist should be completely ignored, suggests that Malthus was the one with the few supporters, at least among those who mattered.

As the in-house political economist for the *Review*, McCulloch was extremely anxious to review Malthus, but Jeffrey was too close a friend of the author to allow such an article to appear (*Works*, Vol. VIII, pp. 189, 325; McCulloch to Ricardo, 15 May 1820 and 25 December 1820, where he mentions that Jeffrey would not allow him to review Malthus). One would think Jeffrey could have found somebody to review Malthus, but apparently there was no one available. Mill was out of the question, not only because he was close to Ricardo, but also Jeffrey did not have a very high opinion of Mill's abilities as a political economist. Horner would have been Jeffrey's first choice, but he was deceased. Torrens, in his review of Owen, already had demonstrated his hostility to the corn law protection, the underconsumption argument against capital accumulation, and most of what Malthus supported, so Jeffrey was probably as much concerned with protecting his friend from Torrens, as well as from McCulloch. Besides, Torrens had his own paper in which to publish his opinion of Malthus.⁵⁹

The most likely reviewer, and the one who would have been the most objective, was Ricardo, but he refused to write reviews or articles. The one exception to his rule against such writing occurred when Mill intimidated him to

Darnell remain convinced that the literary evidence is on their side, and they have returned to the computer in an attempt to raise the value of their x^2 's (O'Brien and Darnell 1980).

⁵⁹ After retiring from active duty, Colonel Torrens purchased a small London evening newspaper, *The Traveller*. The editor was Walter Coulson, a former amanuensis to Bentham, later a barrister, and finally chief teller to the British Home Office. Although Coulson was editor, Torrens wrote the articles on political economy and in 1820 published three short articles on Malthus's *Principles*, (21 April, 26 April and 1 May). The first piece was nothing more than a notice of Malthus's publication, indicating it was an attempt to "controvert the opinions of Mr. Ricardo."

The second article criticized Malthus's definition of profit, which he assumed arose in the process of exchange. Torrens claimed that profit was a surplus, derived from "the power of human industry to produce a greater quantity of the necessaries of life than is sufficient to support the labourers by whom it is carried on." As to Malthus's practical conclusions in support of agriculture, Torrens said they "would go far to banish manufactures and commerce from the land."

In the third piece, Torrens attacked the notion that rent was a part of exchange value, claiming it was part of surplus and would exist independently of markets. (Robbins 1958, pp. 282-283)

Ricardo told Malthus that since Torrens's "arguments are on my side I of course think his criticism just." (*Works*, Vol. VIII, p. 185; Ricardo to Malthus, 4 May 1820). In August, Malthus was inquiring of Ricardo, "Pray tell me if you know of anything that has been written against me? Has Torrens gone on in the *Traveller*?" (*Works*, Vol. VIII, p. 226; Malthus to Ricardo, 28 August 1820)

Malthus must not have expected anything positive to be written about his *Principles*, and even the Tory *British Critic* hoped Malthus would "some day favour the public with a complete system of political economy, arranged in a strictly scientific form" (quoted from James 1979, p. 310).

write an article on the "Funding System" for the Supplement to the *Encyclopaedia Britannica* (*Works*, Vol. VIII, pp. 59-60 n1; quoting Mill to Napier, 10 September 1819).⁶⁰ There is no evidence anyone ever suggested Ricardo as a reviewer of Malthus, and he obviously would have refused. The two French political economists, Say and Sismondi, were out of the question, if for no other reason than their articles would have had to be translated. Meanwhile, the review copy of Malthus's *Principles*, forwarded to the *Edinburgh Review*, gathered dust on the shelf in Jeffrey's office. Malthus worked on a revision of his *Principles*, almost immediately after it appeared, and sent the revision to Murray in January 1823. But it also gathered dust. In a somewhat pathetic letter to Murray, Malthus inquired about his manuscript for a second edition:

I am sure that you must have quite forgotten every thing about the *Principles of Political Economy* which I left with you three weeks ago, or I must have had a proof sheet by this time. It would be very desirable on many accounts to have it out early in May. But this will certainly not be done unless we make more haste. I shall be in Town I believe the end of the week or the beginning of next, and will then call, and shall hope to find matters in progress.

(Quoted in James 1979, p. 318)

It was thirteen years later that Murray published the second edition of Malthus's *Principles* (1836), and then only as a memorial to an old friend. Copies of the first edition of Malthus's *Principles* did not sell well, probably because those who agreed with him did not need to reconfirm their opinions or find new arguments why they were correct. For the reformers and radicals, as well as the liberal Whigs, not purchasing the volume was the best treatment, as Ricardo's influence gained more and more support. In September of 1819, Ricardo was informed that the University of Saint Andrews, the oldest university in Scotland, had adopted his "great work as their text book on the science of which it treats" (*Works*, Vol. VIII, p. 82; McCulloch to Ricardo, 25 September 1819).

⁶⁰ In agreeing to write the article, Ricardo wrote: "I am to kiss the rod [like a punished school boy], and take myself seriously to my task! And do you really expect such obedience? I am inclined to shew you a little of my democratic spirit, and tell you plainly that I will not be an author on compulsion, but when I reflect that you have always been a good master and guide to me—that it is to your encouragement that I am indebted for the gratification which my vanity has experienced as an author, I am induced to pause, and not at once rush into open rebellion" (*Works*, Vol. VIII, p. 60; quoting Mill to Napier, 10 September 1819). Ricardo's article was published in September 1820, *Supplement to Encyclopaedia Britannica*, Vol. IV; reprinted in *Works*, Vol. IV, pp. 149-200. Ricardo's article was retained in both the seventh and eighth editions of the *Britannica*, because it was "so excellent."

While the *Edinburgh Review* and Murray pushed Malthus aside, Ricardo began to prepare his third edition, with a view to answering many of the criticisms and differences of interpretation contained in Malthus's *Principles*. Altogether, Ricardo wrote out 315 "Notes on Malthus" and at one time gave serious consideration to publishing them as an Appendix to his new edition. After Mill strongly objected to such a scheme, it was abandoned. As Ricardo wrote to Trower, Mill thought that

I ought by all means to avoid giving too controversial a character to my book, and indeed he advises me not to notice any of the attacks which have been made upon me, in my third edition . . .

(*Works*, Vol. VIII, p. 333; Ricardo to Trower,
14 January 1821)

After Mill had read Ricardo's "Notes on Malthus," in turn they were sent to McCulloch, Trower and Malthus. Malthus did not correspond with Ricardo about the "Notes," though he did keep them for several months, and they were undoubtedly discussed in private. Both McCulloch and Trower agreed with Mill that the "Notes" should not be published as an Appendix, and Ricardo came to the conclusion that the fire was probably the best place for them.

There were a number of problems associated with Ricardo's "Notes on Malthus:" matters of propriety, strategy and content. It would not have been quite proper for Ricardo to publish an annotated version of Malthus's work without the author's permission,⁶¹ even though that was exactly what Say had done with Ricardo's *Principles*. For Ricardo to publish only his comments would not have made much sense, since the reader would have had to search for the corresponding relevant passage in Malthus, a cumbersome process. Whether he placed just his own notes in an Appendix, or included the relevant passages from Malthus, both schemes would have added considerably to the length of his third edition, and Murray probably would have complained about the added cost and necessary price.

Finally, there was the problem of the content of Malthus's volume. No one doubted the book was intended to be an answer to Ricardo's *Principles* but the latter had thirty chapters, the former but seven. Malthus did not address the issue of taxes, to which Ricardo had devoted ten chapters, nor were there any polemical chapters discussing the various views of Smith, Say or Buchanan. Malthus restricted himself to dealing with Ricardo's initial chapters on the "Principles of Political Economy:" Value, Rent, Wages and Profits. To these he added a new topic, "On the Immediate Causes of the Progress of Wealth," a chapter which raised the issue of the relation between the pace of capital accumulation and the increase in consumption, the problem of the applicability of Say's Law. It was an issue which Malthus had raised many times in his correspondence with Ricardo, and he

⁶¹ Sraffa published Ricardo's "Notes on Malthus" in the manner that originally had been intended: Malthus's original text is at the top of each page, with Ricardo's notes attached at the bottom. Since both authors were long deceased, Sraffa was not faced with the matter of propriety as was Ricardo. (*Works*, Vol. II, pp. xviii, 463)

had even written on the topic in both his review of Spence and his *Grounds of an Opinion*. But there was a new twist in Malthus's Chapter VII, the need for "unproductive consumption."

To the first six chapters of Malthus's volume, Ricardo attached 195 notes, with another 120 to Chapter VII. Malthus's seventh chapter represented about one-third of the whole book, and was intended by the author as the most important contribution of his work. After a careful reading of Malthus, Ricardo claimed the "most objectionable chapter in the book, is that perhaps on the effects from too great accumulation of capital, and the consequent want of demand for the goods produced." (*Works*, Vol. VIII, p. 181; Ricardo to McCulloch, 2 May 1829)

In rebuttal, Ricardo commented:

He is not aware that the produce of a country is always consumed, and that saving means only that a larger portion shall be consumed by those who reproduce a value superior to their consumption . . . It can never happen that capital and labour can be at the same time redundant, except as I said before you have arrived at the end of your resources.

(*Works*, Vol. VIII, p. 181; Ricardo to McCulloch,
2 May 1820)

Ricardo said that if he had not read it himself, he never could have conceived of Malthus advocating an increase in taxes to dispose of the excess of production over consumption. To correct for the deficiency in demand, Malthus advocated "unproductive consumption."

It has been repeatedly conceded, that the productive classes have the power of consuming all that they produce; and, if this power were adequately exercised, there might be no occasion, with a view to wealth, for unproductive consumers. But it is found by experience that, though there may be the power, there is not the will; and it is to supply this will that a body of unproductive consumers is necessary. Their specific use in encouraging wealth is, to maintain such a balance between produce and consumption as to give the greatest exchangeable value to the results of the national industry.

(Malthus 1820, pp. 488-489)

The key passage, on which Ricardo commented in his "Notes", was the statement that unproductive consumption increased the exchange value of goods. For Ricardo, of course, demand played no role in increasing or decreasing exchange value, since the latter arose solely from the amount of labor involved in the production process. As for unproductive consumers:

How can they by their consumption give value to the results of national industry? It might as justly be contended that an earthquake which overthrows my house and buries my property, gives value to the national industry.

(*Works*, Vol. II, p. 436; Ricardo's Note 299)

In spite of his 300-odd "Notes on Malthus," Ricardo's third edition took little notice of the publication of Malthus's *Principles*. There are only seven places in the entire volume where there is any indication that Ricardo made adjustments because of Malthus's volume, four being in footnotes, and three a recasting of paragraphs (*Works*, Vol. I, pp. 18, 47, 81, 83, 87, 334-335 and 404). Three of the references are to Malthus's chapter "On the Nature and Measures of Value" (Malthus 1820, Chapter II, pp. 51-133) and three to his chapter "On the Rent of the Land" (Malthus 1820, Chapter III, pp. 134-239). It is interesting that Ricardo made no reference to the chapter he considered the "most objectionable," the one dealing with Say's law, and the need for "unproductive consumption." What Ricardo did do, however, was to alter his text in order to emphasize that a country's capital, *ceteris paribus*, could be reduced by an increase in "unproductive consumption" (*Works*, Vol. I, pp. 150, 151, and 185; the wording was altered in two places on p. 151).

It is a matter of conjecture why Ricardo did not even mention Sismondi's criticisms and only dealt in a cosmetic fashion with the criticisms raised by Malthus's *Principles*. He may well have been following Mill's advice to ignore his critics, but he did rewrite the first chapter to deal with Torrens's criticisms and he did add the new chapter "On Machinery," in part because of Barton's work. By 1821, Ricardo was very much involved in Parliamentary affairs, and to have made the revisions which would answer Malthus's claim that demand was deficient would have taken more time than was available. To extract from his "Notes on Malthus" what was useful would take too long, just as revising his chapter on accumulation would take more time than he had to spare. A revision of the chapter on accumulation would have been the most likely place to deal with Malthus's claim that demand was a deterrent to accumulation. He told McCulloch that if he had time he would revise Chapter XXI, if he could do it before the printer got that far (*Works*, Vol. VIII, p. 342; Ricardo to McCulloch, 25 January 1821), but the chapter was not revised. In some respects, Ricardo may have believed he had already dealt with Malthus's demand hypothesis, since in his second edition he inserted the following paragraph:

It follows then . . . that there is no limit to demand—no limit to the employment of capital while it yields any profit, and that however abundant capital may become, there is no other adequate reason for a fall of profit but a rise of wages, and further it may be added, that the only adequate and permanent cause for the rise of wages is the increasing difficulty of providing food and necessaries for the increasing number of workmen.

(*Works*, Vol. I, p. 296)⁶²

⁶² Ricardo's Chapter XXI is a recasting of Adam Smith, a discussion which stresses that there are always new vents for capital.

This paragraph represented as good a summary of Ricardo's view as found in any of his extensive writings; undoubtedly the paragraph was inserted as a consequence of his private debate with Malthus over the Say-Mill law of markets. As Ricardo wrote in the first edition:

though a community, or a part of a community, may have as much corn, and as many hats and shoes, as it is able or may wish to consume, the same cannot be said of every commodity produced by nature or by art. Some would consume more wine, if they had the ability to procure it. Others having enough of wine, would wish to increase the quantity or improve the quality of their furniture. Others might wish to ornament their grounds, or to enlarge their houses. The wish to do all or some of these is *implanted in every man's breast; nothing is required but the means, and nothing can afford the means, but an increase of production.* If I had food and necessaries at my disposal, I should not be long in want of workmen who would put me in possession of some of the objects most useful or most desirable to me.

(Works, Vol. I, p. 292; italics added)

Murray was anxious for a new edition and the printer was busy with his task, so Ricardo let his chapter on accumulation go to press in the same way that it had been written in the fall of 1816. He had not changed his view, as Malthus had convinced him of neither any potential deficiency in demand nor the lack of desire for more commodities or services. As a result, the spare time he did have at his disposal was spent in revising his value formulation, since the logic of the early editions was not quite correct.

As discussed in the first chapter of this volume, much has been written of the significance of Ricardo's revision, of the value chapter in his third edition. The great majority of interpretations have held to Jacob Hollander's claim that the revision reflected serious doubts about his earlier view, a withdrawal from the initial proposition that embodied labor was the major measure of value. But the difficulty with Hollander's view stems from the identification of the embodied labor theory of value with a theory of individual price. It is usually ignored that this type of value formulation became significant only with the development of the utility theory of value, already underway in Ricardo's time.

The utility theory of value, with its emphasis upon individual use value, had as its central purpose the explanation of individual market price. But so far as Ricardo was concerned, a theory of value was not a theory of actual price determination; it was merely the setting out of the major causes which regulate exchange value. Ricardo's concern was to show the general consequences of a change in the price of one factor, labor, upon the income of other factors. Nevertheless, he was aware that the consequences of changes in factor payments were not limited to the aggregate level of analysis. He recognized that a change in wages would affect individual prices and not in a uniform fashion. However, his

analysis was not concerned with predicting these actual price calculations. He only wanted to indicate the direction of the repercussions in the movement of individual prices which would follow from the given change in wages.

Changes in relative prices would be zero if labor were the only agent of production, as in the case of Adam Smith's beaver and deer economy. But when fixed capital was included in the analysis of price and output determination, there were degrees of change in relative prices when wages changed, because not all goods were produced with the same proportion of fixed capital. When the amount of labor time required to produce commodities changed (the primary cause), there would be a change in relative prices, but the degree of the price change would also be influenced by proportion of fixed capital (the secondary cause).

Ricardo did not believe the second cause was ever very significant and while he called attention to such consequences, he was more concerned with the direction of the change in relative prices than with the magnitude of such changes. If the direction of the change in prices was the same as the direction of the change in wages, it would follow that when wages rose, prices rose, and the effect of the former could be nullified by the latter. If this were the case, there would be no adverse effect upon profits when wages rose. By raising prices, entrepreneurs could easily compensate for the rise in wages, even given a decrease in the facility of producing a wage good. If, however, when wages rose, the average price of commodities fell, then the price effect could not cancel out the effect of the higher wages, and profits would fall. The inclusion of fixed capital, as a variable which influenced relative values, rather than modifying Ricardo's argument, actually reinforced it, what Sraffa referred to as the "triumphant conclusion" (*Works*, Vol. I, Sraffa's "Introduction," p. xxxv). The conclusion appeared in the first edition, what Ricardo called the "curious effect", but was reinforced in the third edition because of his change in the choice of a *numeraire*.

The inclusion in the Ricardian schema of the forces that regulated the determination of prices was desirable only so far as this aspect of his theory showed that the direction of price changes did not overcome the inverse relation between wages and profits. Ricardo's system conceivably could have dealt only with the movement of the system as a whole without considering the price regulating variables; he could have limited himself to an analysis of the forces determining aggregate output as a whole. The consideration of the influences upon the rate of capital accumulation, the ratio of fixed to circulating capital over time, or the functional changes in income could have constituted the Ricardian system. That is, he could have set out his system in limited macro terms and ignored the value problem. But such a theoretical framework would not have given a satisfactory answer to his critics, like Malthus, who argued that the movement on the individual, or partial, level overcame the general changes occurring in the system as a whole. There was also the legacy of Adam Smith, as his analysis had dealt with both the macro and micro aspects of political economy. Ricardo had to develop a system of analysis to show that when wages rose, profits fell, and that changes in prices could not counteract the effect of the change in wages.

It is in this light that the change in the nature of Ricardo's *numeraire* in the third edition must be considered. The nature of the change was that instead of assuming money was produced with unassisted labor, so no fixed capital was involved in its production, Ricardo adopted a new definition of money, where it was assumed to be produced by the average combination of fixed and circulating capital that went into the production of all other commodities in the system. It has usually been argued that by abandoning his *numeraire* produced by labor alone, and substituting one with both fixed and circulating capital, Ricardo was retreating from his labor theory of value.

Actually, as Sraffa has pointed out, Ricardo's changes were designed for a quite different purpose. The change in his assumption that exchange value "depends solely" to "depends almost exclusively" upon embodied labor represented a shift in emphasis required by the adoption of the new measure of value. The new measure of value strengthened the proposition of the first and second editions, where he claimed that prices did not change, *pari passu*, with a change in wages. Ricardo's theory of value was designed to show that profits were not, in the aggregate, affected by changes other than those occurring in the facility of producing wage goods. As Dobb has said,

It is too seldom remembered . . . that the concern of classical Political Economy was with what one may term the 'macroscopic' problems of economic society, and only very secondarily with 'microscopic' problems, in the shape of movements of particular commodity prices. Ricardo . . . did not pretend that his principle was adequate to determine the latter . . . he was concerned not with particular commodity-values, but with broad classes of commodities, such as agricultural produce and manufactures . . . To this type of problem he considered his approximation an adequate one, and affording the degree of generality which the scale of his problem required. So it was with Marx in the scope of the problem so far as it was covered in his Volume I.

(Dobb 1940, pp. 15-16)⁶³

Ricardo's theory of value should be viewed, as Dobb said, in the same light as Marx's, as a theory of the major determinant of profits, and not as a theory of particular prices. To show that profits were a function of the size of the social product, minus wages, was Ricardo's first problem. To show that the general rate of profit could not be increased by a rise in prices, given a rise in total wages, was his second problem. The second issue can be referred to as Ricardo's attempt to minimize the "price effect" of changes in wages, in counterdistinction to their "profit effect."

⁶³ Marx resolved the problem in the first volume of *Capital* by assuming all commodities were produced with the same ratio of constant to circulating capital. It was in the third volume that he approached the problem in Ricardo's manner by measuring prices against some average of what he called the "organic composition of capital."

In his first attempt to minimize the price effect, Ricardo had utilized a money measure of value which was restricted to labor alone. By employing this "benchmark" he was able to show that, given a rise in wages, the prices of no commodities would rise relative to those of money, since they all contained a smaller proportion of embodied labor than the *numeraire*. All commodities would be less affected than the *numeraire* and could not be increased in absolute price; the increase in wages affected only those commodities which were produced with circulating capital. The commodities most affected, relative to the *numeraire*, were those produced with large portions of fixed capital, and they fell in price. By taking one extreme of the numerous possible production coefficients, Ricardo was able to say that exchange value depended "solely" upon the quantity of labor realized in production, because it was the only variable that could alter any of the exchange ratios. If the prices of commodities could not be increased by an increase in wages, then the sole cause of a change in price was facility of production.

McCulloch gave a good summary of the problem:

Suppose that the durability of the different capitals employed in production are as 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, &c, and that 1 is the least and 10 the most durable—When wages rise they are all affected . . . but in different degrees . . . As any standard with which they can be compared must itself be produced by the employment of capital returnable in a certain period, when wages rise those commodities which are produced by less durable capitals will appear to rise and those which are produced by more durable capitals will appear to fall . . . if the standard had been produced by capital whose durability was equal to 1 they would almost all have fallen as compared with this standard while it is plain that none could have risen . . .

(*Works*, Vol. VIII, p. 339; McCulloch to Ricardo,
22 January 1821)

There was one problem associated with McCulloch's formulation: his number 1 contained some quantity of fixed capital. As a consequence, when wages rose, his number 1 category would be the least affected, but what of industries containing even less fixed capital? As Ricardo explained:

. . . Mr. Malthus and our adversaries say that the standard shall be produced with labour without any capital at all, or at most the capital only that is necessary to support a man for a single day. In this standard your No. 1 would fall with a rise in food and necessaries, and labour [wages] never could rise at all. Malthus has supposed a case of a man by a day's labour being enabled to pick up a certain number of grains of gold or silver on the shore . . . it is proved that a thing which is produced and brought to

market in one day by ten men's labour, is not so valuable as another commodity produced and brought to market at the end of ten days, after one man's labour has for that time been employed upon it. Are you prepared to adopt this standard of daily labour?

(*Works*, Vol. VIII, pp. 343-344; Ricardo to McCulloch, 25 January 1821)⁶⁴

If, when wages rose and prices rose more than proportionately, was it not possible for there to be a rise in profits? Was this not the difficulty with the theory of value which Adam Smith had bequeathed to political economy, that when wages rose there would be a rise in prices? For Ricardo, therefore, the choice of a *numeraire*, the conundrum, was the key to the elimination of the price effect.

Ricardo claimed he was still "fully persuaded that in fixing on the quantity of labour realized in commodities as the rule which governs their relative value we are on the right course" (*Works*, Vol. VIII, p. 344). However the choice of the standard was not easy, since if a day or a week or his original year were chosen to measure the turnover of capital, there would always be commodities produced with a period of turnover shorter than the standard, and then "we introduce a cause of variation in price" (*Works*, Vol. VIII, p. 344).

The problem was difficult and at one point Ricardo was on the verge of admitting that relative value had "two causes instead of one," embodied labor and the durability of capital.

It must be confessed that this subject of value is encompassed with difficulties—I shall be very glad if you succeed in unravelling them, and establish for us a measure of value which shall not be liable to objections which have been brought against all those hitherto proposed. I sometimes think that if I were to write the chapter on value again . . . I should acknowledge that the relative value of commodities was regulated by two causes instead of by one, namely, by the relative quantity of labour necessary to produce the commodities in question, and by the rate of profit for the time that the capital remained dormant, and until the commodities were brought to market. Perhaps I should find the difficulties nearly as great . . . After all, the great questions of Rent, Wages and Profits must be explained by the proportions in which the whole produce is divided between landlords, capitalists, and labourers, and which are not essentially connected with the doctrine of value. By getting rid of rent . . . the distribution between capitalist and labourer becomes a much more simple

⁶⁴ Malthus first raised the issue of money being obtained with no fixed capital on 10 September 1819 (*Works*, Vol. VIII, pp. 64-65). The argument was carried over to his *Principles* (Malthus 1820, pp. 93-94). In Note #25, Ricardo wrote: "Mr. Malthus is quite correct in asserting that many commodities in which labour chiefly enters, and which can be quickly brought to market will rise, with a rise in the value of labour" (*Works*, Vol. II, p. 64).

consideration. The greater the portion of the result of labour that is given to the labourer, the smaller must be the rate of profits, and vice versa. Now this portion must essentially depend on the facility of producing the necessaries of the labour—if the facility be great . . . profits will be high. The truth of this doctrine I deem to be absolutely demonstrable, yet I think that Mr. Malthus does not fully admit it.

(*Works*, Vol. VIII, pp. 194-195; Ricardo to McCulloch, 13 June 1820)

But to have admitted there were two causes of value would have meant that Ricardo would have to abandon his argument that profits depended upon wages, with relative values unaffected. It is not surprising, therefore, that when the third edition appeared, it did not discuss two causes of exchange value.

The new edition did include the new section "On an Invariable Measure of Value." The problem of the section was the same as in the first edition:

When commodities varied in relative value, it would be desirable to have the means of ascertaining which of them fell and which rose in real value, and this could be effected only by comparing them . . . with some invariable standard measure of value . . . of such a measure it is impossible to be possessed . . . there is none which is not subject to require more or less labour for its production.

(*Works*, Vol. I, pp. 43-44)

Besides the variation in value which would occur, because of more or less labor being required to produce wage goods, there were also the variations caused by (1) varying proportions of fixed capital, (2) varying durabilities of fixed capital, and (3) varying periods of turnover of fixed and circulating capital. All of these "circumstances disqualify any commodity . . . from being a perfectly accurate measure of value." There was no commodity which would not be subject to one or several of these variations. Consequently, Ricardo again had to imagine one and again he called it money, but this time the peculiar characteristic he assumed for his *numeraire* was:

May not gold be considered as a commodity produced with such proportions of the two kinds of capital as approach nearest the *average* quantity employed in the production of most commodities? May not these proportions be so nearly equally distant from the two extremes, the one where little fixed capital is used, the other where little labour is employed, as to form a just *mean* between them?

(*Works*, Vol. I, pp. 45-46; italics added)

A standard commodity, produced by an average combination of fixed and circulating capital, allowed Ricardo to predict the direction of deviation in price caused by a change in wages. That is, it provided a theoretical tool by which the direction of the price effect on each commodity could be estimated. While Ricardo did not set out to measure such changes, he did indicate the nature of the solution. He was not interested in actually showing the degree to which the exchange ratios of commodities would deviate from the ratios of the labor they embodied. All he wanted was a solution which would estimate the direction of the change. "The degree of alteration in the relative value of goods, on account of a rise or fall of labour," he said, "would depend on the proportion which the fixed capital bore to the whole capital employed" (*Works*, Vol. I, p. 35). Commodities produced with a larger proportion of fixed capital than the average would rise in relative value, while those produced with less than the average would fall.

The new formulation represented a major change from the first edition, where Ricardo had claimed that a rise in wages allowed some commodities to fall in price, but no commodities would rise in absolute price. Given the new formulation, he allowed for price changes in both directions, with the sum of the deviations above the average being equal to the sum of the deviations below the average. Although he admitted a change in wages did have some effect upon the relative value of commodities, "it would be . . . incorrect to attach much importance to it." Consequently:

The greatest effects which could be produced on the relative prices of these goods from a rise of wages, could not exceed 6 or 7 per cent,⁶⁵ for profits could not, probably, under any circumstance, admit of a greater general and permanent depression than to that amount . . . in the subsequent part of this work, though I shall occasionally refer to this cause of variation, I shall consider all the *great* variations which take place in the relative value of commodities to be produced by the greater or less quantity of labour which may be required from time to time to produce them.

(Works, Vol. I, p. 36; italics added)

By the simplifying assumption of a standard commodity, produced with an average combination of fixed and circulating capital, Ricardo was able to defuse the effect of price changes as an influence upon aggregate profits. The only problem which Ricardo did not consider was that there would be different rates of profit in different industries, a disequilibrium condition. Given a rise in the real cost of producing wage goods, profits in the aggregate would fall, since the general rate of profit was uniquely determined by the ratio of the fund necessary to maintain labor, over the total value of all commodities. Ricardo conceived that this general rate of profit was dependent upon the relation of the two social aggregates, and it was the

⁶⁵ It was this statement that provided the basis for George Stigler's idea of Ricardo's "93% Labor Theory of Value" (Stigler 1958).

purpose of his political economy to analyze the major determinants of the two aggregates. A change in the facility of production of wage goods was sufficient to lower the general rate of profit, and the change in individual prices would not more than compensate for the adverse effects of the real rise in wages. Since the general rate of profit was uniquely determined by the wage-output relation, he said it was confusing to argue, as Malthus did, that profits could be raised by an increase in the consumption of particular commodities. Profits were determined at the aggregate level of production by the ratio of the wage fund to total output, and total output was in turn a function of labor input. Prior to the rise in the cost of wage goods the rate of profit in the production of each commodity would be equal, but after the rise in wages that condition would no longer prevail. But the disequilibrium could not be greater than 6 or 7 percent.

Ricardo's assumption of an average composition of capital was made in an attempt to strengthen the embodied labor theory of value. A theory of value so far as he was concerned, was an explanation of the regulator of the distribution of income, and not a theory of individual price. If this is recognized, Ricardo in his third edition moved in the direction of a theory of value as a prelude to a theory of profits, and away from a theory of value as an explanation for individual prices.

Although the new standard commodity solved some of the difficulties which Malthus had raised, it by no means silenced his criticism of Ricardo's economics. Malthus's *Principles* set out a system of analysis which was essentially different from Ricardo's, even though it also was predicated upon a theory of value. Malthus's theory of value was not one which stressed production; instead it underlined the "will to consume" as the major determinant of value. From the dispute over Malthus's *Principles* came the final Ricardian work on the subject of exchange value. As Ricardo moved in the direction of recognizing that a theory of value must include a consideration of price theory if its hypothesis pertaining to the movement of the total system is to withstand critical evaluation, he turned to the writing of the manuscript, "Absolute Value and Exchangeable Value," discussed below. In the meantime the Malthus-Ricardo debates continued with respect to both the question of value and policy issues about limits to capital accumulation.

There is no question that in his third edition Ricardo left the theory of value in an unsettled state. With the measure of value assumed to be a commodity, money, produced with the average composition of the fixed and circulating capital of all commodities, a rise in the amount of labor necessary to produce wage goods would affect the relative values of all commodities in the system. His reasoning that the price of commodities produced with a larger than average quantity of fixed capital would fall, while those produced with a smaller quantity than the average would rise, meant that the size of the value of all goods in the system would remain constant. That is, the size of the pie would not change, but wages as a percentage of the total output would rise, because of the decrease in the facility of producing wage and general profits would fall. The share going to rent would have also risen, of course. Since it was the change in the distribution between rent, wages and profits, that was his primary concern, Ricardo was not too concerned about the fact that his new formulation left the rate of profit unequal between industries, since profit was

the rate of return on both fixed and circulating capital, and given the change in relative prices at the micro level, the same rate would no longer prevail in each sector, as the proportions between fixed and circulating would not be the same as before the rise in wages. This was the 6 or 7 percent change in profit that was a consequence of the different price changes when wages rose.

Like his early monetary theory, discussed above, where he argued that the increase in the quantity of Bank of England Notes was "wholly and solely" responsible for the rise in the price of bullion, his theory of value assumed that the decrease in the facility of producing wage goods was the single cause of a fall in profits. In both instances, his "single cause" could not account for all of the variations he was attempting to explain. In the case of bullion, 2 or 3 percent of the rise in its price was a result of commercial conditions, while in the case of profit, 6 or 7 percent of the change was due to the different combinations of fixed and circulating capital engaged in the production of individual goods. Ricardo was aware of the problem in each instance, but he had neither the time nor the perseverance to reach a solution in his third edition. That he continued to struggle with the value problem is demonstrated below.

Despite the fact Ricardo possessed one of the best minds ever devoted to the study of political economy, certainly the greatest theoretician of his own day, he was not a careful scholar. It would be interesting to contrast the pagination in Ricardo's *Principles*, for example, with the number of pages where he quoted extensively from others, particularly Adam Smith. In the ten taxation chapters, there is probably more Smith than Ricardo, though the latter gave a new insight into the question, and made a lasting contribution. Ricardo was more careful in using "inverted commas" than most of his contemporaries, even when quoting from his own works. The reason Ricardo so frequently used "inverted commas" was because he wanted to demonstrate just how his analysis was different from that of Smith, Say, or Malthus. But even then, he took liberties in quoting from others, by italicizing passages, and summarizing their sentences, all within inverted commas. In the *Wealth of Nations* there are few, if any, italicized words, and no such sentences. In quoting from Smith, Ricardo typically inserted italics, without informing his readers of his own added emphasis. Of course, he may have believed everyone was aware that Smith had not used italics, so it was not necessary to indicate he was changing Smith's original emphasis.

In pointing out that Ricardo took such liberties with the works of other authors, it should be emphasized that he never professed to be a careful scholar. He was, after all, just another pamphleteer, albeit his pamphlets became more influential than those of other writers, especially in terms of influencing policy, not to mention economic theory.

Always in a hurry, and writing under pressure to cast his views before the public, Ricardo appears to have been remiss in making corrections in his own *Principles*. The corrections, had they been made, would not have changed his theory, and their absence probably was not even apparent to his contemporaries. But they demonstrate the pressure under which he was always writing. Several

illustrations may, perhaps, have some probative value, and explain to some extent why he left his theory of value unsettled.

Reference was made earlier to the creation of two new chapters while the first edition was being printed, each new chapter numbered the same as the preceding one, but with an asterisk. The new chapters, it will be recalled, were "On Natural and Market Price" and "Taxes on Raw Produce." In the first edition, in Chapter III Ricardo assumed that gold was always produced with the same proportions of labor and fixed capital, and claimed that "in the following chapter I shall continue the supposition" (*Works*, Vol. I, p. 87). Due to the breaking up of the original chapter IV, "On Wages", into two chapters, IV "On Natural and Market Price" and IV*, "On Wages," the following chapter did not contain any discussion requiring the assumption as to the production of money, as the discussion now came two chapters later. The reference to the following chapter, an obvious error, also was retained in the second and third editions. The same type of error concerned Ricardo's reference in all three editions to his sixth chapter, "On Foreign Trade," which in editions two and three, was the seventh chapter (*Works*, Vol. I, p. 319; Sraffa corrected Ricardo's error and properly refers to the seventh chapter; see p. 319 n1).

Reference also has been made to Ricardo's inclusion of two footnotes to Torrens in his second edition. But in the interval between the date of publication of the second and third editions, Torrens was promoted from the rank of Major to that of Colonel. In the third edition, in the first footnote to Torrens, he is referred to as Colonel Torrens (*Works*, Vol. I, pp. 96-97, at 97 n), but in the second reference, he is still a Major (p. 271 n).

The third illustration of Ricardo's less than perfect editing skills has given rise to some speculation by William O. Thweatt. In the third paragraph of the "Preface" to his *Principles* in all three editions, Ricardo refers to the writings of Turgot, Stuart, Smith, Say and Sismondi (*Works*, Vol. I, p. 5). Who was Stuart? There had never been a publication by any political economist with that surname, so Ricardo did not mean Stuart, but some other Scot.

Accepting Simon Patten's interpretation that the first few paragraphs of Ricardo's "Preface" reflected the polished writing style of James Mill (Patten 1893, p. 338), with which Sraffa agreed (*Works*, Vol. I, p. xxi), Thweatt concluded that it was Mill who added Stuart, and was referring to his old teacher, Dugald Stewart (Thweatt 1975), not Sir James Steuart, as Sraffa claimed (*Works*, Vol. XI, Index to the *Works*, p. 99; citation to Sir James Steuart). Ricardo retained the improper surname in the second and third editions, an obvious error, but there is little question that he meant Sir James Steuart, not Stuart, and not Dugald Stewart. However, there is no question that Ricardo used all three spellings in his various works.

In his second response to Trower in the *Morning Chronicle*, Ricardo referred to the work of Sir James Stewart (*Works*, Vol. III, pp. 32-33; 23 November 1809), even though such a person had never published anything in political economy. Later in the year, in the *High Price of Bullion* (*Works*, Vol. III, pp. 72, 81), Ricardo referred twice to Sir James Stuart, another unknown person.

Finally, in 1811, Ricardo referred to Sir James Steuart, in correspondence with Malthus, but only after Malthus had referred to Sir James, with the correct spelling of the surname (*Works*, Vol. VI, pp. 34, 40; Ricardo to Malthus, 17 July 1811, in response to Malthus to Ricardo, 14 July 1811). By the time he wrote *Secure Currency*, Ricardo had Sir James Steuart right (*Works*, Vol. IV, p. 59 n) probably because of his earlier correspondence with Malthus. In later correspondence with Malthus, Ricardo also used the proper surname (*Works*, Vol. VII, p. 102, Ricardo to Malthus 21 October 1817) and actually there probably never was any question in his own mind as to whom he was quoting. In all of Ricardo's references to the author whose surname changed, he wrote of Sir James, and there was only one political economist by the name of Sir James, regardless of how the surname was spelled. That the surname "Stuart" lurked in Ricardo's "Preface" is a suggestion of poor editing, for in Ricardo's library there was a well-thumbed copy of *Inquiry into Political Economy*, published in 1767 (*Works*, Vol. X, p. 390).⁶⁶ Adam Smith knew who the author was and so did Ricardo; even though he was not always sure about the spelling of the surname. As the *Dictionary of National Biography* suggests, Stuarts were Stewarts, as well as Steuarts, all variations of the royal line. As Ricardo and Mill sat in the printer's office and wrote the first "Preface" to the *Principles*, they could have been as confused as any 18th or early 19th century writer as how to spell the Scottish name. So far as Mill was concerned, there was only one Stuart, and he was Sir John Stuart, his mentor, and someone he so sought after that he named his wife's firstborn child, John Stuart Mill. The Stuart in Ricardo's "Preface" may well have been inserted by Mill and he may have made the initial mistake about the surname, but it was Ricardo's disdain for detail that let the error be carried over in the second and third editions. Meanwhile there were more important policy matters to pursue, such as the return to partial specie payment and advocacy of the gradual repeal of the Corn Law. There were also his theoretical duels with his friend Malthus, as they continued the discussion of the applicability of the Say-Mill law of markets.

⁶⁶ Sraffa reported that Ricardo's *Commonplace* entries on Sir James Steuart's *Inquiry* were written on watermarked paper of 1808-1809, which corresponds with Ricardo's first reference to Sir James in the controversy with Trower.

Chapter IX

FRIENDLY CRITICS: MALTHUS AND RICARDO ON POLITICAL ECONOMY

. . . here it will be proper for me to correct a little misapprehension under which you appear to be respecting Mr. Malthus' concern in the Corn Law as it now stands. Mr. Malthus is a very intimate friend of mine, and a more candid or better man nowhere exists. Although you have not expressed any doubt, or indeed any opinion of his good qualities, I could not mention his name without giving this testimony in his favor. He has I think some erroneous opinions respecting the expediency of a free trade in corn, but they are honest conscientious opinions. From the respect which is paid to every thing that comes from him his views on this subject may have had great weight in influencing the judgments of those who were finally to decide on the question in Parliament, but he was never consulted by those who originated the measure, and his opinions were only collected from his writings, which did not appear till after the measure was before Parliament.

(Works, Vol. VIII, p. 101)

Ricardo to James Brown, 13 October 1819

. . . the only time that we ever saw an approach to anger on the countenance of Mr. Malthus, was, when he once mentioned attempts which had been made to cause or represent a jealousy

between [he and Ricardo]. He added, 'I never loved any body out of my family so much. Our interchange of opinions was so unreserved, and the object after which we were both enquiring was so entirely the truth, and nothing else, that I cannot but think we sooner or later must have agreed.'

([William Empson] 1837, p. 499)

Malthus's Concept of Effective Demand and Its Influence Upon Ricardian Analysis

Malthus's *Principles of Political Economy* appeared in April 1820, three years to the month after the publication of the first edition of Ricardo's. In the interim Ricardo had published a second edition of his *Principles*, was preparing a third, and had attained quite a name for himself as an outstanding "political economist." Two journals were advancing his theories, the *Edinburgh Review* and the *Scotsman*, and he had a sizable reputation for defending his doctrines both in and out of the House of Commons. Peel's Act of 1819, for the partial redemption of payment in specie by the Bank of England, and the growing resentment and vexation against continued protection of English agriculture were both, in large part, attributable to Ricardo's growing influence. Ricardo's influence was so strong that for some critics political economy was synonymous with Ricardian economics. This was certainly William Cobbett's opinion.¹

Malthus, as the leading theoretical spokesman for protection to agriculture, while engaging in private controversy with Ricardian doctrines, had not published any new defences since his *Grounds of an Opinion* in 1815. However, as early as 1817, Malthus had written to Ricardo that he was "meditating a volume as . . . I want to answer you . . ." (*Works*, Vol. VII, p. 215; Malthus to Ricardo, 3 December

Editors' note: This chapter as constituted here comprises two manuscripts. Henderson indicated that they represented, though not actually constituted, what he would have presented as the chapter. They were either written separately with a view to their eventual inclusion in this chapter or adapted from a draft; if the latter, it appears to be nonexistent. The first section, "Malthus's Concept of Effective Demand and Its Influence Upon Ricardian Analysis," was a draft of at least part of a chapter in an earlier version of the biography, for which it was designated "Chapter Five." The second section, "The Political Economy Club: Robert Torrens and the Decline of Ricardo's Influence," was prepared for the biography but published in *Research in the History of Economic Thought and Methodology*, vol. 2 (1984), pp. 77-105.

¹ See *Cobbett's Weekly Register*, 20 October 1821. Perhaps the association of the study of political economy with Ricardo's theories was best represented by an excerpt from a letter of Lord John Russell from the 18 January 1822 issue of the *Morning Chronicle*. "There is a party amongst us . . . distinguished in what is called the *Science of Political Economy*, who wish to substitute the corn of Poland and Russia for our own. Their principle is, that you ought always to buy where you can buy cheapest . . . They care not for the difference between an agricultural and manufacturing population in all that concerns morals, order, national strength and national tranquility. Wealth is the only object of their speculation; nor do they much consider the two or three millions of people who may be reduced to utter beggary in the course of their operations. This they call diverting capital into another channel. Their reasonings lie so much in abstract terms, their speculations deal so much by the gross, that they have the same insensibility about the sufferings of a people, that a General has respecting the loss of men wearied by his operation . . . Political economy is now the fashion; and the Farmers of England, are likely, if they do not keep a good look out, to be the victims." Quoted, *Works*, Vol. IX, p. 155, n 1.

1817). For numerous reasons, primarily because of publication details, the promised volume of criticism did not appear until three years later, but there is little doubt that Malthus's *Principles* was intended to answer to Ricardo's.

The profound influence which this volume had upon the subsequent development of Ricardian theory grow out of Malthus's basic conflict with Ricardo as to the role of value theory in economic analysis. Both Ricardo's and Malthus's *Principles* had one very significant point in common. Although the theoretical structures of the two works were quite different and the policy implications were diametrically opposed, both were predicated upon fundamental premises regarding value. This common starting point was so important to each system of analysis that both authors turned exclusively to this single area in the "third round" of their extended controversy. The "first round," discussed in chapter VII, *supra*, turned on Malthus's *Grounds* (1815) and Ricardo's *Essay on Profits* (1815), and the "second round" involved the two volumes of *Principles*. The "third round," which produced Malthus's *Measure of Value* (1823) and Ricardo's unfinished manuscript, "Absolute Value and Exchangeable Value" (1823), indicates that both parties to the dispute eventually realized that their respective systems turned on conflicting theories of value.

As has already been noted, Malthus's major criticism of Ricardo was that he was too prone to generalization and not nearly flexible enough to admit the significance of exceptions to general principles. In contrast with Ricardo's broad type of theorizing was Malthus's own inclination to deal with the "particulars" and "exceptions" which *did not* prove the rule. It was from this latter vantage point that he offered his *Principles* in an attempt to correct the "precipitate" practice of many political economists "to simplify and generalize" and their "unwillingness to acknowledge the operation of more causes than one . . ." ² Since he considered this "tendency to extremes" a source of great misconception as to the correct scientific rules for political economy, Malthus said that, as a science, economics had a great deal to gain from the recognition of the necessity for "qualification, limitation and exception." Referring specifically to the theoretical and practical significance of Ricardo's *Principles*, Malthus presented his own analysis as an alternative and more inclusive presentation than the "system of Mr. Ricardo."

As was the case with Ricardo's *Principles*, Malthus's schema rested on the analysis of the "Nature and Measures of Values." Therefore, Malthus's chapter on value (Chapter II) was the groundwork for the successive discussions of rent (Chapter III), wages (Chapter IV), and profits (Chapter V). The significance which Malthus assigned to the various factors that influenced the functional distribution of income followed directly from his general discussion of the nature and practical

² Malthus, 1820, pp. 5, 6. All citations to Malthus's *Principles* are to this edition rather than the condensed edition reprinted in *Works*, Vol. II, "Notes on Malthus's *Principles of Political Economy*." This latter volume will be referred to for Ricardo's comments on Malthus. Perhaps representative of the tendency of political economists to "generalize" and to "simplify" was James Mill's *Elements of Political Economy* (1821). This volume was written as a "schoolbook," and its author claimed that "the essential principles of the science" had been removed from all "extraneous topics." It was a straightforward condensation of Ricardian economics, ignoring all the exceptions which Malthus believed so essential for a proper evaluation of economic principles.

application of the theory of exchangeable value, a phenomenon that Malthus always associated with the relation of demand to supply. At the same time, the practical applications which Malthus used to explain the determination of exchange values were, Ricardo said, restricted to "cases of close monopoly," which had not been overlooked in his own discussion of the general principles of the determination of exchangeable value (*Works*, Vol. II, Ricardo's Note 20, pp. 48-49).

In addition to the more direct relation of Malthus's theory of functional distribution of income to the theory of value, his discussion of the "Immediate Causes of the Progress of Wealth" was also related to his theory of Value. While Ricardo considered this discussion of the conditions for growth as the "most important topic in Mr. Malthus's work," it was nonetheless based upon Malthus's earlier theory that demand was more significant in determining exchange value than was Ricardo's embodied labor. Granted the assumption that demand was more dependent upon the "will to consume" than upon the "power to consume," it was not difficult to argue, as Malthus did in the *Principles*, that an insufficiency of the "will to consume" could be compensated only by the "unproductive consumption" of the landlord class. By postulating that the growth of the wealth of society was dependent upon the maintenance of a balance between production and consumption, and that the "will to consume" was restricted in the laboring and capitalist classes, Malthus added a new condition for the maintenance of economic growth to that of Ricardo's diminishing-returns concept. While Ricardo's major concern with the conditions for growth centered around the problem of diminishing returns in agriculture, Malthus's conditions had to do with the psychological barrier to growth imposed by limitations to the desire for commodities. Interestingly enough, both of these conditions were dependent upon the theories of value utilized, with one being a function of special production coefficients and the other a function of special demand determinants. Also, in both Malthus's system and Ricardo's system, the conditions for continuous growth were satisfied when the agricultural sector of the economy functioned in a particular manner. In the case of Ricardo's analysis, the agricultural sector of the society functioned under diminishing returns, and its heterogeneity was responsible for the fall in the rate of accumulation in all other sectors. The solution for this problem, Ricardo said, was to import grains from geographic areas where diminishing returns had not yet set in. In this way England could avoid the adverse consequences of a decrease in the rate of capital accumulation. So far as Malthus was concerned, the continuous growth of England's wealth depended upon the protection of the agricultural sector in order to insure a continuous high income which would provide the basis for the "unproductive consumption" that economic growth required. Since the limitation to the "will to consume" amongst laborers and capitalists could only be overcome by the "landlords in the enjoyment of leisure" (Malthus 1820, pp. 424, 352ff), the continuous growth of society's wealth could only be guaranteed by the maintenance of high rents, which were the anathema of Ricardo's analysis. To Ricardo, "unproductive consumption" was as "advantageous as a fire." [?]

Malthus's Theory of Value

While Malthus noted Adam Smith's famous distinction between value in use and value in exchange, his own analysis was concerned almost exclusively with the former category, "and it need only be observed that as the application of the word value in this way is very much less frequent than in the other, it should never appear alone, but should always be marked by the addition, *in use*" (Malthus 1820, p. 52). Malthus's purpose in discussing value was twofold, first, to set out the determinants of exchange value, and second to establish a measure of exchange value by which he could estimate the degree to which any particular commodity contained an exchange ingredient; these were the very problems with which Ricardo had dealt in working out his theory of value.

Starting with the proviso that a "nominal" designation of commodities was usually erroneous and faulty as an indication of their true exchange value,³ Malthus said that he wanted a measure of "real value"; "some estimate . . . which may be denominated real value in exchange, implying the quantity of the necessaries and conveniences of life which those wages, incomes, or commodities will enable the possessor of them to command". The advantage of the estimate in "real" terms was that, while nominal value might reflect changes in wealth in name only, "real value in exchange seems to be just and appropriate as implying an increase or decrease in the power of commanding real wealth . . ." (Malthus 1820, p. 60)

Two elements of this definition of real value appear to be significant, (1) that what was meant by "real wealth," and (2) the notion of "command" introduced in Malthus's analysis of value. The first of these, real wealth, Malthus merely defined as "those *material* objects which are necessary, useful, or agreeable to mankind" (Malthus 1820, p. 28).⁴ This definition of real wealth, which Malthus believed was consistent with the definition that Adam Smith had used,⁵ provided the foundation for determining the cause, or source, of wealth. In this connection, of course,

³ In the first two editions of his *Principles*, Ricardo used money as his *numeraire* and assumed hypothetically that money was "always the produce of the same quantity of unassisted labour." Malthus, in claiming that money was inadequate as a *numeraire*, called attention to the historical fluctuations in the value of money and contended that it was usually *not* produced with unassisted labor. All of which, of course, Ricardo himself had pointed out in his discussion of the choice of a *numeraire*. See Ricardo's *Principles, Works*, Vol. I, pp. 54-63. Malthus's criticism of the "nominal" value of commodities and Ricardo's use of money as a *numeraire* are found in his chapter on value (Malthus 1820, pp. 108-118).

⁴ While noting that some economists defined "wealth as those objects capable of accumulation," Malthus omitted the reference to accumulation in his own definition. Ricardo added a comment saying that he thought "there is real use in dividing our enquiries about those material objects which are capable of accumulation . . . from those which rarely admit of such processes." (*Works*, Vol. II, p. 14.)

⁵ "Adam Smith has no where given a very regular and formal definition of wealth; but that the meaning which he attaches to the term is confined to material objects is sufficiently manifest throughout his work. His prevailing description of wealth may be said to be, 'the annual produce of land and labour.' The objections to it, as a definition, are, that it refers to the sources of wealth before we are told what wealth is, and that it is besides not sufficiently discriminate, as it would include all the useless products of the earth, as well as those which are appropriated and enjoyed by man." (Malthus 1820, p. 28). Some part of Malthus's criticism of Smith appears justified since the definition of wealth is found in the second book of the *Wealth of Nations*, while its author utilizes the definition in the first book. Nevertheless there does not appear to be any difference in idea between the two books.

Malthus made use of the classical distinction between productive and unproductive labor. Productive labor produced "real wealth" and was the true source of wealth.⁶ However, it was the *command* over this wealth which constituted real *value* in exchange. Also, the best index of real wealth was the command over the source of wealth, or the command over labor. It was in this way that Malthus utilized Smith's *labor command* doctrine, as opposed to Ricardo's Smithian *embodied-labor* doctrine for his measure of value.

Implicit in Malthus's measure of value, command over the source of real wealth, was the introduction of an emphasis upon the demand side of the exchange equation, since "real value" was actually a function of the demand over labor. In his search for a measure of the command over real wealth Malthus adopted an index which measured the broadest source of this wealth, which was labor. But it was an index of real value couched in terms of labor *command*, as opposed to Ricardo's index of labor *input*. At first sight it might appear strange that both Malthus and Ricardo used a labor index and it might appear that there was no real difference, other than a semantic one, between these two theories. But obviously the major difference between the two theories lay in the fact that one was a *demand* derivative while the labor input thesis concerned the *physical output* of various units of labor. Consequently, Malthus's use of a labor command index should not be construed as an acceptance of Ricardo's or anyone else's labor theory of value. The use of labor command as a *numeraire* does not necessarily require the acceptance of the embodied labor theory of value (Schumpeter 1954, pp. 590, 591, notes 7 and 9), since the latter attributes the value-creating process to production and not to consumption.

Malthus's measure of real value,⁷ expressed in terms of labor command, had certain advantages from an analytical standpoint and constituted a significant aid in the formulation of the policy implications which he deduced from his system of analysis. From an analytical standpoint, the "real value" of a commodity was measured by its ability to command the common source of real wealth, namely,

⁶ Although Malthus defined productive labor as the only source of "real wealth," he attributed an indirect but essential role to unproductive labor, as the "demanders" of the real wealth they had no part in producing. (Malthus 1820, p. 43). A corollary to the distinction between productive and unproductive labor was the difference between productive and unproductive consumption. Productive consumption was that which was necessary to obtain productive labor and capital, and in Malthus's system unproductive consumption was necessary to clear the market of all goods, since productive labor produced more than the value of productive consumption. For a clear presentation of these concepts, see James Mill 1821, pp. 5-6, 178-183. Granted these distinctions, it was not very far to the conclusion of Marx *vis-a-vis* surplus value. Post-Ricardian orthodox economists, of course, followed the pattern of claiming that such distinctions between productive and unproductive labor or consumption are illusory. Marshall said there was "no scientific foundation for this distinction." (Marshall 1920, p. 63).

⁷ Malthus's objections to Ricardo's measure of "real value," which in the first two editions of the *Principles* was money produced with a constant amount of unassisted labor, were numerous but they all were related to the idea that there was no such thing as a constant measure of labor input. Hence he claimed, "Under all the variations . . . which arise from the different proportions of fixed capital employed, different quickness of the returns of circulating capital, the quantity of foreign commodities used in manufactures, the acknowledged effects of taxation, and the almost universal prevalence of rent in the actual state of all improved countries . . . we must . . . allow that . . . it is certainly not this labour [input] which determines their relative values in exchange, at the same time and at the same place." (Malthus 1820, pp. 104-105.)

labor power. Accordingly, a commodity could rise or fall in real value in accordance with its power to purchase labor, while the quantity of labor required in its production could remain constant. This meant that one could have varying aggregate demand functions superimposed upon a constant level of labor output.

"In short," Malthus said, "this measure will . . . exactly accord with the nominal prices of commodities" and will accurately explain "all variations of value, without reference to a circulating medium" (Malthus 1820, p. 122; also cf. 125, 127). Besides eliminating the need to measure the fluctuating value, Malthus's measure of real value also eliminated any need to hypothesize that commodities acquired any underlying value in production which might be different from that value which the market mechanism assigned to them. That is, Malthus's measure did not need to distinguish between "absolute value and exchangeable value" since the two were synonymous when labor command was used as a measure of real value, for it was labor command at the same time and same place, not labor command evaluated against some previous set of circumstances. Because Ricardo criticized this obtuse argument, the major change that Malthus made in his theory of value when he wrote "The Measure of Value" in 1823 was the inclusion of an argument which attempted to show that his labor command theory included not only an evaluation of exchange value, but also a measure of absolute value. The theory of value found in Malthus's *Principles*, however, did not distinguish between these two concepts, and as a consequence, his theory had an advantage over Ricardo's implied distinction between exchangeable value and some idea of an absolute or positive value.

Malthus's measure of value was a relativistic or autonomous measure, that is, the "real value" of any commodity was a function of the market at the moment and not a function of the cost of the commodity in labor and capital inputs at some other time, where the value of the inputs was independent of future markets. Being a function of the market, real value in Malthus's terms was synonymous with the value indicated by the market and was not dependent upon production coefficients. Later utility economists adopted this same formulation, of course, and claimed that value, as indicated by the market, was such that "bygones" were "bygones" and production coefficients were of no use in determining exchange value or use value. On the other hand, as noted before, Ricardo claimed that there was a distinction between "market value" and real or absolute value, and that for any commodity the former needed only to agree with the latter under competitive conditions in the long run. However, because market value always had a tendency to move in the direction of real value, Ricardo argued that a theory of exchange value owed its first allegiance to the explanation of the determinants of this real value when the term was understood in its Ricardian rather than in its Malthusian, sense. Furthermore, since Ricardo assumed constant costs in all industries except agriculture, he legitimately could argue that demand actually played no role in determining the *ratio* of exchange between any two commodities, and this ratio was more apt to be a function of the quantities of their particular labor and capital inputs. On the other hand, Malthus with his labor command doctrine and argument that a commodity had real value only in proportion to its command over labor, gave the "market" the

determining role, for not only market value but real value as well. For these were determined by supply and demand, and while Malthus argued that there was a difference between "the ordinary and average relation of the demand to the supply" as against "the extraordinary and accidental relations of the demand to the supply" (Malthus 1820, pp. 84-85)⁸ still there was "no case of price . . . which they will not determine; . . . in every instance . . . the price will depend upon the relation of the demand to the supply" (Malthus 1820, p. 71).

The Role of Demand

The role of demand in the determination of exchange value could not be denied even in the long run, according to Parson Malthus, because demand was always a function of two elements, (1) the "will to consume" and (2) the power to consume. Since the will to consume any particular commodity was always necessary, any analysis which gave emphasis only to production coefficients failed to incorporate one of the major determinants of exchange value. This type of reasoning confused Ricardo because he claimed that if there were a lack of demand for the current output of any particular commodity, then its price would fall below its cost of production (labor cost plus the average rate of profit) and capital would be withdrawn until such time as the amount of demand would again take the output off the market. That is, the capital in any market suffering from a "glut" would be redirected to other markets in accordance with Ricardo's general equilibrium approach. But Malthus did not restrict the possibility of a "glut" to particular commodities. He argued the probability of a *general* overall deficiency of the "will to consume" with the result that all commodities would have to sell below cost. In this event, total effective demand would have a decided influence upon the total output of the economy and the probability of a "glut" was not restricted to single markets. This was the meaning that Malthus gave to the statement that the "ordinary and average relation of demand to supply" determined real value even in the long run. Because of the assumed deficiency in the will to consume, among all except the landlord class,⁹ Malthus argued that demand was just as significant in determining real value in the long run as it was in the short run. The economy's need for an effective demand, which was theoretically deducible from Malthus's theory of value in exchange, gave the unproductive landlord class an indirectly productive role, as demanders, in maintaining balance between the incentive for accumulation and the incentive for consumption beyond the mere necessities of life. Since real value was a function of the market and since demand was a highly

⁸ See Chapter VIII, *supra*, for an earlier discussion of this same point of making a distinction between the "ordinary and average" and "extraordinary and accidental" relations of demand to supply.

⁹ ". . . an efficient taste for luxuries, that is, such a taste as will properly stimulate industry, instead of being ready to appear at the moment it is required, is a plant of slow growth, the history of human society sufficiently shews; . . ." ". . . in this class the landlords no doubt stand pre-eminent. . ." Malthus 1820, pp. 359, 466.

significant variable in the determination of real value, Malthus assigned the value-creating process to the demand side of the exchange equation. Because the landlord class was the only class with unlimited desires for consumption and because demand was necessary to maintain a continuous command over productive labor, Malthus's famous justification for unproductive consumption followed directly from his theory of value. Furthermore, this emphasis upon demand was in sharp contrast to Ricardo's emphasis upon the influence of production upon value and the consequences of diminishing returns upon accumulation and growth.

The Theory of Profits

Two consequences followed from Malthus's theory of value, (1) Ricardo's theory of the sterility of rent as a value-creating ingredient could be denied and rent could be viewed as having a causal role in price determination in the same way as labor or capital, and (2) the so-called exploitation aspects of Ricardo's theory of value could be denied. While the first of these consequences was the one of major importance so far as Malthus and Ricardo were concerned, the second, of course, has always been associated with the Marxian variant of the embodied-labor doctrine. However, it would appear that one cannot exist theoretically without the other, since both effect the theory of profits and the former automatically includes the latter. Malthus's theory of value incorporated a theory of profits which denied Ricardo's deduction theory and it is in this respect that Malthus's *Principles* can be classed as an answer to the *Essay on Profits*, as well as to Ricardo's *Principles*.

Taking up the Malthusian analysis of profits as it applied to the so-called exploitation thesis, Malthus argued that he could not accept Ricardo's *arbitrary* measure that "the labour which has been employed upon a commodity" is its real value, for he says,

. . . in so doing we use words in a different sense from that in which they are customarily used; we confound at once the very important distinction between *cost* and *value*; and render it almost impossible to explain, with clearness, the main stimulus to the production of wealth which, in fact, depends upon this distinction.

(Malthus 1820, p. 61; italics in original)

The difference between cost and value was profits and if Ricardo said the two were equal, then he denied the income category, profit; at least this was the way Malthus understood the terminology. Ricardo's rebuttal was significant since it showed that he did not confuse the terms cost and value, but nevertheless, value and cost *could* be equal and still leave a surplus produce, or profit. His comment on the above passage in Malthus's *Principles* ran as follows,

Mr. Malthus accuses me of confounding the very important distinction between cost and value. If by cost, Mr. Malthus means the wages paid for labour, I do not confound cost and value, because I do not say that a commodity the labour on which cost a £1,000, will therefore sell for £1,000; it may sell for £1,100, £1,200, or £1,500,-- but I say it will sell for the same as another commodity the labour on which also cost £1,000; that is to say, that commodities will be valuable in proportion to the quantity of labour expended on them. If by cost Mr. Malthus means cost of production, he must include profits, as well as labour,¹⁰ he must mean what Adam Smith calls natural price, which is synonymous with value.

(*Works*, Vol. II, pp. 34-35)

Discussing this same point again in his "Notes on Malthus," Ricardo said,

If I had said that the value of commodities was the same thing as the value of the labour expended on them, the remark would have been well founded, but I have said that the relative value of commodities is in proportion to the quantity of labour bestowed on them. That value may be double what the labour cost.

(*Works*, Vol. II, pp. 101-102)

Ricardo, apparently, looked upon the value of embodied labor as equaling the *sum* of income going to wages and profits, while for Malthus it equalled wages.¹¹ Because value had to equal cost, it would necessarily follow that if only wages are recovered in the market, there would be no profit, and then only Malthus's concept of "real value" could account for a surplus over and above the cost of embodied labor. With real value, in Malthus's meaning a function of demand, it was possible for price to equal cost plus a surplus, but if Malthus's understanding of Ricardo's embodied labor doctrine were used, then "real value" would not allow for a surplus.

To allow for profits, real value had to exceed wages. Accordingly, Malthus reasoned that the embodied labor doctrine could not be used as a measure of real value; he rejected the labor cost theory for one which would allow for profits and which necessarily gave emphasis to the demand side of the exchange equation. In this way Malthus's theory of value eliminated any possible exploitation thesis, i.e. labor creating more value than it received. It need hardly be pointed out that the subsequent development of economic theory, except among socialist writers, followed in Malthus's tradition, not Ricardo's.

¹⁰ When he revised the *Principles* the second time, Ricardo included this comment, along with Malthus's statement as to the alleged "confusion." See *Works*, Vol. I, pp. 46-47, and Ricardo's note to his text.

¹¹ "The profits of capital consist of the difference between the value of the advances necessary to produce a commodity, and the value of the commodity when produced; . . . this proportion may be altered either by circumstances which affect the value of the advances, or the value of the product." (Malthus 1820, pp. 293-294.)

The Theory of Rent

Although Malthus's theory of value got rid of any possible "profit as exploitation" thesis, this was certainly not the major purpose for which it was intended, nor was it the major purpose that it served in Malthus's *Principles*. In the *Principles* the idea of real value being a function of command over labor and being actually determined in the market by demand and supply rather than in the production process, was utilized by Malthus as an underlying assumption to establish the thesis that rental income was a cause and not an effect in price determination. "After very careful and repeated revisions of the subject," Malthus claimed that he could not "agree entirely" (Malthus 1820, p. 134) with the view that rent was governed by the forces characteristic of a common monopoly. After the passage cited, the discussion follows with a series of quotations from Say, Sismondi, and Buchanan's notes on his edition of Smith's *Wealth of Nations*, as well as numerous references to Ricardo. All of these authorities were agreed in their evaluation of rent as a monopoly payment and while Malthus denies the emphasis, he remarks, "perhaps the term *partial monopoly* may be fairly applicable" to an explanation of rent. But, despite the statement that rent was due to a partial monopoly, Malthus's discussion is mainly taken up with the non-monopoly aspects of rent.

In addition to a monopoly explanation of rent, Malthus repeated the argument of his *Observations* to the effect that rent was due to

That quality peculiar to the necessaries of life of being able . . . to create their own demand, or to raise up a number of demanders in proportion to the quantity of necessaries produced.

(Malthus 1820, pp. 139-140)

It is recalled that Malthus had made use of the distinction that the supply of agricultural goods creates its own demand, while supply of manufactures does *not* create its own demand. (See Chapter VII, *supra*). He accepted Say's law as applied to agriculture but not for an economy dominated by manufactures. In the previous discussion of the idea of a contrast between agriculture and manufactures, this distinction was called an "asymmetrical argument" *vis-a-vis* the relation of supply to demand. It was noted that Malthus utilized this argument to advocate retention of the corn laws because it proved that a manufacturing society faced difficulties not found in one dominated by agricultural production and that the discontinuity between demand and supply would inevitably lead to an underemployment of resources which could only be overcome by unproductive consumption. In his *Principles* Malthus used the same asymmetrical approach to prove that land rent was caused by something besides the monopoly. He argued,

If an active and industrious family were possessed of a certain portion of land, which they could cultivate so as to make it

yield food, and the materials of clothing, lodging, and firing, not only for themselves but for five other families, it follows, from the principle of population, that, if they properly distributed their surplus produce, they would soon be able to command the labour of five other families, and the value of their landed produce would soon be worth five times as much as the value of the labour which had been employed in raising it. But if, instead of a portion of land which would yield all the necessaries of life, they possessed only, in addition to the means of their own support, a machine which would produce hats or coats for fifty people besides themselves, no efforts which they could make would enable them to ensure a demand for these hats or coats, and give them in return a command over a quantity of labour considerably greater than their fabrication had cost. For a long time, and by possibility for ever, the machine might be of no more value than that which would result from its making hats or coats for the family. Its further powers might be absolutely thrown away from the want of demand; and even when, from external causes totally independent of any efforts of their own, a population had risen to demand the fifty hats, the value of them in the command of labour and other commodities might permanently exceed but very little the value of the labour employed in making them.

(Malthus 1820, pp. 142-143)

Thus the fertility of the land gives the power of yielding a rent, by yielding a surplus quantity of necessaries beyond the wants of the cultivators; and the peculiar quality belonging to the necessaries of life . . . tends strongly and constantly to give a value to this surplus by raising up a population to demand it.

(Malthus 1820, p. 144)

The mere availability of manufactures, Malthus said, could not "ensure" that there would be desires for the commodities which flow from an industrial society. Therefore real value, the demand which flows from command over labor, was unlikely to be high enough to yield a surplus in an industrial society. A surplus could only be guaranteed in an agricultural society where there would be an insurance that desires would be forthcoming immediately and where the number of demanders would be such as to yield a real value which guarantees a payment for wages and profits as well as rents. Since only an agricultural society could guarantee the continuation of a surplus of real value over and above the cost of the labor necessary to produce commodities, rent was not a monopoly payment; it was merely a reflection of the real value of the commodities in circulation. In order for all commodities to find a market, demand had to be greater than the payment for the wages which produced them, for if the demand did exceed labor cost, "real value" would allow for the payment of rent as well as wages and profits. This

argument was not so very sophisticated as it seems, since once one grants that value is a function of the demand side of the equation of exchange, any payment acquires the same importance as any other payment and a tollgate on the Thames is on an equal basis with manufacturing labor. In rejecting "Mr. Ricardo's labour cost doctrine," Malthus adopted this practical solution for the payment of rent, saying,

If it be said that the doctrine which entirely rejects rent, and resolves the prices of all commodities into wages and profits, never refers to articles which have any connection with monopoly, it may be answered, that this exception includes the great mass of the articles with which we are acquainted . . .

We cannot . . . get rid of rent in reference to the great mass of commodities.

(Malthus 1820, pp. 101-102)

Malthus's argument for the inclusion of rent as a cause, rather than as an effect, was both theoretical and practical. The theoretical support followed directly from the concept of "real value" which made it a function of the demand side of the exchange equation, and which showed that prices could be equal to real value and still yield a rent, as well as a payment for wages and profits. With rent included in the price of commodities, and with price equal to real value, it was erroneous to argue that the value of commodities was determined by the amount of embodied labor since this did not allow a payment for either profits or rents. The practical aspect of Malthus's strictures on rent came from the fact that in the actual state of things, rents were paid, and since they *were paid* there was no use in constructing a theory that denied their existence, which, of course, was what Ricardo hypothesized.¹²

Summary of Malthus's Principles

In the same manner that Ricardo's *Principles* were formulated on a series of propositions respecting the nature and the major determinants of value, it is rather obvious that Malthus's *Principles*, in setting out a system which differed in all major respects from Ricardo's, also took as its starting point the formulation of a theory of value. With "real value" always assumed to be a function of the relation of demand to supply, Malthus's criterion for determining value did not contain any idea of invariability because his measure was one which "is most extensively the subject of exchange." Malthus's measure could evaluate the "degree of abundance" compared with the desires and number of those who consume; that is, labor

¹² Science may be dependent upon formulations which *deny* some generally accepted tenet in the practical world and that an assumed monism between reality and science can be misleading if science becomes too dependent upon the "practical world." Malthus's claim that rent was a cause and not an effect, primarily because it was in reality an income category, may be cited as an example of this possible confusion between the basic requirements of scientific tools and those of nonscientific behavior.

commanded could relate consumption to scarcity and could compare the bargaining power of various commodities, in relation to one another, in the market.

Ricardo's "Notes on Malthus"

Ricardo made three hundred and fifteen (315) notes on Malthus's *Principles of Political Economy*. He said, "If I were to answer every paragraph, containing what, I think, an erroneous view . . . I should write a thicker volume . . ." than the original (*Works*, Vol. VIII, p. 212; Ricardo to Mill, 27 July 1820), and calculated that if the "notes" were published they would run to about one hundred and fifty pages (*Works*, Vol. VIII, p. 305; Ricardo to Trower, 26 November 1820). On the advice of McCulloch, Mill and Trower, however, he decided against publication and the notes were passed among the small group of economists interested in such "dry, and perhaps not very clearly expressed comments . . ." (*Works*, Vol. VIII, p. 298; Ricardo to McCulloch, 23 November 1820).

Ricardo's major criticisms were three; he (1) disputed Malthus's measure of value, (2) disagreed with the defense of rent as a cost of production, and (3) found the most objectionable chapter in the book to be that which discussed the "bad effects of too great accumulation of capital."

The criticism of the measure of value was particularly significant since it provoked Malthus to the preparation of the separate pamphlet on the subject. After having read Ricardo's "notes," Malthus wrote to a friend, "I am very anxious to get out as soon as I possibly can . . . some new views on a *standard of value* . . ." (Quoted by Sraffa, *Works*, Vol. II, p. xii). The obtuse and difficult pamphlet, *The Measure of Value Stated and Illustrated*, was published in 1823. This pamphlet produced another long controversy between Ricardo and Malthus, finally culminating in the manuscript, "Absolute Value and Exchangeable Value," that Ricardo had in preparation when he died.

On Malthus's measure of value in the *Principles*, labor command, Ricardo made no fewer than seven "notes." He particularly emphasized that this measure failed to conform with the requirements that Malthus insisted Ricardo adhere to. In other words, it did not follow the rules that Malthus himself had set down for Ricardo. As has been noted, Malthus had objected to Ricardo's measure of value on the grounds that money was not invariable in its value. It could not be used as a *numeraire*, he said, despite the peculiar conditions of production that Ricardo had assigned to it in the first edition of his *Principles*. "Mr. Malthus justly complains," Ricardo said, "of the variability of gold and silver, and their unreliableness as a measure of value." But what does Malthus "fix as an approximation to" the desired standard of value? Ricardo answered,

The value of labour. A commodity shall be said to rise or fall accordingly as it can command more or less labour. Mr. Malthus then claims for his standard measure invariability! No

such thing; he acknowledges that it is subject to the same contingencies and variations as all other things. Why then fix on it? It may be very useful to ascertain from time to time the power of any given revenue to command labour, but why select a commodity that is confessedly variable for a standard measure of value?

(Works, Vol. II, pp. 29-30)

So far as Ricardo was concerned, the major prerequisite of a measure of value was invariability; a measure of real value was one which would not vary with the value of all other commodities; it would be one where value was a constant. For Malthus, on the other hand, the major requirement for a commodity in order to qualify as a measure of value was that it must be "most extensively the subject of exchange." Malthus's theory of value, which was really a theory of price, was one that gave emphasis to the changing nature of exchange, one that paradoxically took changing relations as its index; it was a theory that was antithetic to the idea of a constant. It was also a theory of value independent of the facility of production of commodities. Malthus's measure was derived from Adam Smith's labor command doctrine and not from the embodied labor of production, as was Ricardo's. With labor command as the control over wealth, Malthus was convinced that the varying scarcity of commodities was the only accurate estimate of real value. Real value as the changing scarcity or abundance of commodities; value in exchange rather than Ricardo's absolute value tied to the production of commodities. Malthus proposed, in Ricardo's words,

. . . a measure which is not only variable in itself, but is particularly variable, on account of its connection with other variable commodities, and in his reasons for choosing it gives several which have no reference to the subject, for nothing is to be considered in a measure of value but its invariability or its near approach to that character.

(Works, Vol. II, pp. 90-91)

As a previous discussion indicated, the variability of Ricardo's measure of value was the very problem that Malthus had raised. He had pointed to the fact that Ricardo's proof that wages had no effect upon prices, the "Ricardo effect," was predicated upon an assumption as to the invariability of Ricardo's *numeraire*. To prove that the absolute price of commodities did not rise, given a rise in wages, Ricardo had assumed a *numeraire* that was invariable in terms of fixed capital, but Malthus had quickly pointed out that the period of turnover of circulating capital is not invariable. Commodities could be produced with varying periods of turnover, as well as varying quantities of fixed and circulating capital, and Ricardo's *numeraire* did not satisfy the prerequisite of an invariable period of turnover. However, now that Malthus had presented his own measure of value, what Ricardo could not fathom was the fact Malthus's measure did not satisfy any conditions of invariability

-- in fact its basic ingredient was variability! How could Malthus logically criticize Ricardo's measure while at the same time he, Malthus, did not bind himself to the same requirements? In his "notes" on the Parson's chapter on value, Ricardo made six extended refutations of this apparent double standard *vis-a-vis* a measure of value -- one for Ricardo and one for Malthus.

It is rather obvious that the basic dichotomy arose from the fact that Ricardo's measure of value was designed to measure changes in absolute value (changes in production), while Malthus's measure was designed to measure changes in exchange value (changes in the circulation of commodities). Malthus's further assumption, not made explicit, was that absolute value took its direction from exchange value, or that circulation regulated production. Ricardo, on the other hand, assumed that exchange value took its direction from absolute value, that production regulated circulation. No matter which position was chosen, economic science had to account for both types of theory. The theory of the production of commodities had to be related to the theory of the circulation of commodities, for theory had to account for the way in which exchange value and absolute value were related to one another.

Malthus's Measure of Value

Malthus was the first of the two to attempt a new formulation of the problem (Malthus 1823). In his obtuse and involved pamphlet, *The Measure of Value*, he set out to prove that absolute value and exchange value were both a function of the scarcity or abundance of commodities. He wanted to show not only that his measure of value was an accurate estimate of exchange, but that absolute value was dependent upon this estimate.

Malthus stated in his preface to the *Measure* that his purpose in writing it was to make clear that "labour command" was the only possible standard by which to evaluate wealth. Labor command, he said, was not only the measure "most frequently used by Adam Smith" (Malthus 1823, p. iv), but was also the only one that could adequately estimate the significance of value in exchange. Labor command, as a measure of value, was far superior to Mr. Ricardo's embodied labor, because this latter was "entirely" destroyed by the "effects of slow or quick returns," and by "different proportions of fixed and circulating capitals" (Malthus 1823, p. 12). Malthus deemed Ricardo's embodied-labor theory of value to be invalid because it could not explain everyday "exchangeable value," and provided an explanation of the regulator of supply only when the commodities in question were produced with equal quantities of fixed capital (Malthus 1823, p. 13). Since it could not account for variations in fixed capital, Malthus said, embodied labor, was not even the regulator of absolute ratios in the long run. As an explanation of short-run exchange value, it was also deficient, because it did not explain the varying relation of demand to supply. It was inadequate as a measure of both "varying facilities of production" and varying states of "demand and supply" (Malthus 1823, p. 3).

Malthus's major criticism of Ricardo, like Böhm-Bawerk's criticism of Marx (Böhm-Bawerk 1949, pp. 64-101), was the failure to account for (1) "exchange value" as opposed to "absolute value," (2) the varying durability of capital, and (3) differing periods of turnover. Also like Bohm-Bawerk, Malthus offered his own theory of "exchange value" as a substitute for the rejected embodied-labor doctrine, claiming that it provided "a correct measure of absolute and natural [market] value" (Malthus 1823, p. 3).

Malthus's pamphlet, written without a single break or subtitle, was disorganized and confusing. Ricardo found it puzzling (*Works*, Vol. IX, p. 329; Ricardo to Mill, 7 August 1823), McCulloch called it "unintelligible" (*Works*, Vol. IX, p. 290; McCulloch to Ricardo, 11 May 1823), and Trower said it was "difficult to know what he [Malthus] would be at" (*Works*, Vol. IX, p. 383; Trower to Ricardo, 3 September 1823).¹³ However, in a letter to Ricardo, Trower said, "The whole tendency of his tract appears to be to confirm the doctrine, in his former work, that the principle of *supply and demand*, and not the *cost of production* is the general regulator of exchangeable value" (*Works*, Vol. IX, p. 293; Trower to Ricardo, 25 May 1823; italics in original).

The focal point of Malthus's argument was his "Table illustrating the invariable Value of Labour and its Results. (See Table IX-1). From this table Malthus was able to draw some "six conclusions. " The first and "most important truth" was that

the quantity of labour required to produce the wages of a given number of men, . . . must always be exactly the same as the quantity of labour which the wages will command, and must together always make up the constant quantity which appears in the seventh column.

Insert citation

That is, the sum of the quantities in columns five and six will always equal the invariable value of the wages of the seventh column.

But the quantity of labour required to produce the varying wages of ten men is, under the different circumstances supposed, very different, as appears in the fifth column; and it is obvious, that while the numbers in the fifth column vary, the numbers in the seventh column . . . cannot be constant, unless, as the quantity of labour required to produce the wages of ten men increases, the quantity of profits estimated in labour diminishes exactly in the

¹³ Interestingly enough, the late Professor Hollander did not reprint Malthus's *Measure of Value*, though he did reprint every one of Malthus's other pamphlets. This pamphlet has acquired new significance with the publication of Ricardo's manuscript, "Absolute Value and Exchangeable Value," which was obviously written as an answer to Malthus's *Measure*.

Table IX-1. Thomas Robert Malthus's
Table illustrating the invariable Value of Labour and its Results.

1.	2.	3.	4.	5.	6.	7.	8.	9.
Quarters of Corn produced by Ten Men, or varying Fertility of the Soil.	Yearly Corn Wages to each Labourer, determined by the Demand and Supply.	Advances in Corn Wages, or variable Produce commanding the Labour of Ten Men.	Rate of Profits under the foregoing Circumstances.	Quantity of Labour required to produce the Wages of Ten Men under the foregoing Circumstances.	Quantity of Profits on the Advances of Labour.	Invariable Value of the Wages of a given Number of Men.	Value of 100 Quarters of Corn under the varying Circumstances supposed.	Value of the Product of the Labour of Ten Men under the Circumstances supposed.
150 qrs.	12 qrs.	120 qrs.	25 pr. Ct.	8	2	10	8.33	12.5
150	13	130	15.38	8.66	1.34	10	7.7	11.53
150	10	100	50	6.6	3.4	10	10	15
140	12	120	16.66	8.6	1.4	10	7.14	11.6
140	11	110	27.2	7.85	2.15	10	9.09	12.7
130	12	120	8.3	9.23	0.77	10	8.33	10.8
130	10	100	30	7.7	2.3	10	10	13
120	11	110	9	9.17	0.83	10	9.09	10.9
120	10	100	20	8.33	1.67	10	10	12
110	10	100	10	9.09	.91	10	10	11
110	9	90	22.2	8.18	1.82	10	11.1	12.2
100	9	90	11.1	9	1	10	11.1	11.1
100	8	80	25	8	2	10	12.5	12.5
90	8	80	12.5	8.88	1.12	10	12.5	11.25

same degree. But this, from what has before been stated, must, under the circumstances supposed, be the case. And it follows, that if the natural value of a commodity may be estimated by the labour and profits of which it is composed, the natural value of the corn wages of a given number of men must always be the same. But such wages, according to the postulate with which we commenced, must necessarily be equal to the quantity of labour for which they will exchange. Consequently the value of a given quantity of labour must, under every variety which can take place in the fertility of the soil and the corn wages of labour, be always constant. It is, however, of the greatest importance to remark, that an exact balance of labour, and of profits estimated in labour, so as to yield always a constant quantity, cannot take place in the production of any one commodity or given portion of a commodity; because any one commodity . . . is liable to vary in relation to labour, and such variation will either increase or decrease the amount of labour and profits united. It is only the varying wages of a given number of men bearing, as the terms imply, a constant relation to labour, which, under any changes in the quantity of labour required to produce them, can still continue of the same natural value. And it is precisely this necessary constancy in the natural value of the varying corn wages of labour, which renders the labour which a commodity will command, a standard measure both of its natural and exchangeable value.

(Malthus 1823, pp. 39-41)

Malthus also concluded from his table that the rate of profit depended upon the demand and supply of corn (column two) and that the value of corn, in turn, was a function of the rate of profit. This showed, he said, that his general rule for determining value was correct, since the value of all commodities was a function of supply and demand, not just of the facility of production. This was true not only in the short run but in the long run also, the only difference being that the "former are regulated by the average and ordinary relations of the demand to the supply, and the latter . . . upon the accidental and extraordinary relations of the demand to the supply" (Malthus 1823, p. 44).

What Malthus attempted to prove with his table was that even Adam Smith's "natural price" was a function of both demand and supply, but not just a function of the facility of production as Ricardo claimed. Malthus's procedure was to determine the price of a commodity by supply and demand, then to move from this point back, so to speak, to natural value. In this way, natural value was regulated by exchange value. Ricardo, on the other hand, took "natural value" as his starting point; natural value, or absolute value, was the regulator of exchangeable value.

The difficulty with Malthus's theory was that it claimed that profits were always the difference between price and cost, but neither the table nor the pamphlet

explained the determination of either. Columns two and eight were assumed, and did not relate in any way to column one. But more important was Malthus's assumed "invariable value of the wage of a given number of men" in column seven. By making this assumption, he could calculate profits (column six) by subtracting column five from column seven. But Ricardo could not understand what made column seven a constant (*Works*, Vol. IX, pp. 282-283; Ricardo to Malthus, 29 April 1823). The assumption of constant labor command was of limited applicability to the theory of absolute value, Ricardo said, adding,

. . . your proof only amounts to this, that your measure is a good measure of exchangeable value, but not of absolute value.

(*Works*, Vol. IX, p. 299; Ricardo to Malthus, 28 May 1823)

Ricardo had very nearly stated the problem. There *was* a difference between absolute value (Adam Smith's natural price), and exchangeable value, or market price. The problem was to connect the two types of value. Did one move from exchangeable value to absolute value, as Malthus had done, or was exchangeable value derived from absolute value? The latter solution was the one that Ricardo had started to formulate at the time of his death. This was also the solution which Marx gave to the problem in *Capital*. Neo-classical theory, of course, stayed with Malthus and derived a theory of distribution from the theory of consumer demand, rather than from the theory of production as Ricardo had done.

The Political Economy Club:

Robert Torrens and the Decline of Ricardo's Influence

A great flurry of publications on political economy appeared in the years 1817-1821, each marking the ever-increasing importance of the science. Another symptom of the significance of the new subject matter was the establishment of the Political Economy Club in 1821. The intended purpose of the Club was to promote the "knowledge of Political Economy," and the impetus for its origin was both social and political. The social initiative grew out of the activities of David Ricardo; the political, from those of Thomas Tooke.

Ricardo had very strong social inclinations and desired lengthy discussions on the issues of political economy with his friends and associates, either over breakfast or dinner. Thomas R. Malthus, J. L. Mallet, James Mill, Robert Torrens, Richard Sharp, Tooke, Hutches Trower, and J. B. Say, to mention but a few of his friends, joined Ricardo for such sessions on numerous occasions, either at Gatcomb Park in Gloucestershire or at his London residence on Grosvenor Square. When the meetings were held in Gloucestershire, the circle was usually enlarged to include neighbors such as Thomas Smith of Easton Grey.

That Ricardo was a forceful persuader is very strongly evidenced, but few could contend with his theoretical onslaughts or with the sharpness of his mind. Commenting on one of Ricardo's dinner sessions, Mallet observed:

He [Ricardo] spoke of Parliamentary Reform and Vote by Ballot as a man who would bring such things about and to destroy the existing system to-morrow if it were in his power, and without the slightest doubt as to the result. And yet there was not one person at table (several of them individuals whose opinions he highly valued) who would have agreed with him. It is this very quality of the man's mind, his entire disregard of experience and practice, which makes me doubtful of his opinions on political economy.

(Mallet 1921, p. ix; Diary entry for 12 January 1820)

When a speaker holding strong views is a man of great wealth, a Member of Parliament, a recognized authority on political economy, a persuasive individual with a brilliant mind, and also your frequent and gracious host, it would be somewhat gauche to oppose him in open discussion. Even though Ricardo himself would have welcomed disagreement, there were only a few on any of his dinner guest lists who were prepared to engage him in debate. Those in attendance at the session described by Mallet were Joseph Whishaw, Pascoe Grenfell, Sharp, and Tooke; they were joined by Samuel Boddington, one of Sharp's partners, and Alexander McDonnald, a student at Oxford and a friend of Whishaw. Of the principals, all were strong Whig supporters, and it is understandable why none of them would have subscribed to Ricardo's version of parliamentary reform. The Whigs controlled too many rotten boroughs and too many peerages to advocate bringing down the whole house of cards. Whig reform, Ricardo believed, was

no reform at all, as it proposes to secure to the aristocracy a majority against the people. Some may wish to extend the suffrage more than others, but the test of sincerity is whether they will allow a majority in Parliament to be bona fide representatives of the interests of the people.

(*Works*, Vol. VIII, p. 62; Ricardo to Mill, 9 September 1819)

Not having been reared as a party to the British establishment, Ricardo had no historical roots in the traditional system; he stood so aloof that Mallet easily could believe he would "destroy the existing system to-morrow, if it were in his power." Ricardo's dinner guests were men successful in their own social environment, and they were not about to express opinions contrary to that system; they were opinionated in their evaluation of the establishment and content to adjust what they thought were marginal defects.

Not so Ricardo, who expressed views which were contrary to the whole system, almost as if he were an outsider. His theoretical position also was somewhat aloof from the existing system and while some political economists

agreed with him on points of theory, they disagreed on other aspects of his system. But so long as the discussions were held in his dining room, it was difficult to establish a beachhead from which to combat Ricardo's views. Part of the problem was that no other member of the inner circle of political economists owned the London facilities or possessed the necessary cash flow to continuously entertain large gatherings at dinner.

For many people, even in the early nineteenth century, large dinner parties were both expensive and unusual, but Ricardo thrived upon such occasions. Large numbers at meal time had always been a part of his experience, commencing with his parent's large dinner table, and carrying over to his own eight children. Thus the meetings were always at 56 Upper Brook Street.

In marking the centennial of the founding of the Political Economy Club, Henry Higgs, its official historiographer, commented that because of Ricardo's domination of the atmosphere in his home there were those like Tooke who "desired a more neutral arena for debate" (Political Economy Club 1921, p. x), and the establishment of an official dining club where political economy would be discussed.

It would be difficult to argue that Ricardo's intentions were strictly social in bringing together his fellow economists, since his political objectives were well known and obviously he always attempted to influence policy. But there was no central economic issue which motivated him and he was just as inclined to engage in discussions of abstract theory about money or value as to deal with more practical topics. As co-founder of the Political Economy Club, Tooke's motivation was strictly political and he was central-issue oriented. Tooke was concerned with the establishment of the principle of free trade. To this end, in January 1820, a small dinner party was held at the residence of Swinton C. Holland on Russell Square to discuss the drawing up of a petition to Parliament advocating the adoption of a statement in favor of free trade. Holland was a senior partner in the influential banking house of Baring Brothers and Company, and, like Tooke, a man of the business world, not a political economist. He was one of several bankers who had been called in 1819 to give testimony before the Committee of Secrecy of the Commons, which was considering the expediency of the resumption of cash payments. It was Holland who first suggested to the Committee the adoption of Ricardo's plan for a return to specie payment, as outlined in his "admirable pamphlet," [?] *Secure Currency*. When Holland appeared before the Committee he said he had never met Mr. Ricardo, nor had there been any correspondence between them, and his opinions were chiefly founded upon Ricardo's writings. Whatever merits his ideas possessed, he said, they were due to Ricardo's publications. It is reasonable to assume that Holland and Ricardo met sometime thereafter, since Peel's Act was based upon the Ricardo scheme and he himself gave testimony, but to the House of Lords, not the Commons.

The dinner meeting at Holland's residence was highly successful, and following this Tooke drafted his Merchants' Petition, which was accepted by the Tory Administration as the official statement in support of free trade. Since the first meeting at Holland's was composed mostly of merchants, neither Mill,

Malthus, Torrens, nor Ricardo attended. The only person at Holland's dinner who had been in the habit of dining at Ricardo's house was Tooke. On 18 April 1821, Mill, Mallet, Torrens, and Robert Mushet, all habitués of Ricardo's, joined Tooke and his fellow merchants, again at Holland's residence, to provisionally establish the Political Economy Club. Ricardo's absence was due to his scheduled speech in the House, in support of George Lambton's motion to extend the franchise to all households and to certain classes of leaseholders for a period of three years. Ricardo supported the motion, adding only that he wished the member from Durham had included a provision for voting by secret ballot. With a small attendance in the House, Lambton's motion lost 55-43, Ricardo in the minority (*Works*, Vol. V, pp. 112-113).

Besides the six already listed as attending the provisional meeting of the new society, there also were other businessmen. They included George Warde Norman (1793-1882), a director of the Bank of England and a currency pamphleteer (Norman 1833, 1850); John Welsford Cowell (1795-1867), a merchant and currency pamphleteer (Cowell 1843); and George Gerard de Hochepeid Larpent (1786-1855) (Larpent 1823, 1833), a merchant in the West Indian trade, Whig politician, and later a Member of Parliament. For his services to the Whig cause, Larpent was made a baronet in 1842.

Holland and Torrens were appointed to make arrangements for the next meeting, set for 30 April 1821, when "a Society for promoting the knowledge of Political Economy" would be formed. James Mill was assigned the task of preparing a draft of the rules and regulations to be voted upon at the next meeting. Mill's draft comprised two types of rules: those involving the conditions for membership and those prescribing the future conduct of the members. In the second instance, Mill was playing his favorite role, that of being a schoolmaster, and it is revealing that his second set of rules were all suspended, with one or two exceptions.

The participants at the provisional meeting, except for Mallet, who could not attend, were joined in May by 10 others, the most notable being Malthus and Ricardo. George Grote (1794-1871), Mill's young friend and protégé, was one; another was C. R. Prinsep, the English translator of Say's *Traite*. The rest of the new members were either bankers or merchants. The assembly agreed to limit the membership to 30, with prospective members being nominated and voted upon by ballot. A two-thirds majority was necessary for acceptance. There were to be seven meetings a year, the first Monday of the month, December through June. Grote was elected treasurer and each member was requested to pay five guineas in December of each year to cover the cost of the seven dinners. At each meeting a member would be chosen as chairman; three members, in alphabetical rotation, would constitute a committee to solicit topics for discussion at the subsequent meeting. No more than five strangers could be invited to attend any meeting, and provision was made for foreign members. At the May meeting, in 1821, from a list of 14 nominees, 10 were elected to raise the Club's membership to its requisite maximum, and Say was elected a foreign member (Political Economy Club 1921, pp. 358-359).

All of Mill's suggested rules for membership were accepted, but his provisional rules for the conduct of members were not so well received. He proposed that at each meeting, the chairman would put certain questions to each member, the germ of the questions being:

1. Had he recently read anything which might be of interest to the other members?
2. Had he discovered any important factor or speculations about Political Economy?
3. Had he been engaged in any discussions about Political Economy which might be useful for the purposes of the meeting?
4. Did he know of any legislation in Britain, that was at variance with the principles of Political Economy, which had not been discussed?
5. Did he know of any such legislation in other nations?
6. Did he know of anything the Society could do to rectify any mistakes in regard to Political Economy in the legislation in the practice or in the opinions of this or of any other country?

(Political Economy Club 1921, pp. 3-4)

Nothing has ever been recorded in the minutes of the Club as to the views various individuals expressed about specific topics, nor were divisions of the group ever taken. For the first 11 meetings, the minutes reported those in attendance, as well as the topics for discussion, but after the December session in 1823 attendance was no longer recorded. Diaries and the recollections of members are the only sources of information as to the ideas expressed. Of all the meetings for which it would be interesting to read detailed minutes, perhaps the first would be the most revealing. Each of Mill's suggested six questions were voted down. One can almost hear David Ricardo suggesting the presence of the Inquisition, since each person would be asked to reveal the degree to which he had proselytized the aims of the Society. Moreover, since the meetings ran from 6 to 11 o'clock, Mill's suggested six questions would have taken considerable time, leaving little for discussion. Mill was left to inquire about his son John's reading list, not those of the members of the Political Economy Club.

There was one portion of Mill's second set of rules which the Club did endorse, namely, that members should be extremely sensitive to the reporting of the press on matters respecting political economy:

As the Press is the grand instrument for the diffusion of knowledge or of error all the members of this Society will regard it as incumbent upon them to watch carefully the proceedings of the Press and to ascertain if any doctrines hostile to sound views in Political Economy have been propagated; to contribute whatever may be in their power to refute such erroneous doctrines and counteract their influence; and to avail themselves of every

favourable opportunity for the publication of seasonable [sic?] truths within the province of this science. P[assed].

It shall be considered the duty of the Society to study the means of obtaining access to the public mind through as many as possible of the periodical publications of the day, and to influence as far as possible the tone of such publications in favour of just principles of Political Economy. P[assed].

It shall be considered the duty of this Society individually and collectively to aid the circulation of all publications which they deem useful to the science by making the merits of them known as widely as possible, and to limit the influence of hurtful publications by the same means. P[assed].

(Political Economy Club 1921, pp. 4-5)

In view of Maria Edgeworth's story that no two members of the Political Economy Club could agree "on any point" (Edgeworth 1971, p. 364; Edgeworth to Margaret Ruxton, 9 March 1822), it is surprising the original members would agree to advance "sound views" and "just principles" of political economy. There would have been a large degree of consensus on the desirability of free trade, the gradual repeal of the Corn Law, and maybe even support for the desirability of the return to specie payment, but these were policy issues and not necessarily theoretical topics. As with any social club, there was sufficient agreement on the "tendencies" of the principles of political economy that a majority was able to support Mill's suggestion for ferreting out the errors of the press.

The difference between the agreement on the broad policy issues of political economy and the disagreement among the members as to the importance of particular theoretical constructs, speaks to the often disputed question of whether Tooke or Ricardo was the moving spirit behind the formation of the Political Economy Club. It cannot be disputed that from the beginning the Club was devoted to practical issues and the motive force for that aspect of the organization was Tooke's. He was the only one of the original 20 members who attended all of the first 11 meetings, held while the minutes recorded such items. During the same period, Ricardo attended but five sessions, while Malthus and Torrens each attended nine. Ricardo's infrequency was of two origins. Since the Club met for dinner, its meetings often conflicted with the sessions in the House of Commons, and though a backbencher Ricardo took his legislative duties seriously. Secondly, for most of 1822, Ricardo was traveling on the continent and could not attend the Club sessions.

It was Tooke, therefore, who held the Club together with his continuous attention to its organization. He also was responsible for the fact that the membership was dominated by businessmen dedicated to the principle of free trade. Without their numbers, the club could not have continued. But Tooke was not at the time the author of any pamphlets or books, even though he was accumulating the statistical data which later formed the basis of his famous study of prices (Tooke

and Newmarch 1838-1857).¹⁴ As a result, political economy as a topic for study had to rely upon the contributions of others, and it was Ricardo's domination in this arena that provided the theoretical impetus for the formation of the Political Economy Club. His influence as the leading voice in the development of political economy was acknowledged on all sides, in and out of the Club.

Ricardo's influence waned with his death in 1823, when Malthus and Torrens became the most important political economists in the group. James Mill stopped attending the meetings, according to Mallet, because he found himself so much at odds with the majority of the members. Those with a business orientation continued to dominate the membership, leaving Malthus and Torrens as the Club's theoreticians, even though they were not of one mind.

In the Preface to his *Production of Wealth* (1821), Torrens discussed the status of the science of political economy, commenting upon the strengths and deficiencies of his two acclaimed contemporaries. It was Torrens's intention to produce a volume which would fill the obvious void:

Though Mr. Ricardo has done more for the science of Political Economy than any other writer, with the single exception perhaps of Dr. Adam Smith, yet he sometimes falls into a species of error to which men of great original genius seem peculiarly exposed, and, in the ardour of discovery, generalises too hastily, and fails to establish his principles on a sufficiently extensive induction. In the inventive faculty, and in the power of pure and continuous ratiocination, he has seldom been surpassed; but in the capacity for accurate observation, his preeminence is less apparent.

Mr. Malthus, whose *Essays on Population*, and on the origin and nature of Rent, have contributed so much to the progress of economical science, exhibits throughout his writings, an intellectual character, altogether opposite to that which has been here described. He possesses in a very eminent degree the faculty of observing particular phenomena, but is somewhat deficient in that power of analysis which distinguishes between coincidence and necessary connexion, and enables us to trace the sequence of causes and effects. If Mr. Ricardo generalises too much, Mr. Malthus generalises too little. If the former occasionally erects his principles without waiting to base them upon a sufficiently extensive induction from particulars, the latter is so occupied with particulars, that he neglects that inductive process which extends individual experience throughout the infinitude of things, and imparts to human knowledge the character of science. As presented by Mr. Ricardo, Political Economy possess [sic] a regularity and simplicity beyond what exists in nature; as

¹⁴ The first four volumes were largely the work of Tooke; the last two, more influenced by Newmarch.

exhibited by Mr. Malthus, it is a chaos of original but unconnected elements.

Should the criticisms now hazarded be correct, it will follow, that a general treatise upon Political Economy, combining with the principles of Adam Smith, so much of the more recent doctrines as may be conformable to truth, and embodying the whole into one consentaneous system, remains to the present day a desideratum in our literature. This desideratum, as far as relates to the Production of Wealth, the Author has attempted to supply in the present volume; and on some future occasion, perhaps he may venture to complete the task by remodelling and extending the disquisitions respecting the distribution of wealth, which he has already laid before the public.*¹⁵

(Torrens 1821, pp. iv-v)

While acknowledging that Malthus had made important contributions to the science, Torrens believed he was being eclipsed, just as another famous scientist had been eclipsed by the advances in his discipline, namely the chemist Joseph Priestley (1733-1804):

when the brilliant discoveries in chymistry began to supersede the ancient doctrine of phlogiston, controversies, analogous to those which now exist amongst Political Economists, divided the professors of natural knowledge; and Dr. Priestley, like Mr. Malthus, appeared as the pertinacious champion of the theories which the facts established by himself had so largely contributed to overthrow. . . . With respect to Political Economy the period of controversy is passing away, and that of unanimity rapidly approaching. Twenty years hence there will scarcely exist a doubt respecting any of its fundamental principles.

(Torrens 1821, p. xiii)¹⁶

The hegemony of Ricardo's theoretical system which Torrens had described was recognized by others, though not always with commendation. One such individual was Lord John Russell (1792-1878), the Whig leader. A great advocate of Parliamentary reform and Catholic emancipation, Russell had nothing but contempt for political economy, though he had been educated at the University of Edinburgh and was even a former student of Dugald Stewart. His description of the science was such that he obviously had Ricardo in mind when he wrote

There is a party among us, however, distinguished in what is called the *Science* of Political Economy, who wish to substitute

¹⁵ The asterisk refers to the *Essay on the External Corn Trade* (1815). Robbins suggests that the published volume on distribution may be Torrens's *On Wages and Combination* (1834); see Robbins 1958, p. 295.

¹⁶ The claim that controversy among political economists would pass away was hardly prophetic.

the corn of Poland and Russia for our own. Their principle is, that you ought always to buy where you can buy cheapest. . . . They care not for the difference between an agricultural and manufacturing population in all that concerns morals, order, national strength and national tranquility. Wealth is the only object of their speculation; nor do they consider the two or three millions of people who may be reduced to utter beggary in the course of their operations. This they call diverting capital into another channel. Their reasonings lie so much in abstract terms. their speculations deal so much by the gross, that they have the same insensibility about the sufferings of a people, that a General has respecting the loss of men wearied by his operations. . . . Political economy is now the fashion; and the Farmers of England, are likely if they do not keep a good look out, to be the victims.

(Letter to the Electors of Huntingdon, *Morning Chronicle*
18 January 1822, p. 3; emphasis in original)

Given their support of free trade and the opening of British ports to the cheap grains of eastern Europe, a majority of the members of the Political Economy Club endorsed those principles that Russell condemned. The theoretical formulation of the principles of economics which led to such policy conclusions were to be found in Ricardo's volume. The only club members who are known to have dissented were Malthus and John Cazenove (1788- 1879) (James 1979, pp. 355-356), though Mallet may have been among them.

In the "Introduction" to his *Principles* Malthus claimed that, although he did not wish to give his work "a controversial air," it was not possible to avoid controversy because there was one modern work, of very high reputation, which contained numerous fundamental principles which he believed were erroneous. The errors of that particular volume had to be called to the public's attention. "I allude," he wrote, "to Mr. Ricardo's work, 'On the Principles of Political Economy and Taxation' " (Malthus 1821, pp. 22-23). Malthus suggested that he was not saying he was right and Ricardo wrong, as to the correct principles of political economy, but their differences were important, not only theoretically, but practically as well.

I have so very high an opinion of Mr Ricardo's talents as a political economist, and so entire a conviction of his perfect sincerity and love of truth, that *I frankly own I have sometimes felt almost staggered by his authority*, while I have remained unconvinced by his reasonings. I have thought that I must unaccountably have overlooked some essential points, either in my own view of the subject, or in his; and this kind of doubt has been the principal reason of my delay in publishing the present volume. But I shall hardly be suspected of not thinking for myself on these subjects, or of not feeling such a degree of confidence in my own

conclusions, after having taken full time to form them, as to be afraid of submitting them to the decision of the public.

(Malthus 1821, p. 23; italics added)

Malthus's biographer, Patricia James, has suggested he was perhaps in awe of Ricardo, because of his great wealth or his influence in Parliament (James 1979, p. 321). However, there is no evidence to support such an interpretation. From what is known of the very close friendship between the two, it would be difficult to support an argument that Malthus held back in Ricardo's presence. Certainly the latter's personality was not one which would have induced people to hold him in awe. What did bother Malthus, as he himself later acknowledged, was that he stood alone against the ever-increasing influence of Ricardo's theories. Not only were there the attacks from Torrens in 1821, in both his newspapers¹⁷ and in his latest volume, but Jane Marcet's second edition was much more on Ricardo's side than on Malthus's (Marcet 1821), and Mill's *Elements* (James Mill 1821)¹⁸ was intended as a proselytizing of Ricardo's work, written for those who knew little of the principles of political economy. Meanwhile, John Ramsey McCulloch was extolling the correctness of Ricardo's formulations in the *Scotsman* ([McCulloch] 1820b) and the *Edinburgh Review* ([McCulloch] 1821a).¹⁹

Although Torrens wrote disparaging remarks about Malthus, setting him apart from the central body of thought in political economy, he also continued his critique of Ricardo's theory of value, as originally outlined in his *Edinburgh Magazine*

¹⁷ In 1820 Torrens became the owner of an evening paper, *The Traveller*, and in 1821 he also acquired an interest in *The Champion*, a weekly devoted to a "Review of Politics and Political Economy," under the motto "The Greatest Happiness of the Greatest Number." Torrens wrote a column labeled "The Economist," in which foreign trade, rent, profits, and machinery were discussed from a Ricardo-Torrens point of view. Ricardo claimed *The Champion* set forth "the correct principles."

¹⁸ The relation between the Marcet and Mill volumes was suggested by Ricardo. In 1821 his daughter-in-law, Harriet, was reading Marcet "with great attention, and I am happy to add with great profit, and appears to understand it well. Your book [Mill's] will confirm the good doctrines in her mind, and will supply her with some new ideas on the subject." *Works*, Vol. IX, p. 118; Ricardo to Mill, 10 December 1821.

¹⁹ McCulloch had said his article would "endeavour to refute the absurd and pernicious maxims which Mr Malthus has inculcated in that part of his work" (*Works*, Vol. VIII, p. 325; McCulloch to Ricardo, 25 December 1820). Probably because of Jeffrey's intervention, the article was nowhere as provocative as McCulloch suggested it would be; he showed great respect for both Sismondi and Malthus, the latter "so able an economist" ([McCulloch] 1821a, p. 116). Say was neither cited nor quoted in the article, but that was unnecessary because the piece was a reaffirmation of the principle of consumption being equal to output. As for Sismondi's claim that capital accumulation would displace labor, the author countered that employment would expand in the machine production areas. "Too much of one particular commodity may be occasionally produced; but it is quite impossible that there can be too great a supply of every commodity."

As to Malthus's argument that unproductive consumption was a necessity, McCulloch replied: "Wherever there is the *power*, the *will* to consume will never be wanting. The real difficulty is not in the eating of a good dinner, but in the getting of a good dinner to eat. If production be sufficiently stimulated, consumption may be left to itself; and Mr. Malthus may dismiss his fears, that 'without a large expenditure on the part of Government,' we should have a continued glut of commodities! At all events, we must not suffer ourselves to be misled by his authority." ([McCulloch] 1821a, p. 122; italics in original).

McCulloch used a dateline of London, 1821, for all three of the volumes he supposedly was reviewing, but in fact none was published in 1821, with two in Paris, not London. Say's fourth edition of the *Traité* was published in 1819, Sismondi's *Nouveaux Principes* the same year, and Malthus's *Principles* in 1820. McCulloch's *Edinburgh Review* dateline is a mystery.

article. In the first instance, Torrens's definition of wealth included all commodities which possessed utility, not just those which could "be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint," to quote Ricardo (*Works*, Vol. I, p. 12). Such a formulation meant that Torrens did not limit himself to exchange value but included commodities which possessed use value in excess of their cost of production. He was talking about prices, not value. Secondly, and perhaps more importantly, he argued that it was the relative quantities of fixed capital in production which determined exchange ratios in an advanced economy, not the relative quantities of embodied labor, as Ricardo claimed. He thought the latter case appropriate under primitive conditions, as Adam Smith had demonstrated, but not in a society like Britain. In drawing a distinction between value and price, Torrens argued that the speculation about a possible measure of value was useless:

As every marketable commodity which exists, or which can be supposed to exist, is perpetually varying in its power of effecting purchases, it is as impossible to discover a measure or standard of exchangeable value, as it would be to obtain a measure of length, or of weight, if everything in nature were undergoing incessant changes in its dimensions and specific gravity.

(Torrens 1821, p. 65)

Perhaps it was this passage, and the whole of the chapter on value, which led Malthus to conclude that Colonel Torrens's book was as much on his side as on Ricardo's (*Works*, Vol. XI, pp. 69-70; Malthus to Ricardo, 25 September, 1821). But despite Torrens's criticism of Ricardo's value theory, he himself emphasized the production aspects of wealth and ignored the role of demand. Malthus, therefore, noted that Torrens "is still infested with the heresy of attempting to account for prices and profits without reference to demand and supply on which every thing really depends" (*Works*, Vol. XI, p. 80; Malthus to Ricardo, 25 September 1821).

Torrens was critical of Ricardo's continuous reference to profit as a cost of production, and in a long passage near the end of his first chapter the Colonel drew a sharp distinction between the cost of production and a commodity's exchangeable value, the difference being profit. The passage could just as well have been written by Adam Smith, or, in a slightly different version, by Karl Marx. Torrens claimed:

In manufacturing, as well as in agricultural industry, the profit of stock is distinct from the cost of production. The master manufacturer expends a certain quantity of raw material, of tools and implements of trade, and of subsistence for labour, and obtains in return a quantity of finished work. This finished work must possess a higher exchangeable value than the materials, tools, and subsistence, by the advance of which it was obtained; otherwise the master could have no inducement to continue his business. Manufacturing industry would cease, if the value

produced did not exceed the value expended. But it is the excess of value which the finished work possesses above the value of the material, implements, and subsistence expended, that constitutes the master's profit; and therefore, we cannot assert that the profit of his stock is included in the cost of production, without affirming the gross absurdity, that the excess of value above the expenditure, constitutes a part of expenditure. Supposing that the materials, tools, and subsistence, cost 300*l.* and that the finished work is worth 360*l.*, then the difference will be the master's profit; and we cannot maintain that the amount of profit is included in the amount of expenditure, or cost of production, without urging the contradiction, that 300*l.* are equal to 360*l.*

The profit of stock, so far from forming any part of the cost of production, is a surplus remaining after this cost has been completely replaced. In carrying on their business, the farmer and manufacturer do not expend their profit;--they create it. It forms no part of their first advances; on the contrary, it constitutes a portion of their subsequent returns. It could not have been employed in carrying on the work of production, because, until this work was completed, it had no existence. It is essentially a surplus--a new creation--over and above all that is necessary to replace the cost of production, or, in other words, the capital advanced.

(Torrens 1821, pp. 53-54)

The fact that the exchangeable value of the finished product exceeded the value of the inputs involved in production allowed for the existence of a surplus, or profit. For Torrens, this surplus was "created" by the farmer or manufacturer, but he did not explain in any fashion how its creation came about. Marx, of course, claimed that the exchangeable value was the product of labor time, which was always more than the value of the productive power which the farmer or manufacturer purchased in the labor market. It was this distinction between the value of labor and the value of labor power that Marx believed was his major contribution to the classical theory of production, a distinction which had been lurking in the classical literature, particularly in Smith and Ricardo, but which had not been explicitly expressed. It appears that Torrens, perhaps, came closer to Marx's explanation than anyone else.

In commenting upon the analysis, Marx claimed that "One of Torrens's merits is that he has at all raised the controversial question: what are *production costs*" (Marx 1971, p. 79; italics in original). He observed that Ricardo continually confused the exchangeable value of commodities with their production costs and that Malthus further muddied the waters by asserting that the exchangeable value of a commodity was determined by the quantity of labor it could command. Marx wrote that Torrens alone understood the meaning of production costs in the same way that many capitalists understood it:

what the production of a commodity *costs* the capitalist and what the *production of the commodity itself costs*, are two entirely different things. The labour (both materialized and immediate) which the capitalist *pays* for the production of the commodity and the labour which is necessary in order to *produce* the commodity are entirely different. . . . If this difference did not exist, then neither money nor commodities would ever be transformed into capital. The source of profit would disappear together with the surplus-value. . . . The excess of its value (that is, what the commodity itself costs) over and above the value of the capital expended (that is, what it costs the capitalist) *constitutes the profit which, therefore, results not from selling the commodity above its value, but from selling it above the value of the advances the capitalist made.*

(Marx 1971, pp. 80-81; italics in original)

For Torrens the difference between production costs and the exchange value of a finished commodity was a surplus in some way created by the capitalist. For Marx, the difference between production costs and the exchange value of a finished commodity was a surplus created by the laborer. That is, the difference between the value of his labor power and the value of his labor creates surplus value. It arises during the portion of the working day when the worker is producing commodities in excess of those required to buy his time and effort.

In critiquing the analysis of their predecessors, different authors stress different passages and chapters. While Marx gave emphasis to Torrens's distinction between production costs and exchange value, Lord Robbins only notices the distinction *en passant* (Robbins 1958, p. 239).

In a very long fourth chapter, on mercantile industry, Torrens's Section VI was "On the Principles of Demand and Supply," but the discussion was not devoted to an analysis of market forces as Malthus would have expected. Instead, Torrens was concerned with the relation of the total demand to the total supply of all goods produced, a discussion which turned on the Mill-Say principle. If goods were produced in proper proportions, there would be no problem of total demand being equal to total supply, with a clearing of all markets. Gluts occurred only when errors were made with respect to the production of particular commodities, and such miscalculations might lead to a "general stagnation in trade," because

the desire of turning goods into money is rendered more intense than the desire of turning money into goods, and the proportion in which prices will fall, will be much greater than that in which the relation between the quantity of commodities and the amount of currency will be altered.

(Torrens 1821, pp. 421-422)

Torrens's formulation of the role of money still reflected his antibullionist views and was not stated in a Ricardian quantity theory framework. The argument that general prices might fall, by an amount in excess of the change in the proportion of the total money supply to the total quantity of production, did not emphasize short-run distortions in the system, disturbances which were considered of little consequence in a strict interpretation of the quantity theory. Torrens's 1821 view was closer to that of Henry Thornton than it was to that of Ricardo or McCulloch.

Despite his emphasis on a possible short-run "general stagnation" due to the excess production of particular commodities, Torrens believed that such mismatches could be avoided. He stood with the Mill-Say principle in saying that "in every conceivable case, effectual demand is created by and is commensurate with production, rightly proportioned" (Torrens 1821, p. 397).

Free trade was the guide for maintaining correct proportions of production. There was nothing in Torrens's volume to support Malthus's insistence on an inherent tendency toward a general deficiency in the desire to consume goods or to support J. C. L. Simonde de Sismondi's view of a general tendency for capital to displace labor. Torrens did not discuss the problem of unemployment in detail, and there is only a slight reference to emigration as a solution, despite his 1817 *Paper on the Means of Reducing the Poors* [sic] *Rates*, which supported colonization as the only short-run means for preventing a further growth in pauperism. In the long run, the development of the Lancaster system of education and the growth of savings banks were expected to exert prudential checks on population, but emigration was a short-run solution.

Torrens's *Production of Wealth* was published in July of 1821, but as late as November, Ricardo had not yet seen a copy and the book was never again mentioned in any of his correspondence. The following year he was in Europe for a good portion of the time and it is unlikely that he ever read Torrens's latest volume. Tooke had told him it was not very good, and Ricardo probably was aware of much of the content from his discussions with Torrens. Prior to its publication Ricardo had said that both Malthus and Torrens adhered "too firmly to their old associations to make a very decided progress in the science" (*Works*, Vol. VIII, p. 22; Ricardo to McCulloch, 7 April 1819).

It is obvious Ricardo believed Malthus to be the more formidable opponent, the one with the greatest influence, for he worked through the new *Principles* making his voluminous *Notes*. Perhaps this was partially due to his great friendship with Malthus, and the *Notes* can be considered a continuation of their running debate in the correspondence. There was not the same personal relationship between Ricardo and Torrens; no correspondence exists, and the only volume by the Colonel found in Ricardo's library was the *Essay on Money* (1812). On the other hand, Ricardo was not a great book collector and his library was surprisingly sparse. The fact that he did not own a copy of Torrens's *Production of Wealth* is somewhat understandable, since the volume did not attract a great deal of attention at the time. Torrens had nothing new to say about the fundamental issues of the day. His views on free trade and the Mill-Say principle were similar to those of Ricardo, Mill, McCulloch, and

Say. Lord Robbins has remarked that much of Torrens's *Production of Wealth* was taken word for word, page by page, from his earlier works *The Economists Refuted* (1808), the *Essay on Money* (1812), and the *Comparative Estimate* (1819b).

But if Ricardo did not pay any attention to the work of Torrens, he should have done so, since it was the Colonel, and not Malthus, who became the leader of Ricardo's detractors. The place where he led that attack was at the meetings of the Political Economy Club, as its influence continued to grow after Ricardo's death. Of the original 20 members, 12 made it into the *Dictionary of National Biography*, and 7 took their place in the House of Commons. It was not that the Club made the members famous, but that the Club became more influential as its members gained importance in public affairs. A writer in the *Edinburgh Review* in 1825 claimed that the most important truths of Political Economy had been "triumphantly established" and no longer were in "danger of being again called into question." These truths were now "matters of vulgar notoriety, and are constantly referred to and acted upon by thousands who would have been incapable of eliciting them from the masses of error and prejudice through which it was at first necessary to assert them" ([Jeffrey] 1825, p. 7).²⁰

The first postwar triumph of political economy was responsible for the return to specie payment by the Bank of England in February 1820. The theoretical thrust for the restoration of the currency was the work of Ricardo, of course, while the political details were the result of the efforts of Robert Peel (1788-1850), at the time M.P. for Oxford and chairman of the influential currency committee of the House of Commons.²¹

Despite the growing influence of the subject area, the widespread acceptance of the principle of free trade, and the relaxation of government intervention in all types of economic activity, skeptics remained. Stalwarts within the Whig party, as well as a hardened old-line Tories, disputed the claims of the new "science." As always, there was William Cobbett:

That great ass, PERRY [Editor of the *Morning Chronicle*], observed, the other day, that, the Inquisition being at an end in Spain, *science* would take a spread in the country; for that a Spaniard might now have "a *Blackstone* or a RICARDO in his library!" A *Ricardo*, indeed! . . . But this PERRY is, at once, the most conceited coxcomb and greatest fool in this whole kingdom. . . . "A *Ricardo*!" The empty, pompous fool, when it has taken but a few months to shew that "*a Ricardo*" is a heap of senseless, Change-Alley jargon, put upon paper and bound up into book; that the measure, founded upon it, must be abandoned, or will

²⁰ From the content of the last few pages of the review, it appears to have been written by a Scot, someone familiar with Edinburgh University. The author was critical of the fact that political economy no longer was being taught by the Professor of Moral Philosophy, who at the time was John Wilson. The reviewer supported the idea that McCulloch should give a series of lectures at Edinburgh on political economy, as no "fitter person" existed. Jeffrey is listed by Fetter as the author. Fetter 1953, p. 252, n. 103.

²¹ Peel's Act of 1819 was passed soon after Ricardo became a Member of Parliament.

cause millions to be starved, and that it has since been proposed, even by the author himself to supplant it by a plan for paying off the Debt! "*A Ricardo*", indeed!

(*Cobbett's Weekly Political Register*, May 20, 1820, pp. 707-708; italics and emphasis in original)

Henry Brougham, in a speech in the House, once referred to Ricardo as an "oracle" on matters of political economy, intending it as a compliment. Cobbett picked up the term, and thereafter always referred to Ricardo as "the Oracle," using the word in a pejorative sense. In writing of Ricardo's use of gold as the standard for money, Cobbett wrote:

To refer to the *market price of gold as a standard* is exactly what the *Oracle* did; the Oracle of the "*Collective Wisdom*." Gold, says he, being the *standard of all things in the world*; every price depending on that of gold; and gold now being within *four and a half per cent.* of its lowest possible price, the prices of *other things* cannot, by this measure, be brought down more than four and a half per cent; . . . This was the ground *upon which Peel's Bill* passed! This queer, this 'Change-Alley, this Jew-like notion of the price of gold being the *standard*. However, this was no *new* notion: it had been harped on by *Oracle Horner* and his Bullion Committee; by *Lord King*; and by a great many others, long before *the Oracle by excellence* spouted it forth.

(*Cobbett's Weekly Political Register*, October 20, 1821; pp. 925-926; italics in original)

Tooke wrote that Cobbett was a "blackguard," and noted he was now being honored with a portion of the abuse which previously had been reserved for Ricardo. He claimed Ricardo's status as the deservedly highest authority on political economy was "a sufficient cause" for Cobbett to miss no opportunity to attack him. As for himself, Tooke thought Cobbett had let him off easily (*Works*, Vol. IX, p. 106; Tooke to Ricardo, 13 October 1821).²² While he could describe Cobbett as a blackguard and no member of the Political Economy Club would have dissented, still everybody read Cobbett's weekly commentary on political and economic events. It was not read solely by the working class, though this was the group he considered his audience. He changed his foes, but never the tone of his rhetoric. In an open letter to Malthus, Cobbett said he had "detested many men; but never anyone so much as you." There was, moreover, no assemblage of words that could render an "appropriate designation" for Parson Malthus (quoted in Sambrook 1973, p. 106). Moreover, Malthus was a party to "the" great conspiracy against mankind:

²² Cobbett was particularly upset with the Agricultural Committee, before which Tooke was the leading witness, when it reported that the low price of corn was due to excess production rather than Peel's Act. *Cobbett's Weekly*, September 29, 1821, p. 726.

If you will follow me in this inquiry, I will first show you how this thing called the 'Reformation' began; what it arose out of; and then I will show you its progress, how it marched on, plundering, devastating, inflicting torments on the people, and shedding their innocent blood. I will trace it downward through all its stages, until I show you its natural result, in the schemes of Parson Malthus . . . in the present misery indescribable of the labouring classes in England and Ireland, and in that odious and detestable system, which has made Jews and paper-money makers the real owners of a large part of the estates of this kingdom.

(Quoted in Sambrook 1973, p. 136)

While he traveled in northern Italy in 1822, Ricardo had heard reports of the low price of British corn, of landlords in despair, and of farmers in bankruptcy. He could not understand why the depression had lasted so long. He also wondered what Cobbett was writing about Ricardo's responsibility for the current turn of events. "I suppose Cobbett is in high spirits," he wrote Mill, and inquired: "does he continue his attack on me?" (*Works*, Vol. IX, p. 228; Ricardo to Mill, November 3-4, 1822)

The benefit of the policies founded upon the principles of the "new science" were disputed in many quarters, one reason being that people did not know what the essential principles really were and whether they might be as true tomorrow as they were avowed to be today.

Speaking in the House in 1823, Thomas Fowell Buxton (1786-1845), the member for Weymouth, remarked that 50 years earlier certain principles of political economy had been accepted as the proper foundation for the policy then in effect. (He was referring to the principles of mercantilism.) But then Adam Smith had gained great fame by showing that those principles were in error. Recently, Buxton reported, the House

had heard his hon. friend, the member for Portarlington (Mr Ricardo), combat the doctrines of Adam Smith in many particulars, with a clearness and force which had certainly persuaded him (Mr. F. Buxton) of his hon. friend's correctness. The petitioners [the silk weavers of Sudbury] therefore, were certainly entitled to ask, what security there was, that some future system of political economy would not overturn the system of his hon. friend, which had overturned the system of Adam Smith, who, in his day, had overturned the system of those who had gone before him?

(*Works*, Vol. V, p. 306; Buxton's speech, 9 June 1823)

A fortnight earlier, Buxton had claimed the principles of political economy changed every two or three years. In his response, the member for Portarlington had reported that the "principles of true political economy never changed" and that

"those who did not understand that science had better say nothing about it" (*Works*, Vol. V, p. 296; Ricardo's speech of 21 May 1823). He did admit, however, that of late the words "political economy" had become "terms of ridicule and reproach" because members like Buxton were using them "as a substitute for an argument" (*Works*, Vol. V, p. 307; Ricardo's speech of 9 June, 1823). While Buxton modified his earlier statement that political economy changed every two or three years, his 50-year history of the changes in the science was not too far afield, illustrating the skepticism of numerous politicians, landlords, and workers. As a recent commentator has said:

Alternative principles and methods were constantly put forward even during the time when Ricardo's views had their greatest influence. Spokesmen for the landed and the working classes both subjected Ricardian political economy to intensive criticism, and attempted to formulate a substitute set of doctrines more in tune with their own political perspectives. The result was a great deal of controversy, both methodological and theoretical, in the emerging discipline.

(Berg 1980, p. 42)

The author of the *Edinburgh Review* article on the status of political economy, while stressing the widespread agreement on the advantages of free trade and a convertible money system, suggested that in other areas there were widespread differences of opinion among the "learned" of the profession. He alluded to the "proper constituents of *Value*--the true nature of *Rent*--the proper effects of *Taxation* and public *Debt*, and the possibility of *Excessive* production" ([Jeffrey] 1825, pp. 7-8). Obviously the topics in dispute far outweighed those on which there was a consensus and it is not difficult to understand why the character of political economy changed so drastically in the course of the next few years. There were challenges to the orientation of the fundamental theoretical propositions, and attacks upon the Ricardian methodology. After 1823, the theoretical and methodological opposition to Ricardo's influence came not from Malthus but from other sources, and Malthus was forced to take on the defense of his old friend. The leader of the theoretical thrust was Torrens. The leader of the methodological attack was William Whewell (1794-1866), a philosopher and fellow of Trinity College, Cambridge. It is not known whether Torrens and Whewell ever communicated with one another, but their individual efforts meshed in a way that raised serious doubts about Ricardo's authority and deterred continued acceptance of his theories.

As is well known, Torrens first raised his objections to all of Ricardo's principles within the confines of the Political Economy Club in January 1831. As reported by Mallet, Torrens

held that all the great principles of Ricardo's work had been successively abandoned, and that his theories of Value, Rent, and

Profits were now generally acknowledged to have been erroneous. As to value the dissertation on the Measure of value published in 1825 by Mr. Baillie [sic]²³ of Leeds had settled that question. As Thompson²⁴ had shown that Rent was not the effect of differences in the relative productiveness of soils, but the effect of demand and price, and as to profits, it is clear that the part that goes to replacing the capital employed which Mr. Ricardo had omitted to take into account was decisive of the unsoundness of his views.

(Mallet 1921, pp. 223-224; Diary entry for 13 January 1831)

At the time, Torrens was one of 16 members of the Political Economy Club who were also members of the House of Commons, with two others in the House of Lords (calculated from Fetter 1980, Appendices I and II). Lord Robbins claimed that Torrens was "a little inclined to be pompous" (Robbins 1958, p. 257), and certainly the night he denounced Ricardo he must have been in high spirits. He spoke not only as one of the leading political economists of the time but as one of the Whig leaders in the Commons. From Mallet's account, McCulloch was the only one present who defended Ricardo's theory of value and rent, though he agreed with Torrens about Ricardo's mistakes regarding profit. McCulloch considered Ricardo to have "done the greatest service to the science, his methodical and scientific way of treating it, so that even where he was mistaken, his errors could be detected by a subsequent and more correct analysis" (Mallet 1921, p. 224; Diary entry for 13 January 1831). Neither James Mill nor Malthus was in attendance, and Tooke, the only other person mentioned by Mallet, defended Ricardo on rent, but not his value theory.

Torrens raised the topic of Ricardo's merits again at the April meeting of the Club, when it was generally agreed that all of his theories were incorrect, according to his own terms, but he was "right in principle." It was claimed that his greatest error was in accepting Malthus's principle of population and in carrying it to an extreme, since time had shown that the fund for the maintenance of labor had grown faster than population. Mallet summarized what must have been the general overall view of Ricardo's system:

he looks forward from the gradual demand for food and the use of land, to the gradual lowering of wages and profits till nothing remains but rent to the Landlords. But long before that, modification would take place in the state of society which would make such conclusions all wrong. First of all, it is contended that the interest of the Landlords does in fact coincide with those of the other classes; . . .

(Mallet 1921, p. 225; Diary entry for 15 April 1831)

²³ Bailey 1825.

²⁴ Thompson 1826.

To believe that Ricardo supported such a pessimistic view of society was to ignore the fact that he purposely cast his theory in a negative mold in order to emphasize his important policy conclusions. Opening British ports to grain imports from the continent of Europe would prevent the stationary state from ever appearing and then capital accumulation could proceed at full force. In 1815, with the passage of the new Corn Law, and during the postwar era when the law was defended by the landed interests, the landlords were opposed to the rest of society if capital accumulation was the goal. By 1831 the landed interests were in retreat. The reason they were losing control was the eminent acceptance of the reforms for which Ricardo himself had always fought: parliamentary reform and the repeal of the Corn Law. The other facet of Ricardo's political economy involved his schemes to establish order in the monetary system and in this instance Torrens was still on his side.

The two writers upon whom Torrens depended to support his claim that Ricardo had been all wrong were Samuel Bailey (1791-1870) and Col. Thomas Perronet Thompson (1783-1869). In 1825, Bailey published anonymously his *Dissertation*, with his major points centering on a criticism of Ricardo's notion of absolute value and the search for an invariable standard of value. For Bailey, value reflected the esteem in which any object is held. It denoted, strictly speaking, an effect produced "in the mind." In stressing use value rather than exchange value, Bailey cited the opinion of Say. There really was nothing very original in what he wrote since use value had been referred to by everyone who made any reference to Adam Smith. Moreover, according to Bailey, value was always a relation between two items. There was "nothing positive or intrinsic" about the worth of any commodity, since all value was relative, with no such thing as absolute or real value. Ricardo's and Malthus's attempts to isolate a commodity of invariable value, to be used as a standard measure of value, was useless:

My proposition is that, if the causes affecting any one commodity continued unaltered, this commodity would not be invariable in value, unless the causes affecting all commodities compared with it, continued unaltered.

(Bailey 1825, p. 20)

As we cannot speak of the distance of any object without implying some other object, between which and the former this relation exists, so we cannot speak of the value of a commodity but in reference to another commodity compared with it. A thing cannot be valuable in itself without reference to another thing.

(Bailey 1825, p. 5)²⁵

Of that subset of commodities with which Ricardo primarily was concerned, Bailey conceded that the cost of production was the determinant of their respective

²⁵ For a sympathetic interpretation of Bailey's value theory, see Rauner 1961.

exchange values and use values played no role for commodities produced under constant costs. But the exchange ratios of such commodities were determined by the relative quantities of fixed capital used in their production and not by the relative quantities of embodied labor (Bailey 1825, p. 205).

Besides being highly critical of Ricardo, Bailey claimed that Malthus had fallen into the same error by

supposing, that if a commodity continued the same in the circumstances of its production, it would retain the same value amidst the fluctuations of other commodities. The inconsistency of this with the definition of value [Bailey's], has already been sufficiently exposed; and as it is the basis of Mr. Malthus's notion of absolute value, that notion necessarily falls to the ground.

(Bailey 1825, p. 24)

After having exposed the fallacies of Ricardo and Malthus with respect to value theory, Bailey noted that it was a "pleasure" to quote from an author, "whose views as to the nature of value appear to me to be sounder than those of any other writer" (Bailey 1825, p. 32). That writer, of course, was Col. Robert Torrens.

Obviously there was a great similarity between Bailey's *Dissertation* and Torrens's works, particularly the "Strictures" article in the *Edinburgh Magazine* and the value chapter in the *Production of Wealth*. Both were critical of Ricardo's absolute-value notion, his search for a standard of value, and his concept that the exchangeable value of commodities was a function (primarily) of the different quantities of labor embodied in their production. They also agreed that Ricardo's inverse relationship between wages and profits was wrong, as was his discussion of wages rising and falling in terms of the proportion of total output.

For Torrens to claim, at the Political Economy Club, that Bailey had settled the issue of the errors of Ricardo's value theory was tantamount to claiming that he, Torrens, had been correct all the time, beginning with his "Strictures" article in the *Edinburgh Magazine* in 1818. It is unlikely that Torrens knew Bailey personally because in 1831 when he spoke favorably of his *Dissertation* he referred to him as being from Leeds, whereas Bailey always lived in Sheffield (Rauner 1961, pp. 143-148). That Mallet misspelled Bailey's name, when quoting from Torrens's speech to the Political Economy Club, can be attributed to Mallet probably not being familiar with Bailey's writings.

Before leaving the question of Bailey's attack upon Ricardo and Malthus, it should be noted that Ricardo himself was well aware of the types of criticisms which had been raised about his theory of value by Torrens and others. In 1821 an anonymous pamphlet appeared that anticipated many of the criticisms raised by Bailey. The author was primarily concerned with the fashion in which political economists developed their own unique terminology and discussed the writings of Smith, Say, and Malthus but was particularly directed to Ricardo's value theory. The author was especially critical of Ricardo's notion of "absolute" or "real value," a confusion between exchange value in a relative sense and the notion of an absolute.

If Mr. Ricardo *understands* by the value of a thing . . . its value in *exchange for* the quantity of labour that produced it, his inquiries about the reasons for exchanging a deer for two salmon, etc. etc. are superfluous; for we need not inquire whether *that* is or is not the *cause* of a thing, which we have already determined to be the *very essence and definition* of it. . . .

(Anonymous 1821, p. 84; italics in original)

[A]ll value is relative, as M. Say observes; and as we should more easily bear in mind, if the word 'exchangeable,' or in 'exchange,' which in this sense it always *implies*, were always uttered and expressed.

(Anonymous 1821, pp. 13, 10; italics in original)

Ricardo read the anonymous pamphlet, as did his friend Hutches Trower, and they exchanged several letters as to the difference between exchange value and real value. Ricardo claimed:

In speaking of exchangeable value you have not any idea of real value in your mind --I invariably have. . . . The exchangeable value of a commodity cannot alter, I say, unless either its real value, or the real value of the things it is exchanged for alter. This cannot be disputed. [But it was disputed.] If a coat would purchase 4 hats and will afterwards purchase 5, I admit that both the coat and the hats have varied in exchangeable value, but they have done so in consequence of one or other of them varying in real value, and therefore if I use the word value without prefixing the word exchangeable to it, it will be correct for me to say that the coat has risen in value whilst hats have not varied, or that the hats have fallen in value while coats have remained stationary.

(*Works*, Vol. IX, p. 38; Ricardo to Trower, 22 August 1821)

Ricardo suggested that Trower should reread two passages from his *Principles*. The first:

the exchangeable value of these commodities [Ricardo's sub-set], or the rule which determines how much of one shall be given in exchange for the other, depends almost exclusively [93%] on the comparative quantity of labour expended on each.

(*Works*, Vol. I, p. 12; the First and Second editions read "depends solely" rather than "almost exclusively")

And the second point:

In speaking, however, of labour, as being the foundation of all value, and the relative quantity of labour as almost exclusively

determining the relative value of commodities, I must not be supposed to be inattentive to the different qualities of labour, and the difficulty of comparing an hour's or a day's labour, in one employment, with the same duration of labour in another. The estimation in which different qualities of labour are held, comes soon to be adjusted in the market with sufficient precision for all practical purposes, and depends much on the comparative skill of the labourer, and intensity of the labour performed. The scale, when once formed, is liable to little variation.

(*Works*, Vol. I, p. 20; the First and Second editions do not contain "almost exclusively")

Like the author of *Verbal Disputes*, Trower took issue with Ricardo's interchangeable use of real value and exchangeable value:

I say you ought not to express by the same term two different ideas. For you will not deny, that there is a *real difference* between exchangeable value and real value. They do not always coincide--Exchangeable value is the *market* value of a Commodity--Real value is its *cost*. The *market* value, tho' governed by the *real* value, and constantly gravitating towards it, scarcely ever corresponds with it.

(*Works*, Vol. IX, p. 68; Trower to Ricardo, 13 September 1821; italics in original; for Ricardo's reply, see Ricardo to Trower, 4 October 1821, *idem.*, p. 87)

The exchange ratio of Ricardo's hats and coat was not always the same, and what he was looking for was a means of being able to detect which commodity's production characteristics had been altered--the hats or the coat. The means of identifying the change was to inquire as to the change in the difficulty of producing the two goods, since it was quite possible, and very likely, that there had been no change in the amount of labor necessary to produce the hats but there had been a change in the amount of time necessary to produce the coat. Ricardo's line of reasoning was at odds with almost all political economists, as they abandoned any attempt to identify the cause of the change in exchange ratios, since it was considered impossible to find an absolute measure of original value. It was a search for the historical roots of value, for an original cause, and what mattered was to measure the change in exchange ratios, not why they changed. Ricardo, on the other hand, needed to be able to identify the cause of the change in the real value of corn, to show that the rise in the cost of wage goods was responsible for the decline in profits as a proportion of total output. Recently it has been noted that Ricardo was the only Ricardian²⁶ and that was what set him against other political economists.

²⁶ See the report of a discussion, *Newsletter*, The History of Economic Thought Society of Australia, No. 4, Winter 1983, p. 10.

Obviously there was no way that Bailey could have been aware of the Ricardo-Trower correspondence or that Ricardo was writing an article on "Absolute and Exchangeable Value" in an attempt to answer his critics, particularly Torrens, Trower, and the author of "Verbal Disputes." Nonetheless, Bailey was quite correct in his claim that Ricardo's analysis was dependent upon the concept of an absolute value and that the leading critic of Ricardo's concept was Torrens. When Torrens launched his attack upon Ricardo, at the Political Economy Club meeting in 1831, he was vindicating his own formulation of the value question, since Bailey alone singled out Torrens as the author of the correct view of the basis of exchange value. Actually, of course, the author of "Verbal Disputes" had written much the same criticism of Ricardo and Malthus as had Torrens, but Bailey made no reference to "Verbal Disputes." As is well known, Marx was the first writer to draw attention to the similarity between "Verbal Disputes" and Samuel Bailey's *Dissertation*--such a strong similarity that Marx accused Bailey of plagiarism.

After he published his *Dissertation*, Bailey discovered a copy of "Verbal Disputes," and he too was struck with the similarity between the two pamphlets, writing in his copy that someone could easily claim that Bailey had lifted material from "Verbal Disputes," but adding that he did not know of the latter when he wrote the *Dissertation*. There are several grounds for believing Bailey other than his own statement of disclaimer.²⁷ First, "Verbal Disputes" contains any number of Greek, Latin, and French phrases, and was probably written by someone trained in a classic English tradition. Bailey's pamphlet, on the other hand, reflects little of the classic writing style, being more the reflection of a philosopher than a classic scholar. And secondly, "Verbal Disputes" did not mention Torrens, and it was Bailey's reliance upon Torrens that so impressed the latter. Had Bailey not vindicated Torrens's criticism of Ricardo's value concepts, it is doubtful if the Colonel would have relied upon Bailey's critique when he delivered his speech before the Political Economy Club in 1831.

Meanwhile, at Cambridge, Whewell and his inductivist cohorts were concerned with shifting the emphasis of philosophy away from the deductivist orientation of the Cartesians. Whewell was the leader of those philosophers who wished to return to the inductivists orientation of Francis Bacon (1561-1626), a revival of British empiricism. Unlike most British philosophers of his time, Whewell was extremely well grounded in the work of Immanuel Kant and he was well versed in the ant deductivist orientation of European philosophy, in contrast to the orientation of the British radicals, such as Mill, Bentham, Joseph Hume, Ricardo, Robert Owen, and Grote. The new radicals were described by Brougham as being "in their religion intolerable atheists, in their politics bloody-minded republicans, and in morals somewhat gross, and most selfish latitudinarians" (quoted in Woodward 1962, p. 69). They did not agree with Burke that reason had limits but believed it was the responsibility of the present generation to convey to its heirs what it had inherited from its ancestors. Ricardo was not only one of the

²⁷ For citations to Bailey's reaction to "Verbal Disputes" and his thought that he might be accused of plagiarism, see Samuel Hollander 1979, pp. 663-664, especially n 49.

principle leaders of the new science but the personification of the deductivist line of reasoning. As Mallet put it, Ricardo's work was "almost a sealed Book to all but men capable of pursuing abstract reasoning by a strict and mathematical analysis" (Mallet 1921, p. 224; Diary entry for January 13, 1831).

Whewell's interest in discrediting Ricardo's influence was what brought him into collaboration with Richard Jones (de Marchi and Sturges 1973), and they set out to reconstruct political economy strictly on an inductivist basis:

Ricardo was a chief object of their criticism because, they alleged, he had reasoned upon premises which were based on only the most casual observation; and, as it happened, the deductions for which he claimed general applicability were no more than special cases. He was . . . indicted for what Bacon had labelled 'the anticipation of nature.': 'the jumping or flying to generalities and the principles of things' from 'the confined obscurity of a few experiments.'

(de Marchi and Sturges 1973, pp. 381-382)²⁸

The reconstruction of political economy along inductivist lines was to be built upon the work of Whewell, Thompson, and Jones. Whewell's contribution consisted of several papers in which he reduced Ricardo's economics to mathematics in order to "make nonsense of it" and to show that it was built upon special cases and extreme assumptions (de Marchi and Sturges 1973, pp. 379-382). His work appeared in several issues of the *Transactions of the Cambridge Philosophical Society* and, given Whewell's status as a philosopher, there can be no doubt that he exercised considerable influence.

It is somewhat ironic that in 1825, when Ricardo's third son, Mortimer, went up to Trinity College, Cambridge, his tutor was Whewell (*Works*, Vol. X, p. 63). Mortimer was the only one of Ricardo's three sons who did not graduate from Trinity; there is no necessary reason to assume the Whewellian atmosphere was a deterrent, since Mortimer Ricardo had a history of ill health. He had attended Charterhouse, like his brothers, and had also spent two years at Eton before he had to withdraw because of his health. He was well prepared for Trinity, but perhaps not for Whewell, who at the time was attacking the elder Ricardo's work.

Besides his own work, Whewell gave his support to the writings of Thompson and Jones (Jones 1831). Like Torrens, Whewell believed that Thompson had exposed the error of Ricardo's theory of rent and it was with respect to the theory of rent that Whewell and his group wished to detract from Ricardo's influence. If Whewell was aware of Bailey's work, it played no role in his campaign to discredit Ricardo.

From Cambridge, Whewell circulated copies of his own mathematical formulation of Ricardo's theory, as well as the alternative theories of rent by

²⁸ What Bacon described as jumping to generalities was dubbed the "Ricardian Vice" by Schumpeter (Schumpeter 1954, pp. 473, 653n, 668, and *passim*).

Thompson and Jones. He prepared three commentaries on Jones's work, and sent off packets of the material to political economists and other individuals. A prime candidate to receive one of Whewell's packets was Malthus, who as the leading critic of Ricardo's strong cases was also viewed as leaning in the direction of inductive methods as against the deductive theorizing of Ricardo. As de Marchi and Sturges have pointed out (de Marchi and Sturges 1973, p. 384), each of the four extant letters from Malthus to Whewell suggest he was responding to a letter or pamphlet from Cambridge. Malthus does not appear to have initiated any of the exchanges. Moreover, if Whewell had expected to find an ally for his attacks on Ricardo he was disappointed, since Malthus defended his friend's view of rent and was critical of both Thompson and Jones.

So far as Whewell's mathematical exposition of Ricardo's doctrines was concerned, Malthus said he was ashamed to admit that he was not familiar with contemporary "algebraic notation" (de Marchi and Sturges 1973, p. 387; Malthus to Whewell, 26 May 1829) and so he really could not comment very intelligently. He had always been convinced, he reported, that many of the problems of political economy could be dealt with in terms of *de maximis et minimis*, so in general he was sympathetic to Whewell's intentions. It had been a long time since Malthus had emerged as ninth Wrangler and he had not maintained his mathematical skills.

As to Thompson's *True Theory of Rent*, it was more new than true. Thompson's exposition dealt with the rent which arose from the use of land on which to grow grapes for fermenting Tokay wine. The major difference between Thompson and Ricardo was in the role of demand upon marginal land. As with all of the theorists who described the disadvantages of having to utilize inferior land, Ricardo's exposition rests upon the assumption that, as accumulation and population increased, the new level of demand would necessitate the utilization of less fertile land and the cost of production in the marginal land would be equal to the price of corn. The cost of growing corn on the more fertile land, the intramarginal plots, was lower than the market price and thus yielded a rent. As he told his friend Ricardo on numerous occasions, it was the extremes to which he had applied the theory of differential rent to which Malthus objected. In principle he agreed with the theory of differential rent, since originally it was his theory, but the applicability of the principle did not deny the possibility that profits could be influenced by factors other than the cost of producing wage goods. In the ordinary circumstances of society, land was cultivated to produce the agricultural goods which constituted the largest percentage of the wage goods consumed by workers, of which corn was the essential commodity. Workers did not drink Tokay wine, which was subject to the caprice of *amateurs du vin*, and the rent on land devoted to growing grapes could rise, due to the increase in the demand for Tokay, Port, or Burgandy. As Malthus said, such a view was a new but not the true theory of rent as Thompson claimed (de Marchi and Sturges 1973, p. 388; Malthus to Whewell, 26 May 1929).

So far as Jones's work on rent was concerned, Malthus was more receptive, especially because of the favorable view which was taken of his side of the controversies with Ricardo. It was Jones's intention to write essays on each of the categories of income (de Marchi and Sturges 1973, p. 382; James 1979, p. 284):

rent, wages and profits, but the only one which ever appeared was that of rent. As one of the precursors of British historicism, Jones was critical of the narrowness of classical economics, particularly Ricardo, because of the exclusive emphasis upon the conditions of production existing in late eighteenth and nineteenth century Britain. In his view, the farmer-landlord relation was but one of many types of landholding conditions which prevailed throughout the world at the time and which had existed historically, the serf-lord relation being one such example. Ricardo's error was in developing a theoretical analysis of the principles of the distribution of income within the confines of the institutional structure of the Britain of his time. As de Marchi and Sturgis indicate, Jones believed that Ricardo's conception of the landlord-tenant relation was applicable to one percent of the globe (Jones 1831, p. 205). What Jones did not acknowledge, for certainly he recognized the fact, was that Ricardo was only concerned with the political economy of one percent of the globe. Malthus's critique of Jones was crucial:

I am not sure . . . whether he has not gone beyond the truth in his unwillingness to admit the *tendency*. . . to diminishing returns must be the general principle, though after wages and profits have in old countries been reduced to a certain point, the further increase of rents may as I have stated be almost wholly derived from improvements. Just supposing wages and profits to have been once very high, as they are in prosperous new colonies, they must fall in the progress of population and cultivation; and there is no proposition of the truth of which I feel a stronger conviction than that, if the real wages in any country are so ample as to occasion no difficulty whatever in supporting the largest family, and the rate of accumulation from high profits is such as to afford the means, for many years, of paying these wages, it is *impossible* that the country can go on and become *fully peopled* without a considerable fall both of wages and profits, which fall will of course go to rents.

(de Marchi and Sturges 1973, p. 389, Malthus to Whewell,
28 February 1831, and p. 391, Malthus to Whewell,
31 May 1831)

James has claimed that Richard Jones "may be said to have demolished the classical theory of rent in 1831" (James 1979, p. 283). By taking a historical view of the fertility of the soil, Jones was able to demonstrate that the pessimistic view of British cultivation which Ricardo had hypothesized was misplaced. But in his correspondence with Whewell Malthus did not agree that he believed Jones had demolished Ricardo's theory of rent, which was, of course, Malthus's theory. According to James's interpretation, the great insight which Jones had about the ever-available fertility of the soil was due to his great success as a cultivator of roses. Unlike Ricardo, whom she says never understood or participated in cultivation, which incidentally is incorrect, Jones "knew in his bones" that "in real

life farmers and market-gardeners were not concerned with applying to the land continual doses of a homogeneous abstraction called capital" (James 1979, p. 283).

According to her view, Jones was the only economist she knew who took "a square yard of earth as an example" (James 1979, p. 283), analyzed the effects of changing the doses of manure, and by applying different methods of hoeing was able to grow larger and more beautiful roses. As Malthus said of Thompson's Tokay wine, workers do not consume roses, as they are hardly a wage good. Tokay wine, roses, and corn are extractive commodities, but the conditions which determine their market prices are different; the caprice of consumers is the essential factor in the first two instances, but not so with corn. If Jones had taken several acres of earth rather than one square yard, he would have learned that not all land is of equal fertility, the essential assumption of the differential theory of rent.

Of Jones's *Essay on Rent*, Malthus wrote:

In his zeal to shew that Mr. Ricardo is quite wrong, which he certainly is, in dwelling upon the diminished returns of agricultural capital as the sole cause of increasing rents, he seems inclined to deny the undoubted truth of the natural tendency of such diminished returns in a *limited space*, unless prevented by improvements in agriculture or manufactures.

(de Marchi and Sturges 1973, p. 391; Malthus to Whewell,
31 May 1831; italics in original)

The difference between Malthus's continuing debate with Ricardo and the attempts by Thompson and Jones to completely discredit the Ricardian emphasis was that the former never denied the proposition that cultivation, accompanied by the use of inferior soil, led to higher rental income. He obviously could not deny such a proposition, since it was his own theory. Malthus questioned whether the recourse to inferior soil was the sole cause of higher rents and lower profits. In this regard he was following his instinct to question Ricardo's habit of singling out a particular variable and attributing to it the sole responsibility for an economic phenomenon. Malthus usually was more eclectic, since there was seldom a single variable to which he could point and proclaim: "Here is the cause."

Ricardo's isolation of a single cause first appeared in the *High Price of Bullion* (1809), where he claimed the excessive issue of Bank of England notes was solely responsible for the market price of gold exceeding the mint price. Then there was Ricardo's singling out of increasing cultivation of inferior soil as solely responsible for increasing rents and declining profits. And, finally, there was the single cause of the exchange value of the particular class of commodities where the amount of labor involved in their production could be increased in quantity under conditions of competition. In all three instances, Ricardo admitted that there might be other mitigating circumstances and that his single cause might not account for 100 percent of the variation of the economic phenomenon he was trying to explain. In the case of exchange value and the spread between gold import and export points, he conceded 7 percent to other causes. But the concession he was willing to grant

was never sufficient to mitigate his single cause. Malthus was of a different mind, and he was always trying to probe so as to weaken his friend's emphasis upon a single variable.

Unlike Torrens, Whewell, Thompson, and Jones, for Malthus there was never any suggestion that Ricardo was completely in error, only that he argued in the excess. Malthus, no less than Ricardo, engaged in deductive reasoning, as the *Essay on Population* clearly illustrates, but if the line of deductive reasoning led to results which Malthus found not to his liking he was not adverse to changing his deductive bent. In the *Essay on Rent*, he had demonstrated that the least productive land, that of the margin, yielded no rent, with price just equal to the cost of production, covering wages and normal profits. When Ricardo used the same argument in his *Principles* to demonstrate that rent was not a component part of price, Malthus began to have second thoughts about his original formulation, especially after Say criticized Ricardo's exclusion of rent as a component part of price. In 1818, at Gatcomb Park, and then in his *Principles*, Malthus claimed that originally he had been in error and that the land last taken under cultivation did in fact yield a rent and was a component part of price, in the tradition of Adam Smith. In this sense Malthus was an inductivist, since he was willing to modify his definitions to include more cases or exceptions. But he was really more inclined to the deductivist line of reasoning and that is why he was not willing to support the inductivist attack upon Ricardo as formulated by Thompson, Whewell, and Jones. Moreover, he was not pleased with the recent turn of events:

I was hardly prepared to expect that in so short a time as has since elapsed, one of the questions in the political economy Club should be "Whether any of the principles *first* advanced in Mr. Ricardo's work are now acknowledged to be correct?" My apprehension at present is that the tide is setting too strong against him; . . .

(de Marchi and Sturges 1973, p. 391; Malthus to Whewell,
31 May 1831; italics in original).

Within three years of writing these thoughts Malthus was dead, so he did not live to witness the eclipse of Ricardo's influence upon political economy. The issues of the debates over which he and Ricardo engaged were also eclipsed, if not forgotten. But one of the issues which had not been in dispute was whether different soils gave rise to rent.

Chapter X

A NEW CAREER IN POLITICS

Noah was a prodigious radical, when, hearing the world was to be drowned, he went about such a commonsense proceeding as making himself a ship to swim in. A Whig would have layed half a dozen sticks together for an ark and called it a virtual representation.

Thomas Perronet Thompson (1830)

Ricardo began his third career when he entered Parliament on February 26, 1819 after retiring from the Stock Exchange and having completed his principal works in political economy. He died prematurely four and a half years later in September 1823, having delivered 106 recorded speeches in the House of Commons, 11 more on various other occasions, and having given evidence on the usury laws and on the resumption of specie payment by the Bank of England.¹ Much of his contribution and influence naturally concerned political economic subjects, the most notable being his arguments against the Corn Law.² But he also developed strong views about representative government and democratic reform,

¹ Recall that speeches in Parliament and other business were recorded by newspapers at the time (a leader in this regard being the *Morning Chronicle*), and that inaccuracies were possible. Ricardo in fact expressed concern over reporters' knowledge of the subject of political economy: "It is a great disadvantage to me that the reporters not understanding the subject cannot readily follow me - they often represent me as uttering perfect nonsense" (*Works*, Vol. IX, p. 175); Ricardo to Trower, 5 March 1822). *Hansard* was compiled from newspaper reports and matching copy provided by speakers, and was not comprehensive.

² For a comprehensive account of Ricardo's involvement in economic issues in Parliament, see Gordon (1976).

which are the subject of this chapter. In the year before entering Parliament Ricardo spent a year in the study of politics, carried on an extensive correspondence with Hutches Trower in particular on the subject, and wrote two papers on the reform of Parliament, "Observations on Parliamentary Reform" and "Defence of the Plan of Voting by Ballot." These were first published posthumously in 1824. A third paper on reform written in 1819 is lost.

James Mill had encouraged Ricardo to enter Parliament as early as 1814, but Ricardo had been reluctant on account of business and writing. However, in 1817 after the appearance of the first edition of the *Principles*, he allowed an agent of Mill's to begin negotiations to acquire the Irish pocket borough seat of the Earl of Portarlington, and by August 1818 the seat was Ricardo's based on a loan of 25,000 pounds at 6 percent interest against a mortgage on the Portarlington estates.³ Early in the negotiations the Earl had hesitated over whether Ricardo would support the Tory government or side with the Whig opposition. This condition was soon abandoned, however, and Ricardo did vote generally with the opposition. Still, he did not enter Parliament with the intention of simply supporting the Whigs, since it was rather Bentham, Mill, and the Philosophic Radicals' campaign of reform that motivated him. He wrote to Trower in 1818, "I should neither be Whig nor Tory but should be anxiously desirous of promoting every measure which should give us a chance of good government. This I think will never be obtained without a reform in Parliament" (*Works*, Vol. VII, p. 260; Ricardo to Trower, 22 March 1818).

The years after Waterloo indeed were a time when Parliamentary reform was on the agenda. The end of the war with Napoleon and demobilization coincided with the passage of the Corn Laws that held up the price of bread for the working class by restricting wheat imports. Wages for weavers had already been depressed for a number of years on account of the introduction of the power-loom and large demonstrations of working people began to be frequent, dating from the 1808 massing of 10,000 to 15,000 people in St. George's Fields in Manchester to call for a minimum wage. Petitions delivered to the House of Commons, however, received little positive response, if not contempt, and workers were increasingly drawn to radical leaders such as William Cobbett with his *Political Register* and the future Peterloo speaker and organizer Henry Hunt, both of whom argued that the people had a right to rebellion dating from the Glorious Revolution of 1688. In November and December of 1816 the great London reform demonstrations at Spa Fields occurred. Yet the government saw social unrest as prelude to revolution and reacted by suspending Habeas Corpus the next year. This was followed by a general repression, arrests and trials of working class agitators and government expression of the view that for working men to attend meetings under the auspices of men of their own rank was tantamount to riot and insubordination.

1819, Ricardo's first year in Parliament and the year of the August Peterloo massacre, was a turning point. As E.P Thompson put it,

³ See Sraffa's account for the details of the transaction (*Works*, Vol. V, pp. xiv-xix).

1819 was a rehearsal for 1832. In both years a revolution was possible ... because the government was isolated and there were sharp differences within the ruling class. And in 1819 the reformers appeared more powerful than they had ever been before, *because* they came forward in the rôle of constitutionalists. They laid claim to rights, some of which it was difficult to deny at law, which had never been intended for extension to the "lower orders". But if these rights were gained, it meant, sooner or later the end of the old régime.

(1968, pp. 671-2)

These rights were those of political organization, a free press, freedom of assembly, and finally the right to vote. They were to be pressed for at St. Peter's Fields, Manchester, and were to constitute a peaceful petition to the government on the part of spinners, weavers, printers, tailors, cobblers, and ordinary workers of all sorts. Yet when by various estimates sixty to one hundred thousand people had assembled, including many women and children, they were ridden down upon, trampled, and sabered by veterans of Waterloo and by "Manchester manufacturers, merchants, publicans, and shopkeepers on horseback ... who pursued the banners, knew the speakers by name and sought to pay off old scores, and who mustered and cheered at the end of their triumph" (Thompson 1968, p. 686). England was stunned by the event. The government became even further isolated and increasingly confined itself in the following weeks to denying that the massacre had been premeditated. The reform movement, in contrast, immediately gained both momentum and the high moral ground, and many in England began to believe a revolution was afoot.

But by December 1819 the tide had turned. The Houses of Commons and Lords rushed to pass the notorious Six Acts,⁴ whereas the reform movement was weakened by division between its revolutionary and constitutionalist wings. Not to be underestimated, a wave of prosecutions, imprisonments, deportations, and executions thinned the ranks of radicals and working class organizers, and generally disrupted a movement that had never been more than loosely organized. Thompson argues, however, that the longer-term effects of Peterloo were significant and that they did much to bring about later passage of the important Reform Act of 1832 (1968, pp. 709-10). First, middle-class reformers and Whigs learned the consequences of their loss of influence over the unrepresented masses, both for themselves and for the masses, and accordingly turned to democratic reform with new-found commitment. Second, the post-war agitation undermined the *ancien régime's* self-confidence and this opened a door to limited democratic concessions that would later be difficult to close. Third, the subsequent repudiation of the

⁴ The first prohibited drilling and 'military' training, the second authorized entry of homes without warrant in search of arms, the third prohibited meetings of over more than fifty individuals, the fourth increased the tax on periodical publications, and the sixth increased the legal and police powers of authorities, especially in connection with seditious libel.

massacre ended the government's repression of large meetings and public assembly on the part of the working class under working class leadership henceforth became a *de facto* right.

In these circumstances, Ricardo came into a Parliament that represented perhaps two and a half percent of the English population (Halévy, 1928, Vol. III, p. 27, note 5). His first vote on March 2, 1819 and a number of subsequent votes in future years were for reducing the number of offences subject to capital punishment. He also voted twice during his time in Parliament for the abolition of punishment by flogging. In the special session called after Peterloo he voted against the Six Acts, and then later voted specifically for repeal of the sixth, the Blasphemous and Seditious Libel Act. He also voted for an investigation into the massacre, as well as against the later Irish Insurrection Bill in both 1822 and 1823. Though names were generally not recorded for votes, members of the opposition sometimes gave their names to reporters when there were important votes. During the time Ricardo was in Parliament 224 such opposition lists were tallied, and Ricardo's name appears on 167 or seventy-five percent of them. According to Sraffa, few members were as often in the minority (*Works*, Vol. V, p. xxi). Henry Brougham, a prominent member of the Whigs, later wrote of Ricardo that "[f]ew men have ... had more weight in Parliament; certainly none who, finding but a very small body of his fellow-members to agree with his leading opinions, might be said generally to speak against the sense of his audience, ever commanded a more patient or even favourable hearing" (*Works*, Vol. V, p. xxxiv).

Ricardo's democratic values and positions certainly came to him in good part through his attachment to the philosophic radicalism of Bentham and Mill. But there is some controversy in the literature on Ricardo in Parliament over whether Ricardo had any views independent of the philosophic radicals. To set out this controversy the next section that follows first summarizes the traditional view of Ricardo in Parliament and then a more recent revised view of his activities there and his later political thinking. After this, the next section of the chapter proceeds to a discussion of Ricardo's two 1818 papers on parliamentary reform, "Observations on Parliamentary Reform" and "Defence of the Plan of Voting by Ballot." The third section of the chapter examines Ricardo's views on religious toleration, and argues that they are important to a full understanding of his politics. A brief fourth section concludes the chapter.

The Debate Over Ricardo in Parliament

The literature on Ricardo in Parliament is not very extensive, and until relatively recently seems to have been in agreement on two propositions: first, that Ricardo essentially followed the lead of Bentham and Mill when it came to political thinking, and consequently lacked a distinctive, independent vision of politics, and second, that Ricardo's specific conception of the relationship between political economy and politics was that the former was essentially a tool which legislators

ought to employ in the determination of the right economic policy--"the statesman's guide to economic growth," as O'Brien has more generally characterized the Classical economists' conception of the role of economic policy (O'Brien 1975, p. 34). Against this view, however, it has more recently been argued by some scholars first, that Ricardo possessed an understanding of politics that departed in important respects from the ideas of Bentham and Mill, and second, that he believed the relationship between political economy and politics was one where knowledge gained in the former entailed changes in the nature of the latter. In the discussion that follows, this second view will be defended in an examination of Ricardo's two papers on Parliamentary reform, and then further extended by taking into account Ricardo's views on religious toleration.

James Mill, in writing to McCulloch after Ricardo's death, did much to create the view that Ricardo lacked independent political views in saying that Ricardo had possessed "hardly a thought or purpose, respecting either public, or his private affairs, in which I was not his confidant and adviser" (*Works*, Vol. IX, p. 390; Ricardo to McCulloch, 19 September 1823). Jeremy Bentham in a letter to Jean Baptiste Say did not hesitate to confirm this judgment, making himself out as Ricardo's original inspiration: "on morals and politics he had taken his principles from me: which through the medium of Mill was exactly true. Till he knew Mill he was not distinguishable from other stockjobbers" (Say's Papers, Bibliothèque de France, Paris; Bentham to Say, 19 October 1823). Subsequently John Stuart Mill in his *Autobiography* added that Ricardo had entered Parliament at James Mill's behest, and had there "rendered so much service to his and my father's opinions on political economy and on other subjects" (1924 [1873], p. 19). This view was later codified and surely overstated by Halévy in his influential study of the Philosophic Radicals where he stated that "[a]ll the actions in Ricardo's life, after 1811, were willed by James Mill" (Halévy 1928 [1900-04], p. 266). Perhaps lending some support to the view is Ricardo's own correspondence with Mill before entering Parliament which testifies to his desire to be directed in his reading and study of politics by Mill.

No one denies, of course, that Ricardo was influenced in his thinking about politics and democratic reform by James Mill (and Bentham as well). The issue is rather whether Ricardo was indebted to Mill for virtually everything he did in politics, and whether he brought an independent thinking to this late stage of his intellectual life. Surely the notion that everything he did subsequent 1818 was due to Mill is *prima facie* not very plausible. As is evident from review of the titles of Ricardo's speeches and the evidence he gave to select committees, his understanding of political economy was continually brought to bear on arguments regarding monetary policy, public finance, foreign trade, and industry. But while James Mill also wrote on political economy, his talent was not equal to Ricardo's. Indeed Ricardo's reputation among those in and around Parliament as an authority on political economy was never attributed to Mill. Accordingly Mill was rather indebted to Ricardo in this important domain of Parliamentary affairs.

Of course, it might well be that while Mill depended upon Ricardo in matters of political economy, Ricardo was still reliant upon Mill for his thinking about

politics and democratic reform. Indeed just as Mill did not hesitate to put what were mostly Ricardo's ideas to work in his *Elements of Political Economy* (1818), Ricardo in turn indicated he thought quite highly of Mill's *Encyclopedia Britannica* essay, *Government* (1820). Put this way, however, we see the significance of the second disputed proposition above concerning the relationship between political economy and politics. On the traditional view of Ricardo, if political economy is no more than a tool to identify right economic policy, especially in the service of the politics of Philosophic Radicalism, then Ricardo's advantage over Mill might be thought secondary to the latter's advantage in the more important domain of politics. In contrast, were the development of political economy at the end of the eighteenth and beginning of the nineteenth centuries in Britain to have suggested to political economists new views regarding the very nature of the political process, then Ricardo might well be thought to have had an advantage over Mill with respect to both political economy and politics. In effect, were the realities of developing markets, industrialization, and the accumulation of capital crucial for the direction of development of English society in Ricardo's time, then those who devoted themselves to understanding this emerging economic system would likely have had the best conception of how the political process would ultimately need to be reformed.

Fetter (1980) did much to advance the idea that political economy brought a distinctive understanding to the affairs of Parliament in his study of economists in Parliament from 1780 to 1868. Whereas Gordon (1976, 1979) demonstrated that political economists introduced new ideas in Parliament at this time on such matters as wages, free trade, the currency, and so on, Fetter suggested an arguably more important influence in arguing that Ricardo, Thornton, Torrens, Stuart Mill, and others did not restrict themselves to economic matters, but actively supported reform of Parliament, the secret ballot, cutting back the privileged position of the Church of England, disestablishing the Church of Ireland, granting full civil rights to Catholics, Dissenters, and Jews, removing the privileges of the aristocracy, and ending a variety of abuses in the army and navy (p. 228). Moreover, in the positions they took on these matters, the political economists not infrequently were overwhelmingly opposed by other members of Parliament. Thus we might suppose that the economists in Parliament at this time possessed a distinct vision of how economy and society were linked, believed it important to pursue the implications of this vision onto non-economic terrain, and thought it necessary to take unyielding stands on questions of principle even when they were sure to be hopelessly out-voted.

This hypothesis, where Ricardo in particular is concerned, ultimately needs to be examined in connection with Ricardo's own writings on Parliamentary reform--a task reserved for the following section. Here I preface that examination with a brief account of the economic history of the time, especially as drawn from O'Brien's summary remarks (O'Brien pp. 16-19), in an attempt to give some sense of the salience of economic concerns in the first decades of the nineteenth century. Were economic changes fundamentally altering the nature of English society in Ricardo's lifetime, and generating agendas for political reform on the part of those

most knowledgeable about the economy, then the broad outlines of new social relationships should be apparent in the economic development of the time. What sorts of changes, then, were there afoot in economic life when Ricardo entered Parliament?

Population, which had grown slowly in the previous century, increased dramatically an estimated 16.9 percent in the years 1810-20. While national income quadrupled over the first three-quarters of the nineteenth century, and though real wages did grow significantly after 1840, there was nonetheless apparently almost no real wage growth in the very first two decades of the century when Ricardo was writing. Essentially, the growth of labor supply outstripped the growth of labor demand in the early decades, after which the growth of the latter was sufficient to begin pulling up wages. This transition involved a shift of the English economy out of agriculture and into manufacturing and international trade. Agriculture's share of national income was 40 to 45 percent in the years 1700-76, but declined to 14 percent of national income by 1871. Manufacturing amounted to about a quarter of national income in 1770, and rose to nearly 40 percent by 1871. Significant trade liberalization did not occur until the 1840s (the Corn Laws were repealed in 1846), after which the volume of trade, especially in manufactured articles, rose significantly.

Thus the nineteenth century exhibited something of a staggered economic development with conditions for industrialization being created in the early decades, and the realization of the gains from sectoral shifts in the form of higher wages and greater income growth appearing increasingly after mid-century. Seen from the present, English society made an investment in industrialization which enriched it relative to other European countries by the end of the century. However, the social cost of doing so was significant. The decline in agricultural employment and movement of population from the countryside disrupted families and communities. Manufacturing employment was highly unregulated in the new cities with working and living conditions notoriously unhealthy and insecure. In addition, the first two decades of the century were disrupted by war with France followed by demobilization, which caused turmoil in the economic affairs of many while simultaneously enriching a few. The nineteenth century British economy can accordingly be said to have gone through two stages, first uncertain change with unclear prospects, and then a new settledness and modest rising prosperity.

The time was also one in which agricultural policy would cease to be the chief focus of economic affairs in Parliament. The wars with Napoleon had briefly given state budgets, the Bank, and the currency center stage, but the passage of the Corn Laws in 1815 signaled the opening of decades of conflict between agricultural interests and manufacturing interests over the direction of economic development. Ricardo, of course, was a pre-eminent figure in this contest and his part in supporting the rising influence of the capitalist class against the landed aristocracy, both in his writings and in Parliament, gave his voice great weight. The Philosophic Radicals were also hostile to the landlord class, but began with a broader vision of social and economic change that involved general democratic reform. To what extent, then, did these two conceptions and shared opposition to

the power of aristocracy link up with one another? Ricardo's two essays on Parliamentary reform show him to have been more than simply a defender of manufacturing interests, believing in fact that general democratic reform was necessary for England's social and economic development.

Ricardo's Two Essays on Parliamentary Reform

The two essays in question, "Observations on Parliamentary Reform" and "Defence of the Plan of Voting by Ballot," were first published posthumously by McCulloch in the *Scotsman* newspaper in 1824. Sraffa located original manuscripts of the essays in the Mill-Ricardo papers and established that they were both written in 1818 when Ricardo was preparing to enter Parliament. Mill had urged Ricardo to familiarize himself with Parliamentary issues and then write on the subject of Parliamentary reform. Ricardo sent two resulting discourses to Mill for comment. The latter essay is in the form of a Parliamentary speech suggesting that Ricardo imagined himself participating in a fictitious or future debate. This and the fact that he subsequently presented a number of the ideas developed in the essays in speeches actually delivered in Parliament probably explains partly why the essays were never published by Ricardo.

The most extensive treatment of the two essays is to be found in Milgate and Stimson (1991) who argue explicitly for the two propositions that Ricardo was an original thinker in politics and that he took the implications of political economy for politics to require reform of the latter. For them, Ricardo was a utilitarian thinker in only the loosest sense and this helped to give him a very different perspective from Mill and Bentham on matters such as the franchise, the ballot, and the duration of Parliaments. Henderson (1981), though he does not discuss Ricardo's two essays, considers Ricardo's Parliamentary views on religious toleration in the context of his personal experience, and suggests that Ricardo had a distinctive understanding of politics based on his views of religious liberty and civil rights.

"Observations on Parliamentary Reform"

Let us first review the argument of Ricardo's first 1818 paper, so as to understand its conclusions in the way in which they are developed. Ricardo begins by distinguishing governments which are free from those governments which are arbitrary according to how well a check on sovereign power is organized and brought to bear on a nation's ruler. "In England the Monarch's authority is checked by the fear of resistance, and the power of organizing and calling forth this resistance is said to be in the aristocracy and the people, through the medium of the two House of Parliament" (*Works*, Vol. V, p. 495). Yet more accurately it is the House of Commons and those who appoint its members, namely the wealthy aristocracy of the country, that constitute the principal check on the Monarch, who is then induced to deliver offices, appointments, and lucrative positions to those of

the aristocracy willing to support the Crown. This check, Ricardo asserts, hardly secures the prevention of abuse, and "[i]f ... there were no other check on both these bodies, England would not have to boast of a better Government than what exists in those countries in which it is called despotic" (*Works*, Vol. V, p. 496).

Fortunately, he adds, there is a further check on both the Crown and the aristocracy which rests in the people of the country which is manifest in the "good sense and information of the people" and which operates "through the means of a free press"--"the great safeguard of our liberties" (*Works*, Vol. V, p. 497). The press curtails the Sovereign and his Ministers, the aristocracy, and the House of Commons by examining every one of their transactions and by sending up an alarm throughout the country whenever measures are proposed or adopted that may be harmful to the community. This check consequently works through the fear that government and the aristocracy have that their misrule may produce an insurrection of the people who perceive their rights encroached upon. Thus despotism in England had as its ultimate check in the early years of the century the threat of violent struggle in defense of rights on the part of a people made well-informed by the press.

Yet this ultimate check, on account of its operation through the medium of the press, had at best an irregular influence on government in Ricardo's view. He notes that it is both difficult "to rouse the people to an active opposition to minor measures" and to repeal "laws, which, however detrimental, have been long in force" (*Works*, Vol. V, p. 497). As a result, laws are often passed which are contrary to the interests of the people, individuals gain offices without merit, and wars and other costly enterprises are pursued for the sake of private interests. Therefore because the liberty of the press is not enough to prevent such things from occurring, despotism needs to be prevented "by making the House of Commons really and truly representative of the people" (*Works*, Vol. V, p. 498). The aristocracy and the Monarch are clearly prone to pursuing their private interests at the expense of the general interest of society. In contrast, the people, "whether high or low," are only "interested in being well governed" and because of this rather concern themselves with the "happiness of the many" or "the general happiness" (*Works*, Vol. V, p. 498). The voices of people with such an interest must thus be represented in Commons to provide an ultimate check on despotic power.

What, accordingly, does this imply for Ricardo regarding Parliamentary reform?

A reform in the House of Commons then, the extension of the elective franchise to all those against whom no plausible reason can be urged that they have, or suppose they have, interest contrary to the general interest, is the only measure which will secure liberty and good government on a solid and permanent foundation.

(*Works*, Vol. V, pp. 498-9)

To this, of course, there were objections in Ricardo's time, but, with one exception, these objections in his view typically involved fallacies of argument or special pleading. That one objection he did think deserved special comment was that, were the franchise extended, the door to anarchy would be opened, the grounds for this supposedly being that the great majority of the people are only interested in equally dividing the property of the wealthy amongst themselves. Needless to say, Ricardo never doubted the rights of property and so here he did not hesitate to say that he would "agree to deprive those of the elective franchise against whom it could justly be alleged that they considered their interest to invade them" (*Works*, Vol. V, p. 501). This said, however, he went on to question the empirical claim that many of even the lowest ranks of the people were interested in a division of property. His argument that this was likely not the case was that most people understood that each's share would be miniscule upon any such division and that even those in the poorest stations of life grasp that employment in the country depended upon capital being accumulated in the hands of those who had the skill and enterprise to direct it. Indeed, Ricardo added, the anarchy objection was often not an honest one, since those who made it were typically unwilling from the start to say just where the franchise should be cut off if the poorest individuals in society were in fact interested in a division of property and not to be included.

Consequently Ricardo saw as the main Parliamentary reform needed in England in 1818 an extension of the electoral franchise. But how much of an extension did he contemplate? Here he is somewhat unclear and it is necessary for us to draw conclusions of our own regarding the nature of his views. Two points may be made. In the first place, Ricardo reasons downward from an upper limit to the franchise rather than upward from the lower limit of the existing extent of the franchise (the estimated at 2.5 percent of the population). Thus, he does not call for universal suffrage, arguing that universal suffrage is not an end in itself, but rather even in the eyes of its proponents but a means to good government. Further, he says he is in favor of caution on how closely one should go in approaching universal suffrage, and is in fact "convinced that an extension of the suffrage far short of making it universal, will substantially secure to the people the good government they wish for" (*Works*, Vol. V, p. 502).⁵

In the second place, however, Ricardo asserts, based on the expected beneficial effects of an extension of the franchise upon the "knowledge and intelligence of the public, that in a limited space of time after this first measure of reform were granted, we might, with the utmost safety, extend the right of voting for members of Parliament to every class of the people" (*Works*, Vol. V, p. 502). This bolder view, it seems, constitutes the larger framework in which his initial hesitations regarding universal suffrage and the case he makes for limiting the franchise operate. If suffrage were not to be universal, because something well short of it would be

⁵ This argument was later made in a December 1819 speech in Parliament on the Seditious Meetings Prevention Bill (*Works*, Vol. V., p. 29). Also see Ricardo's earlier letter to Malthus (*Works*, Vol. VII, p. 270; Ricardo to Malthus, 24 June 1818).

sufficient means to guarantee good government, then it makes little sense go on to contemplate extending suffrage to "every class of the people." Given that the context of these points is whether anarchy might result from full extension of the franchise, and given that conservative opponents must have claimed any extension of the vote was a stalking horse for universal suffrage (and anarchy), it seems odd that Ricardo would be so quick in his discussion to open the door to full electoral reform--something he further imagines might be granted "with the utmost safety" - unless he were truly committed to that prospect.

It is reasonable to suppose, therefore, that Ricardo was willing to contemplate universal suffrage, but felt constrained to adopt a more pragmatic stance in circumstances in which calls for universal suffrage earned one contempt and dismissal by most members of Parliament. Thus, though Ricardo allows universal suffrage is typically supported by its defenders as a means to good government, his imagining that the right to vote might in the future be extended beyond what is necessary to accomplish good government more immediately appears to make a fuller suffrage an end in itself. More strongly, the fullest extension of the vote, that is, universal suffrage, was something he appears to have supported in principle.⁶ This conclusion is consistent with the overall argument of the "Observations" which focuses on checking the despotism of private interests by the power of those whose principal concern is the general interest. The only serious objection one might have to such a view is whether any class or group of people might not have the general interest as their concern, particularly where this affected the rights of property.⁷ To this Ricardo had replied that the rights of property were not likely to be threatened by virtually anyone (he would certainly have allowed there was criminal behavior), having already claimed that those with modest property would not combine to serve interests distinct from the general interest. Given this emphasis and focus to his argument, it seems that--though he did not say as much - there were in his view no legitimate objections in principle to universal suffrage, at least in time.

"Defence of the Plan of Voting by Ballot"

Ricardo's second 1818 paper complements his first by turning to the mechanics of the electoral process. Specifically, Ricardo addresses what he terms the mode by which members of the House of Commons were elected and makes arguments for changes in the nature of elections that he regards as independent of the question of the extent of the franchise. When Ricardo entered the House, his loan to Portarlington had earned him the Earl's support before the electors. The election itself was open, so that those electors who voted against Ricardo would have had to publicly oppose the Earl. Since these individuals were typically

⁶ To be sure, it is doubtful Ricardo meant to include women.

⁷ Ricardo also expressed this concern regarding the security of property in a December 1818 letter to Trower (*Works*, Vol. VII, pp. 369-70; Ricardo to Trower, 20 December 1818).

vulnerable to the economic power of the Earl, securing the Earl's support essentially guaranteed Ricardo's election. However, in his "Defence" essay, Ricardo recommended a secret ballot, which would have canceled out the influence of individuals such as Portarlington, as well as put an end to the practice of purchasing seats in Commons, which he himself had taken advantage of. Clearly even without an extension of the franchise, a secret ballot would have shifted considerable political power to the middle classes.

Ricardo begins his discussion with two arguments for the secret ballot. The first was perhaps meant in part to open the minds of those who might ordinarily be opposed to the measure, since it attacked the anarchy that generally occurred on the occasion of general elections. Voting at the time was preceded by an assembling of the public to hear the speeches of the candidates. This was anything but an orderly affair, as mobs typically in the pay of wealthy candidates intimidated the opposing candidates and their potential electors. For a candidate having little support: "Dirt, filth, and often stones, are thrown at him - the most unmanly attacks are made upon his person, and it is frequently a task of difficulty to his friends to protect him from the effects of their savage and brutal animosity" (*Works*, Vol. V, p. 505). Ricardo found this despicable, no doubt both on account of the indignities candidates suffered and the corruption involved, but he made ending the anarchy of elections a reason in itself for a secret ballot. "The scenes which occur at such times, would disgrace a barbarous people" (*Works*, Vol. V, pp. 504-5). Moreover, the elections were typically followed by periods of widespread drunkenness and public disorder.

However, having set the tone of his discussion, Ricardo asserts that the second reason for the secret ballot concerns remedying a "far greater [evil] to guard against" (*Works*, Vol. V, p. 505). Without a secret ballot the influence exercised over voters at elections prevents them from genuinely voting.

It is a most cruel mockery to tell a man that he may vote for A or B, when you know that he is so much under the influence of A, or the friends of A, that his voting for B would be attended with destruction to him. He cannot justly be said to have a vote, unless he have the free exercise of it, without prejudice to his fortunes.

(Works, Vol. V, p. 506)

Indeed, Ricardo adds, it is a delusion to think that a 40 shilling a year freeholder has a vote of his own, since he must almost always vote as his landlord wishes in order to avoid losing his lease. It is the landlord, then, who actually has the man's vote, and indeed, were the franchise extended without instituting a secret ballot, the power accruing to the wealthy aristocracy of the country would likely further increase.⁸

⁸ Much of this argument re-appeared in an 1821 speech reported in the *Scotsman* (*Works*, Vol. 5, pp. 473-4). There Ricardo also addressed the extent of the franchise, the frequency of elections, and the secret ballot, asserting that the last was the important of the three reforms.

At this point, Ricardo interrupts his argument to make an interesting set of observations on the possible consequences of extending the franchise without a secret ballot. Some will argue, he says, that by simply extending the franchise "an additional security is afforded against bribery, because the greater the number of electors the more difficult will it be to provide funds for the purpose of directly influencing votes by means of bribes" (*Works*, Vol. V. p. 507). Yet it should not be forgotten, he adds, that bribery is only one way of getting votes, and that, as Bentham had noted, terror is very effective means of influence and corruption. Indeed, in Ricardo's view, "[v]otes are more effectually secured by the fear of loss than by the hope of gain" (*Works*, Vol. V, p. 507). Thus suppose that over time the franchise is extended. Then while the corruptive effects of bribery may weaken, as new voters increasingly come from more humble circumstances, the influence of the powerful due to fear would presumably increase. Whether this latter development would outweigh the former, Ricardo does not say. He does say, however, that there is a simple way to overcome this source of influence: the secret ballot.

Having described two evils, Ricardo then proposes two remedies, one appropriate to the anarchy of elections and the other appropriate to the problem of influence. For the first what is needed is simultaneous local district voting to replace elections on one day and in one place. For the second, of course, the secret ballot is proposed. Ricardo allows either might be adopted and the other rejected, though in his subsequent discussion he hardly mentions the possibility of adopting reformed voting and rejecting the secret ballot. Interestingly, not content to let his earlier discussion of the evils of the present system constitute his case for these proposals, he then devotes the balance of the essay to what he regards as the best arguments for adopting each of the proposals. At the same time, he frames his discussion at important points in terms of an extension of the franchise, the effect of which is to produce, if indirectly, a general view of democratic reform in his eyes.

Regarding reform of the voting process, Ricardo suggests that public review of candidates ought not occur through their speaking before crowds, but through the press. "Through the medium of the press, the candidate may make known his pretensions; through the same channel, objections may be made to his principles, or to his former conduct - the press is open to all, and the candidates would no longer be subjected to an ordeal which is not a test of merit but of endurance" (*Works*, Vol. V, pp. 508-9). This is not to say, Ricardo adds, that public speaking before electors and crowds should cease; rather, the press constitutes a more impartial tribunal which can ensure all sides are fairly listened to. Moreover, another possible objection can also be dismissed. Some say that public meetings give the lowest ranks in the community a sense of worth and opportunity to participate in the government of the country. To this Ricardo replies:

Can he be said to have this share if he is without a vote? Does he show his importance by spitting at the candidate, by throwing dirt and filth in his face? This is not calculated to raise him in his own estimation; and if it be right that he should have a voice in the government of his country, give him that voice, and allow him

to exercise it legally on the same terms with the first elector in the land, but do not delude us or him, by giving him the shadow, and calling it the substance of power!

(*Works*, Vol. V, pp. 509-10)

The secret ballot, Ricardo begins, would offer complete security against the corruptive practices of the aristocracy for the reasons already noted, and this is enough to recommend it. But an odd objection to secret ballots receives Ricardo's comment. One individual, he reports, has argued that with the secret ballot candidates would still seek promises of votes from electors, which, if kept, would demonstrate there was no need for secret ballots, and if not kept, would involve voters in immoral acts for which they could be charged by law. Ricardo only answers the second point, since he thinks the keeping of promises would not necessarily imply the ballot was useless. But regarding not keeping promises, his view is that the immorality rather lies with those who attempt to exact such promises. "It may be expedient to instruct ... a man, to enlighten him on the subject of his real interest, but here our efforts should cease, and we become criminal if we induce him to act contrary to the dictates of his own conscience, and, instead of condemning him for breaking a promise so criminally exacted and given, the most enlightened morality would teach and require that such promises should be violated" (*Works*, Vol. V, p. 511).

Thus Ricardo calls for a reformed ballot process that he asserts would--whatever the extent of the franchise--make the members of the House of Commons "the real representatives of the electors" rather than representatives of those with the most influence over the electors (*Works*, Vol. V, p. 512). Yet his use of the expression, "the real representatives," betrays his true sentiments regarding his view of the franchise, since under the system in place when he entered Parliament, the members of Commons were already the "real representatives" of the electors, who in turn were of course the "real representatives" of the aristocracy. In fact what Ricardo meant was that the larger population of the country was not represented at all, and that Parliament ought to represent the population as a whole rather than only the interest of wealthy landlords. Thus in the end his position is three-fold: a reformed voting process, the secret ballot, and (as he had argued explicitly in his "Observations" paper) a considerable extension of the franchise.

Ricardo on Religious Toleration

The importance of Ricardo's views on religious toleration to an evaluation of his political thinking in Parliament is partially a matter of what they tell us about his understanding of individual rights and partially a matter of what they tell us about the sources of his political views. In his "Observations" essay, and to a lesser extent in his essay on the secret ballot, there is evidence that Ricardo thought universal suffrage and democratic reform of Parliament were ends in themselves

(even if he was unwilling to press openly for universal suffrage in the short term). Milgate and Stimson (1991, pp. 142ff) argue persuasively that Ricardo was only loosely committed to utilitarianism's greatest happiness rationales for political reform developed by Mill and Bentham. What, then, were Ricardo's further rationales for supporting a more democratic politics in principle? Henderson (1981) traces Ricardo's commitment to religious toleration to sensitivities developed as a Jew, as the spouse of a Quaker, and possibly as a non-believer. That Ricardo felt strongly about the subject is well indicated by the radical character of his remarks in a letter to Isaac Lyon Goldsmid, a leader of the movement to emancipate the Jews under English law:

I carry my principles of toleration very far; - I do not know how, or why any line should be drawn, and am prepared to maintain that we have no more justifiable ground for shutting the mouth of the Atheist than that of any other man.

(*Works*, Vol. IX, p. 278; Ricardo to Goldsmid, 4 April 1823)

Freedom of conscience and speech are clearly central here, and we have already seen that Ricardo supported a free press and (in his opposition to the post-Peterloo Six Acts) the right of people to assemble to press their grievances. How, then, does Ricardo's support of individual rights link up with his other views about democratic reform?

To put this matter in context, it is helpful to recall the state of religious intolerance at the time when Ricardo entered Parliament and the effects this had on his career. The Anglican Church held sway over the civil fortunes of individuals in English society through the Test Act (1661) and the Marriage Act (1753). The former required that anyone holding military, political, and civil offices in England had to be a communicant of the Anglican Church. Meant originally to exclude Roman Catholics, the Act also affected in varying degrees Jews, Quakers, and Protestant dissenters. The Marriage Act required that all English marriages take place under the auspices of the Anglican Church. Jews and Quakers were in fact excluded from the Act, and could be married within their own congregations according to their own rituals. But neither Jews nor Quakers, with their own respective forms of exclusivism, condoned mixed marriages, and accordingly those who sought to marry outside of their faiths, such as Ricardo and Priscilla Wilkinson, had to seek a somewhat ignominious civil marriage license based on a short parish residency. Their marriage, in fact, made them religious outcasts from both Anglican society and from their own former households.

Thus religious intolerance in Britain when Ricardo entered Parliament functioned much as the privileges of class and wealth to exclude different sets of individuals from participation in the political and social affairs of the country. Irish Catholics were historically the most notorious exclusion, and Catholic emancipation, debated for many years in connection with a number of Catholic emancipation bills introduced in Parliament, in effect constituted one means of reforming Parliament and extending the franchise. Ricardo did not speak in

Parliament on the matter, but he did express his views in favor of emancipation clearly in correspondence. For example, writing to Trower in 1821, Ricardo asserted that "no reasonable man can apprehend danger to the United Kingdom from acceding the catholic claims in Ireland," and "I should not see much to regret if Ireland had a catholic establishment, in the same way as Scotland has a presbyterian one" (*Works*, Vol. VIII, pp. 350-1; Ricardo to Trower, 2 March 1821). Also, despite Cannan's doubts (1894, I, p. 254) regarding whether Ricardo voted in favor of William Plunkett's motion for a committee to examine the claims of Irish Catholics, subsequent evidence seems to indicate that he did do so (cf. Sraffa's remarks, *Works*, Vol. V, p. xxiii).

On two occasions, however, the subject of religious toleration *per se* arose directly in Ricardo's speeches. One was on the occasion of an 1823 petition for release from prison by Mary Ann Carlile, who had distributed atheist pamphlets (written by her brother Richard Carlile), had subsequently completed her term of imprisonment for blasphemous libel, but had then been unable to pay the accompanying fine of 500 pounds required for release. Ricardo found the whole affair from the time of the original so-called offence disgraceful, and indicated the reason why.

Blasphemy was an offence which it was quite impossible to define. Nobody, in committing it, was aware of what he was offending against. It was one thing in this country, and another thing in France; indeed, that which was blasphemy here, was not blasphemy there, and *vice versa*.

(*Works*, Vol. V, pp. 278-9)

Further, he argued, the way the law was applied in the case of Mary Ann Carlile made it impossible for her to give a reasoned defence of her views, since were Carlile to have attempted to explain her views, she would have thereby further offended against the law. Thus, in Ricardo's view, the whole affair was handled improperly from the outset.

He must now inform the House, that after a long and attentive consideration of the question, he had made up his mind that prosecutions ought never to be instituted for religious opinions. All religious opinions, however, absurd and extravagant, might be conscientiously believed by some individuals. Why, then, was one man to set up his ideas on the subject as the criterion from which no other was to be allowed to differ with impunity? Why was one man to be considered infallible, and all his fellow men as frail and erring creatures? Such a doctrine ought not to be tolerated; it savoured too much of the Inquisition to be received as genuine in a free country like England.

(*Works*, Vol. V, p. 280)

In short, religious intolerance, however practiced, was a form of despotism. It victimized certain sets of individuals on account of their convictions, whether those beliefs were a product of their cultural background and religious inheritance, or whether those beliefs were a concomitant of struggles for social and political reform (as in the case of the Carliles).

The other occasion when Ricardo spoke in favor of religious freedom was when he made what proved to be his last speech in Parliament in July 1823. His friend Joseph Hume had presented a petition against the prosecution of unbelievers, which had been drawn up by the Unitarian minister Robert Aspland, whose lectures Ricardo had from time to time attended.⁹ The Unitarians were probably the most liberal dissenters in Ricardo's time, and defended tolerance toward all forms of religion, whether Christian or non-Christian. Ricardo began by stating his support in favor of the petition, asserting that no individual had the right to "dictate his opinions upon abstract questions to another, upon peril of punishment for a refusal to adopt them" (*Works*, Vol. V, p. 324). While it was reasonable, he argued, to punish obscene writings since they were harmful to society, this was not so with respect to abstract religious subjects, about which, he emphasized, there could never be universal assent. Indeed, this applied to even an individual's deepest convictions. Thus,

was it possible for a man not to believe in a future state, and yet be strictly moral, and impressed with the necessity of upholding credibility in the common obligations of society? For his part, he firmly believed in the possibility of a man's being very honest for all the social purposes and essential obligations of the community in which he lived, and still not assenting to the belief of a future state. He fully admitted that religion was a powerful obligation; but he denied it to be the only obligation.

(*Works*, Vol. V, pp. 326-7)

For Ricardo, that is, religion helped individuals pursue a moral life, but it was not necessary to their doing so. Citing the ideas of the late Archbishop of Canterbury John Tillotson, Ricardo added that religion did this not by imposing morality upon us, but rather by requiring of us those things our reason urges us to do. Religion, he concluded, is a matter about which there is never final agreement, but a subject about which individuals ought amicably reason.

Ricardo, it might be recalled, had had an early experience with inflexible religious thinking in his own family's orthodox Sephardic household. Yet according to his brother's *A Memoir of David Ricardo*, from the age of nineteen or twenty Ricardo demonstrated a "taste for abstract and general reasoning" as well as a "propensity to go to the bottom of the subjects" to which he was attracted, which

⁹ There is no evidence that Ricardo converted to Christianity or joined the Unitarian Church. However, since the Unitarians did not practice baptism, neither would there have been formal conversion had Ricardo joined the Church.

presumably stood in sharp contrast to his father's "prejudices" (*Works*, Vol. X, pp. 4, 5). These facts, combined with those surrounding the circumstances of his marriage, lead one to the conclusion that Ricardo's views on religious toleration were long held and deeply rooted in his thinking. Henderson suggests that Ricardo may also have been influenced in this regard by his early reading of works of Western philosophy of the late eighteenth century which supported the substitution of reason for ecclesiastical authority (1981, p. 300). More generally, it seems reasonable to suppose that Ricardo absorbed many of the values of the Enlightenment, and that they influenced his thinking about society generally. An attachment of this sort would certainly not be inconsistent with the tenor of Ricardo's political economy that emphasized a scientific methodology based on rational investigation.

Thus we might suppose that Ricardo acquired a secular bent of mind fairly early in life, honed this thinking in his years on the Stock Exchange and in his political economic writings, and upon turning to politics simply saw religious intolerance as both unjustified and as little more than a form of political despotism. Having come to have but modest religious interests of his own, and no doubt well acquainted with discrimination on account of his Jewish origins, Ricardo could easily have seen the Anglican Church's authority in England as merely a further means of including some and excluding others from political power. Moreover, had he thought that the privileges of wealth and religious culture were ultimately both means of narrowing political participation, it could well have struck him as crucial to the cause of Parliamentary reform that the franchise be extended and individual rights be defended simultaneously.

This view of the interconnections between Ricardo's political ideas can be defended on strictly utilitarian grounds, but to do so is to miss both much of the motivation behind those views in Ricardo's personal history, as well as the force that they seem to have had for him. That is, one could say that in Ricardo's view it is was in the general interest of society that all forms of political discrimination--whether based on wealth, class, cultural background, nationality, and (we would add) gender--should be overcome. Alternatively one could say that individuals have a right *per se* to be represented in the political process whatever their circumstances, and that defending this right is, additionally, in the general interest. In the latter case, the utilitarian logic reinforces prior claims regarding individual rights. These rights have their own intrinsic credibility (as indeed does the idea of the general advantage), and allowing that they do permits a separate and distinct grounding for democratic reform to that grounding which utilitarian provides. The case for political reform seen in this latter fashion is only strengthened.

Milgate and Stimson, it should be noted, take a somewhat different view of how Ricardo separates himself from utilitarianism. First, "unlike Bentham and James Mill, whose thinking about politics was exclusively grounded upon a strict application of the utilitarian model of human nature, Ricardo grounded his upon a model of economic functioning" (Milgate and Stimson 1991, p. 17). That standard utilitarian approach defined the general well-being as an aggregate of individual utilities. Ricardo, however, rather reasoned in terms of an economic growth in

aggregate material production that would--when not biased by trade interferences - be to the advantage of all social classes. This general advantage mirrored market relationships in the economy, explaining the progress of different classes in terms of their distinct economic circumstances. Second, whereas Mill, in connection with the question of the extent of the franchise, believed individuals required a certain minimum education and political sophistication to be able to make choices concerning the general interest, Ricardo never asked more of individuals than that they respect property and not have interests clearly contrary to the general interest. Milgate and Stimson interpret this to mean that Ricardo was far less concerned with there being homogeneity of interests in the political process, and more prepared to see politics as an "arena in which [different classes'] competing claims could be publicly aired, and where conflicting interests could be structured in a stable and representative way" (p. 144).

Two of the conclusions of the Milgate-Stimson analysis are that a strong case can be made for saying that Ricardo was a more committed democratic reformer than Mill and others of his time, and that Ricardo's view of democracy was more modern in its conception as a harmony of disharmonious interests. Both of these conclusions follow from the analysis given above as well. First, Ricardo's emphasis upon individual rights and concern with their limitation distinguish his commitment to political reform from that of the utilitarians, in that these rights were never reduced to merely being means to the advancement of general well-being. Rather they constituted grounds in themselves for political reform, and required defense or else despotism would prevail. Second, that Ricardo may have had a more realistic conception of the character of modern democracy than Mill and others also follows from the fact that they, being more native to English culture, failed to grasp as he more naturally did that a heterogeneity of interest was inevitable in any more inclusive political process. Despite his intellectual achievements, Ricardo must have always felt himself socially an outsider. Though he joined the landed gentry and adopted the life of the English aristocracy, he was still the former change-alley stockjobber. His entry into Parliament, however, demonstrated to him that different interests could politically interact, so long as there prevailed a commitment to toleration. Thus toleration, religious and cultural, was at the very root of his vision of a reformed democracy, and while toleration could be defended on utilitarian grounds, quite likely Ricardo saw toleration as a simple requirement of civilized society.

Conclusions

Ricardo, therefore, was indeed in important respects an independent and original thinker in politics and democratic reform in early nineteenth century Britain. His not having been seen as such by most scholars is probably due to a number of interlinked factors. First, the Philosophic Radicals and their more utilitarian vision gained pride of place in the history of the reform movement, both because of their wide-ranging and undeniable contributions to it, and because of the novelty and persuasiveness that utilitarian reasoning assumed after Bentham.

Though Ricardo was closely connected to the Mills, the relationship between them seems to have been more in the nature of an affiliation of ideas from different sources than a full sharing of common principles. Second, as evidenced by the decline of Ricardian economics by mid-century, Ricardo's own historical standing was no doubt injured by the reputation political economy acquired as the dismal science, especially given his pre-eminent role in its development. Indeed one of the ironies that historians of economics have long puzzled over is how dramatic the reversal in Ricardo's influence was shortly after his death (cf. Meek, 1950). Third, Ricardo's Sephardic origins may have created a blind spot in scholars' reception of his non-economic ideas. Ricardo's abandonment of his family background may have encouraged the view that this background did not influence his thinking, whereas his commitment to tolerance as a form of democratic reform likely stems from precisely this very background.

Chapter XI

EQUIVOCATION: THE EFFECTS OF MACHINERY ON THE DEMAND FOR LABOR

When the introduction of new machinery increased production and augmented the wealth of the country, the country was bound in some shape or other to afford assistance to those classes who were reduced to destitution by the change.

Col. Robert Torrens on behalf of the Bolton weavers (1834)

The most significant change in all of Ricardo's theory came late in his life with the addition of the famous "On Machinery" chapter to the third edition of the *Principles*. There Ricardo reversed his previous position, and declared, "I am convinced, that the substitution of machinery for human labour, is often very injurious to the class of labourers" (*Works*, Vol. I, p. 388). In describing the revision of the first edition of the book to his publisher, John Murray, Ricardo stated that the manuscript contained "a very few trifling alterations," and in later writing to Say regarding the second edition he added that in it there was "nothing new" (*Works*, Vol. VII, p. 331; Ricardo to Murray, 23 November 1818; Vol. VIII, p. 150; Ricardo to Say, 11 Jan. 1820).¹ In the third edition, however, Ricardo abandoned

¹ Sraffa confirms this judgment in asserting that the only change of note in the second edition was "the subdivision of the chapter On Value into sections each carrying its own heading," adding that "it is surprising how little rearrangement was made (*Works*, Vol. I, pp. lii, liii).

his previously held view that the introduction of machinery into production was not sometimes detrimental to the interests of the working class of society.

It is more incumbent upon me to declare my opinion on this question, because they have, on further reflection, undergone a considerable change; and although I am not aware that I have ever published any thing respecting machinery which it is necessary for me to retract, yet I have in other ways given my support to doctrines which I now think erroneous; it, therefore, becomes a duty in me to submit my present views to examination, with my reasons for entertaining them.

(*Works*, Vol. I, p. 386)

The first two editions of the *Principles* had contained no mention of the effects of machinery on the working class, only including an unrelated discussion of machinery in the twenty-first chapter, "Effects of Accumulation on Profits and Interest." Earlier in his 1815 essay on profits, however, Ricardo had said in passing that it was "no longer questioned" that improvements in machinery had a "decided tendency to raise the real wages of labour" (*Works*, Vol. IV, p. 35). Sraffa suggests that Ricardo's words in the quotation above, "in other ways given my support," may be an allusion to remarks in Ricardo's 16 December 1819 speech in Parliament on a plan put forward by Robert Owen that raised the issue of the progress of wages (*Works*, Vol. I, p. lviii).

Ricardo, however, had first begun to think seriously about the effects on the working class of machinery introduction as early as May 1817 when he wrote to John Barton (1789-1852), a Quaker, shortly after the initial appearance of the *Principles* that "there is no new creation of machinery which entirely supersedes the use of the labour of man" (*Works*, Vol. VII, p. 159; Ricardo to Barton, 20 May 1817). Barton's own *Observations on the Circumstances which Influence the Condition of the Labouring Classes of Society* would appear later that same year, and was to subsequently influence Ricardo to revise his thinking about the demand for labor. Indeed of all those who debated with Ricardo throughout his career, Barton alone appears to have succeeded in causing a major change in thinking on Ricardo's part. But initially Ricardo was convinced that Barton's position and thinking were mistaken and argued as much to McCulloch.

In January 1820 McCulloch had favorably commented on Barton's *Observations* in an article in the *Edinburgh Review*, and Ricardo wrote to him later in March criticizing Barton's thinking (*Works*, Vol. VIII, pp. 168-171; Ricardo to McCulloch, 29 March 1820). McCulloch was persuaded to change his view of Barton and subsequently published a critique of Barton's *Observations* entitled "Effects of Machinery and Accumulation" for the March 1821 *Edinburgh Review*, asserting that "no improvement in machinery can possibly diminish the demand for labour, or reduce the rate of wages" (*Works*, Vol. I, p. lviii). However, when Ricardo wrote again to McCulloch in April 1821, he related that he had come to change his thinking about the effects of machinery on the working class and that

this admission would be set forth in the third edition of the *Principles* which was to appear the following month. McCulloch was understandably upset, but he also mistook the nature of Ricardo's change in thinking.

Your object has never been and never can be any other plan than to endeavour to promote the real interests of the science; but I apprehend you will agree with me in thinking that nothing can be more injurious to these interests than to see an Economist of the highest reputation strenuously defending one set of opinions one day, and unconditionally surrendering them the next -- The fundamental differences that formerly existed (for I am sorry to think they have now nearly disappeared) between you and Messrs. Malthus and Sismondi induced many to believe that Political Economy was a thing of fudge, a fabric without a foundation -- And I certainly think that those who were formerly of that opinion have a good deal better ground for entertaining it now --

(*Works*, Vol. VIII, p. 382; McCulloch to Ricardo,
5 June 1821)

But Ricardo had hardly adopted Malthus's view of effective demand, and took pains to immediately distinguish his thinking on this score to McCulloch. Malthus's objections to machinery, he replied, were that

it adds so much to the gross produce of the country that the commodities produced cannot be consumed -- that there is no demand for them: mine, on the contrary, is that the use of machinery often diminishes the quantity of gross produce, and although the inclination to consume is unlimited, the demand will be diminished, by the want of means of purchasing. Can any two doctrines be more different?

(*Works*, Vol. VII, p. 387; Ricardo to McCulloch,
18 June 1821)

These points direct our attention to the substance of the change in Ricardo's thinking. To see how Ricardo came to his new view, Section One that follows turns to the stage Barton set in his *Observations*. Section Two then presents and compares Ricardo's own analysis of machinery introduction in the added chapter. Sections Three and Four examine the implications of the new chapter for Ricardo's thinking in the *Principles* of the first two editions.

Barton's *Observations*

Barton's argument was in large part an empirical defense of the economic basis of the "friendly societies."² Attacking Malthus's strictures against the poor

² The growth in the number of "friendly societies" was significant in the last part of the eighteenth and early nineteenth centuries, particularly in the factory centers of Lancashire, Yorkshire, and Lanarkshire (Ashton 1952, pp. 133ff).

laws by showing that they were not well grounded in the evidence, Barton claimed that displacement of laborers by machinery would have far greater impact on the condition of the laboring classes than would increases in population. His reasoning needs to be traced back through his 1817 correspondence with Ricardo. According to Ricardo's letter in reply, Barton raised two different issues when he first wrote to Ricardo: (1) whether from a "general and progressive decrease of the value of money" there would be a change in profits, and (2) whether a rise in the net income of society, or a rise in the income of society over and above the wage fund, was compatible with an increase in the gross output of wages plus surplus. On the first of these issues Ricardo commented that

The farmer and the manufacturer ... will, in consequence of the rise in the price of commodities, have a larger nominal income, but not a larger real income, as though they will receive more money for their goods, they will also have to pay more money for their goods which they themselves consume.

(*Works*, Vol. VII, p. 156; Ricardo to Barton, 20 May 1817)

Sraffa comments that Barton apparently accepted Ricardo's argument on this first point when he came to publish his *Observations* (*Works*, Vol. VII, p. 155, note 1). However, Ricardo was less successful regarding Barton's second point, where the issue had to do with the employment of the economy's net income or surplus. Suppose that an economy has a circulating capital sector and also a fixed capital sector in which machinery is produced, and suppose that an improvement in technology leads to a rise in the surplus. If the addition to net income is invested in the circulating capital sector, then the income of the working class should rise in equal degree. That is, a change in net income would lead to an equal change in gross income. However, if the new net income is invested in machinery in the fixed capital sector, the increase in gross income may not be proportional to the increase in investment. Barton asserted, in fact, that this would not be the case, and that the increase in supply of goods would be in smaller degree. His reasoning was that (1) the output of machinery would not be equal to the amount of investment in any given year, and that (2) the new machinery would not only displace that part of the working class which had previously produced the product, but, would also decrease the quantity of labor employed in the production of wage goods.

Ricardo replied somewhat unconvincingly that

The case is evidently put forward for the sake of argument, and could not really take place, for there is no new creation of machinery which entirely supersedes the use of the labour of man. A steam engine requires the constant labour of man -- he must procure coals for the fire necessary to work it -- he must attend to its annual repairs, and by degrees in a rich country the

employment of men for these purposes becomes on an average as nearly a fixed quantity, as the number of men devoted to any other occupation.

(*Works*, Vol. VIII, pp. 158-9; Ricardo to Barton,
20 May 1817)

The evidence for these claims, however, was lacking and the question of the proportionality between gross and net income subsequently remained at the center of discussion. Barton returned to it in his *Observations* with a new example (1817, pp. 16-17). Suppose, he suggested, that a capitalist employs 20 weavers at an annual wage of 50 pounds for a total circulating capital of 1000 pounds. Suppose also that with 1,500 pounds the capitalist could employ 30 workers to build a machine to weave cloth which would last for 15 years. Since the new machine is assumed to be as productive as 15 workers, the original demand for 20 weavers would be reduced by 75 percent. Allow that in addition to the 5 weavers still needed to work with the new weaving machine that the machine also requires 2 construction workers and 1 repairman. The capitalist, Barton suggests, could also absorb 2 workers as domestic servants. Thus the total labor demanded under with the new machine would be 10 individuals, while the output of the capitalist with the machine to weave cloth would be the same as without the machine. Thus 10 workers would remain unemployed.

As we will see, it was on this score that Ricardo was later convinced, as he later testified in the chapter added to the *Principles*:

My mistake arose from the supposition, that whenever the net income of a society increased, its gross income would also increase; I now, however, see reason to be satisfied that the one fund, from which landlords and capitalists derive their revenue, may increase, while the other, that upon which the labouring class mainly depend, may diminish, and therefore it follows, if I am right, that the same cause which may increase the net revenue of the country, may at the same time render the population redundant, and deteriorate the condition of the labourer.

(*Works*, Vol. I, p. 388)

While Ricardo also thought there was "much valuable information" additionally contained in Barton's *Observations*, it was Barton's insight into the effects on the laboring classes of increasing amounts of fixed capital that was responsible for the addition of the "On Machinery" chapter to the third edition of the *Principles*. We turn to that discussion itself in the next section, and then to the impact of the added chapter on the argument Ricardo had developed in his first two editions in the section thereafter.

"On Machinery"

Ricardo's new chapter is divided into two sections, neither of which is titled or otherwise distinguished. The first section begins with Ricardo's declaration regarding the change in his position, proceeds to a detailed account of his past position, and closes with a statement regarding what he perceives to be the correct characterization of the condition of the laborer when machinery introduction is taken into account.

Central to the discussion is an analysis of the differential movements of a society's gross and net incomes that relies on a numerical example of a single capitalist farmer's construction and subsequent use of a new piece of machinery. (He later adds that his farmer example is chosen for simplicity and that the analysis applies to any trade.) Ricardo then offers qualifications concerning how savings due to falling commodity prices might increase the efficiency of net revenues to enable capitalists to hire back many if not all workers made redundant by machinery introduction, and finally closes with a four point summary.

The briefer, second section of the chapter focuses on a set of recommendations for the re-employment of displaced labor and draws parallels between the displacement of human labor by machinery introduction and its displacement by the labor of horses. The discussion proceeds by imagining a gradual introduction of machinery, whereas the first part of the chapter employs a comparative static analysis. The second section and the chapter conclude with a warning that the state should nonetheless never discourage the introduction of machinery, say, by taxing it as the country's weavers had long wished (cf. Berg 1980), on the grounds that to do so would have the effect of driving capital abroad. Thus remedies other than halting or slowing machinery introduction were still to be preferred.

One point regarding the balance of the chapter merits emphasis at the outset. Though Ricardo supposes there are circumstances in which machinery introduction may be accompanied by re-employment measures which will correct labor displacement, it seems that these possibilities should be thought secondary in importance relative to the principal theme of the chapter that machinery introduction is "often injurious to the interests of the class of labourers" by its capacity to "render the population redundant, and deteriorate the condition of the labourer" (p. 388). After all, if Ricardo had thought re-employment would always adequately address labor redundancy, there would have been no need for the added chapter nor for the opening declaration that he had previously been mistaken on the subject. Minor changes elsewhere in the third edition of the *Principles* would have sufficed.³ This is not to say that Ricardo grasped all the implications of his

³ These conclusions seem to have later escaped John Stuart Mill, who wrote, "All increase of fixed capital, when it takes place at the expense of circulating capital, must be, at least temporarily, prejudicial to the interests of the labourers" (1871, I, vi, sect. 2). Ricardo had allowed for temporary effects in his first editions, and would not have had to add his new chapter if these alone were at issue.

admission regarding machinery introduction, and it will be argued below that these were more serious than he believed. Rather, that Ricardo was so forthright about a subject on which he thought himself to have been in error is evidence of his intellectual honesty. He thought it important both to show where he had been mistaken, and to attempt a better analysis of the matter, instead of burying the problem under qualifications he knew would complicate the essential conclusion. Let us turn, then, to the actual reasoning of the chapter.

In the previous two editions of the *Principles*, Ricardo's position had been that each of the three main economic classes of society would benefit from the "application of machinery to any branch of production," because the "inconvenience which in most cases attends the removal of capital and labour from one employment to another" is outweighed by "the effect of saving labour" made possible by machinery introduction (p. 386). That is, "as the capital which employed [labor] was still in being; and as it was the interest of those who had it to employ it productively, it appeared to me that it would employed on the production of some other commodity" (p. 387).⁴ The "effect of saving labour" was upon the prices of commodities, which on a labor value analysis would fall, thus cheapening commodities for all classes. Ricardo thus abandoned his view that machinery introduction was of general benefit on the grounds that while commodities would be cheaper, this advantage could be outweighed for the labouring classes by the displacement of laborers from employment.

This conclusion links directly to the issue of the differential movements of a society's gross and net incomes, since technological displacement of labor allowed for the possibility that net income might increase while gross income declined. To demonstrate this, Ricardo created an example not unlike Barton's. Suppose a farmer's entire capital of 20,000 pounds is annually divided between circulating and fixed capitals, such that respectively 13,000 is employed in the support of labor (when each year the farmer capitalist sells 13,000 pounds worth of food and necessities to his laborers, paying them wages of the same amount) and 7,000 is invested in buildings, tools, etc. Since the total capital of 20,000 pounds, a rate of profit of 10 percent requires a total profit of 2,000 pounds per year. This is achieved by having the laborers produce a total output in food and necessities of a value of 15,000 pounds each year, leaving the 2,000 after the 13,000 circulating capital is replaced. Note that the gross income is 15,000 and the net income or capitalist profit is 2,000.

Then, Ricardo goes on, suppose the capitalist one year reduces his work force producing food and necessities by half, putting the remaining laborers to work constructing a machine for future production of those same food and necessities. That is, out of the 13,000 spent as circulating capital paying the wages of the work

⁴ Marx argued that here Ricardo overestimated the amount of capital that was "still in being" for the re-employment of labor elsewhere, because of the changed requirements for raw materials, added machinery, etc. in subsequent employments. See Marx 1968, Part 2, p. 557.

force, half of the total is now devoted to wages for those constructing the machine. The new 15,000 gross output produced (given the 10 percent rate profit on the original capital) now results in 7,500 of new food and necessaries and also 7,500 in new machinery. While the value of the total capital is unchanged, the proportion of fixed capital has increased. The capitalist now possesses 5,500 in food and necessaries as future circulating capital after his 2,000 is subtracted as a profit from the 7,500. He also possesses the new machinery worth 7,500 in addition to his original buildings, tools, etc. of 7,000. That is, circulating capital is 5,500 and fixed capital is 14,500, compared to a previous circulating capital of 13,000 and a fixed capital of 7,000.

Since Ricardo assumes that the labor hired by the 5,500 pounds of circulating capital can operate the whole of the fixed capital embodied in the 14,500 of new machine and old tools, the shrinkage in circulating capital from 13,000 to 5,500 means that labor employed by the 7,500 difference has become redundant to production. The fewer employed laborers and the larger quantity of fixed capital now produce 7,500 in food and necessaries, so as to give the capitalist 2,000 in profit on the 20,000 total capital advanced. Thus net income remains the same, while gross income is diminished by 7,500, or by half (15,000 in the previous year minus 7,500 after the introduction of the machine). As the power of supporting a population and the employment of labor depends on the gross produce of a society and not on its net produce, there will necessarily be a diminution in the demand for labor, and the situation of the laboring classes will deteriorate. Fixed capital is accumulated at the expense of circulating capital, and those displaced from employment are made redundant to production, or are technologically unemployed.

In the balance of the first part of the chapter, Ricardo qualifies this conclusion with an argument concerning the use of increased savings capitalists enjoy on finding the goods they consume cheaper due to machinery introduction. Assuming capitalists generally increase their fixed capital, goods will generally be cheaper. The saved revenue can be accumulated as capital to extend production, and this will permit the re-employment of some portion of the laborers made redundant by machinery introduction. From the capitalist's perspective,

it could not fail to follow from the reduction in the price of commodities consequent on the introduction of machinery, that with the same wants he would have increased means of savings, - increased facility of transferring revenue into capital. But with every increase of capital he would employ more labourers; and, therefore, a portion of the people thrown out of work in the first instance, would be subsequently employed.

(Works, Vol. I, p. 390)

Generalizing this argument for Ricardo, we might add that lower prices for food and necessaries produced with machinery would permit savings on circulating capital as well, thus making re-employment possible for a further number of formerly redundant laborers. Indeed it is conceivable, Ricardo asserts, that all

those laborers rendered by machinery introduction will at some point be returned to employment, or that the circulating capital will be re-extended to its former magnitude. He continues:

and if the increased production, in consequence of the employment of the machine, was so great as to afford, in the shape of net produce, as great a quantity of food and necessaries as existed before in the form of gross produce, there would be the same ability to employ the whole population, and, therefore, there would not necessarily be any redundancy of people.

(P. 390)

Yet this is only a possibility for Ricardo, not an inevitable nor even a likely consequence of machinery introduction. It might be compared with another consequence of machinery introduction that does follow with inevitability, namely, the movement of capital and labor from one employment to another following a saving of labor resulting from machinery introduction. In a more modern terminology, then, Ricardo believed that machinery introduction caused not just frictional unemployment but technological unemployment as well. This he affirms in what stands as the principal conclusion of the first part of the chapter:

All I wish to prove, is, that the discovery and use of machinery may be attended with a diminution of gross produce; and whenever that is the case, it will be injurious to the labouring class, as some of their number will be thrown out of employment, and population will become redundant, compared with the funds which are to employ it.

(P. 390)

From this four specific conclusions are delineated in the following pages. (Pp. 391-2) First, "the discovery, and useful application of machinery, always leads to the increase of the net produce of the country, although it may not, and will not, after an inconsiderable interval, increase the value of that net produce," on account of the fall in prices from saved labor. Second, "an increase of the net income of a country is compatible with a diminution of the gross produce." Third, "the opinion entertained by the labouring class, that the employment of machinery is frequently detrimental to their interests, is not founded on prejudice and error, but is conformable to the correct principles of political economy." Fourth, should price reductions "increase the net produce of a country in a degree so great as not to diminish the gross produce, ... then the situation of all classes will be improved." Regarding the laboring classes, these benefits derive from:

1st, from the increased demand for menial servants; 2dly, from the stimulus to savings from revenue, which such an abundant net produce will afford; and 3dly, from the low price of all articles of consumption on which their wages will be expended.

(Pp. 391-2)

The third case was a feature of Ricardo's treatment of machinery in the first two editions of the *Principles*. The second case, savings from revenue to add to capital for the extension of production, emerges in Ricardo's qualifications to his main argument. The first case, however, represents a new emphasis. Since it is a major theme in the latter section of the added chapter, let us turn to that discussion.

Here Ricardo generally investigates alternative ways in which capitalists (and indirectly landlords collecting rent from capitalist farmers) may expend that portion of net revenue devoted to their own consumption needs. Depending upon how this occurs, different re-employment possibilities emerge for labor. Indeed, should capitalists also be reluctant to direct new savings into the formation of new capital, perhaps on account of depressed trade or restrictions on trade, how they choose to consume in these circumstances will additionally affect employment for laborers. Thus Ricardo announces that "the labouring class have no small interest in the manner in which the net income of the country is expended" (p. 392). Consider first, then, that

If a landlord, or capitalist, expends his revenue in the manner of an ancient baron, in the support of a great number of retainers, or menial servants, he will give employment to much more labour, than if he expended it on fine clothes, or costly furniture; on carriages, on horses, or in the purchase of any other luxuries.

(P. 393)

Putting aside changes in the net and gross revenues of the country, revenue spent in the former way, Ricardo explains, would serve to re-employ individuals otherwise made redundant.

If ... I realised my revenue in the first set of commodities, no more labor would be *consequently* employed: - I should enjoy my furniture and my clothes, and there would be an end of them; but if I realised my revenue in food and clothing, and my desire was to employ menial servants, all of whom I could so employ with my revenue ..., or with the food and clothing which it would purchase, would be to be added to the former demand for labourers, and this addition would take place only because I chose this mode of expending my revenue.

(P. 393)

If we suppose machinery introduction in luxury goods production permits the same workers to turn out more goods, further expenditure of net revenue on luxury goods would not change the number of individuals involved in this line of production. However, should increased net revenues alternatively be spent on expanding menial service, some formerly redundant workers would then be re-employed.

A second means of supporting displaced labourers by judicious expenditure of net revenue also occurred to Ricardo. War may provide an opportunity for reducing the redundancy of population, because "a country engaged in war, and which is under the necessity of maintaining large fleets and armies, employs a great many more men than will be employed when the war terminates" (p. 393). It would be

uncharitable, however, to suppose Ricardo's view here is that redundant laborers can be eliminated as casualties in military conflict. Rather just as servants may be financed out of capitalist and landlord net revenue, so this net revenue may be taxed to create military service employment. That large numbers of individuals were drawn into English armies and navies during the Napoleonic Wars could not have escaped Ricardo's attention. Machinery introduction, then, might actually be encouraged in times of war to generate military manpower. Ricardo's argument about menial service is accordingly generalized.

If I were not called upon for a tax ... during the war, and which is expended on men in the situations of soldiers and sailors, I might probably expend that portion of my revenue on furniture, clothes, books, &c. &c and whether it was expended in the one way or in the other, there would be the same quantity of labour employed in production; for the food and clothing of the soldier and sailor would require the same amount of industry to produce as the more luxurious commodities; but in the case of war, there would be the additional demand for men as soldiers and sailors; consequently, a war which is supported out of revenue, and not from the capital of a country, is favourable to the increase of population.

(PP. 393-4)

Ricardo admits that the termination of war once again leaves labourers displaced by machinery introduction redundant. Since he did not recommend large, permanent standing armies and navies, this means of absorbing displaced laborers was consequently more on the order of a temporary expedient.

The balance of the second part of the chapter offers comments and qualifications to the main analysis of the entire chapter. Ricardo warns that substitution of the labor of horses for that of human beings bears the same consequences as the substitution of machinery for human labor. He also qualifies the importance of his numerical example by suggesting that machinery introduction generally proceeds more gradually in actuality. "To elucidate the principle, I have been supposing, that improved machinery is *suddenly* discovered, and extensively used; but the truth is, that these discoveries are gradual, and rather operate in determining the employment of the capital which is saved and accumulated, than in diverting capital from its actual employment" (p. 395). Were it entirely new capital which bore the higher proportions of fixed to circulating capital, we might suppose very little labor would ever be displaced. With capital as a whole growing at a faster rate than circulating capital, "[t]he demand for labour will continue to increase with an increase of capital, but not in proportion to its increase; the ratio will necessarily be a diminishing ratio" (p. 395). However, Ricardo offers no reason to suppose that existing capital will be treated differently in production from saved increments to capital, and we might accordingly rather suppose that with an annual opportunity for turnover characteristic of farming in particular capitalists will carry out this conversion whenever they believe it to be in their interest. Despite his qualifications, then, Ricardo left open the possibility that labourers might often find themselves without employment.

Thus, with this sobering prospect in view, Ricardo closes his new chapter with an admonition that the state should never act to discourage machinery introduction. The flight of capital that this would likely engender would deprive England of the opportunity to reduce the values of commodities both in its own consumption and in trade with other countries. It might well be, of course, that on balance more good than ill would come of a general cheapening of commodities. Whether or not this was the case, however, Ricardo's emphasis remained cautionary. Dire consequences might ensue from any effort to regulate machinery introduction. As in much else that he wrote, Ricardo seemed to believe that it was the worst-case scenarios that needed primary attention. This was a conservative type of reasoning that looked to steady progress uninterrupted by serious setbacks. Halting machinery introduction might well involve such setbacks. His reasoning was also of pragmatic sort that focused on the likely consequences of specific policies. We see in the section following, however, that Ricardo's careful approach to the issue of machinery introduction caused him to overlook what the addition of the "On Machinery" chapter to the last edition of the *Principles* meant to the underlying framework in which his argument was crafted in the first two editions.

The Challenge to Ricardo's Vision

Sraffa termed the addition of the new chapter to the *Principles* the "most revolutionary change" in the third edition (*Works*, Vol. I, p. lvii). This was not just because Ricardo admitted a past error, but rather because he effectively announced for the first time that the laws of political economy need not always work to the advantage of all. Before Ricardo, Adam Smith had closely associated political economy with the idea that the market system worked, as if by an invisible hand, to promote the interests of all classes and individuals in a way the State could not. The State was left with a small list of responsibilities (to provide for national defense, a system of justice, etc.), and were one class to control the apparatus of the State to promote its own monopoly interests, then according to the laws of political economy this would reduce general well-being. Ricardo inherited this understanding of political economy together with its prescribed functions for the State, and argued that the landlords' defense of the Corn Laws was harmful to the interest of all. But the machinery chapter demonstrated--in the absence of one class monopolizing the power of the state to further its own interests--that a free economy could be "very injurious to the interests of the class of labourers." Moreover, because re-employment possibilities were tied to the manner in which capitalists and landlords might expend net revenue, it was now conceivable that the class of labourers might reasonably petition the members of these classes to expand the ranks of those in service. The State, then, began to look more like an arena in which economic interests might advantageously be addressed than a relatively passive adjunct of the market system.

Ricardo, of course, died before many of the implications of widespread machinery introduction were to become very clear. However, he did see the beginnings of English industrialization, especially in the textile industries, and he did observe class conflict in the Luddite revolts and mass assemblies such as Peterloo. But like almost all of his contemporaries (Barton and Owen were exceptions), he only barely glimpsed the nature of the coming industrial age on society. He did recognize, unlike McCulloch and others, that the class of labourers had not fully misapprehended the laws of political economy, though at the same time he never apparently questioned the status of these laws as inherently natural arrangements which society could not alter. Challenging that interpretation was left to Ricardo's most important successor in explaining value in terms of labor, namely, Karl Marx. Marx believed the laws of political economy were products of an historical system, the capitalist mode of production, and consequently not rooted in a natural order. In contrast, Ricardo's early vision of the economic system was indisputably a naturalist one as revealed in its reliance on (i) the Malthusian biological law of population, (ii) the physico-chemical law of the diminishing fertility of the soil, and (iii) the Smithian conception of the economy as a naturally harmonious process. The argument of the machinery chapter implicitly threw each of these naturalist commitments into question, and in this sense was revolutionary for Ricardo's thinking (cf. Davis 1989).

To see this, it is helpful to first consider the effects the added chapter had on Ricardo's use of the Malthusian population law, since the technological unemployment the chapter considers is directly relevant to determination of the supply of labor, which was Malthus's original focus. The population law explains the growth of the laboring population in terms of the growth of laborers' means of subsistence. By originally defining the "natural price of labour" in the first editions of the *Principles* as that "which is necessary to enable the labourers ... to subsist and to perpetuate their race, without either increase or diminution" (*Works*, Vol. I, p. 93), Ricardo accounted for increases in the supply of labor through growth in population when the market price of labor was above the natural price of labor, and decreases in the supply of labor when the market price was lower. That is, when the market price of labor differed from its natural price, the means of subsistence differed from that necessary for a constant growth of population. Population either grew when subsistence was abundant or it declined when subsistence was inadequate.

The biological character of Malthus's law is most clearly reflected in the mechanism by which population and labor supply change over time. When there was a divergence between the market and natural price of labor, laborers would reproduce and die at a different rate. Thus there was nothing in the constitution of society that modified or countered the operation of the law. Indeed there was nothing in Malthus's simple view of population dynamics that allowed for a distinction between human beings and animals. More broadly, Malthus ignored

learning, a knowledge of history, and all of the characteristically social behaviors that may enter into families' decisions about family size.⁵

Ricardo relied on this rudimentary understanding of population in the first two editions of the *Principles* to simplify his account of labor supply. No doubt he was aware that it was an overly simple view, but he almost certainly still thought that labor supply was at bottom governed by principles of nature. The machinery chapter, however, upset this picture by adding a new means by which population might become redundant, since the introduction of machinery added to the supply of labor by freeing-up previously employed laborers. At the same time, Ricardo's discussion of how labor might be re-employed through use of saved revenue from falling prices meant that social decisions influenced labor supply. Malthus's population law left little hope for those made redundant by a fall in the market price of labor. Nature simply took its course, and eliminated individuals. But Ricardo's re-employment strategies meant that nature could be countered in its negative effects on labor, specifically, by an extension of production and menial service. Indeed that Ricardo asks his readers to consider re-employment possibilities as policy measures indicates he believed social intervention in the market necessary. In effect, then, society joined nature in determining how the laws of political economy would operate, ending their status as purely natural arrangements.

More strongly, society had a responsibility to consider how social welfare might actively be promoted. For Ricardo, the key to understanding the changes brought on by machinery introduction was to understand how society might address the indeterminacies associated with different re-employment possibilities for those displaced. While on the one hand the expulsion of labor from production appeared to proceed with a natural inevitability as capitalists pursued their own self-interest, on the other hand laborers' re-employment rested upon a variety of trade-offs involved in decisions concerning the expenditure of saved revenue. Consequently, whether re-employment proceed at a rapid or slow pace depended upon a whole range of social decisions that balanced the advantages and disadvantages of more or less technological unemployment, different modes of consumption, and the possibility of war. Since these decisions required that society assess the desirability of alternative states of affairs, this further implied that some concept of social welfare and the good of society needed to be developed, and brought to bear on the choices that arose. It should be noted that any debate over whose good is to be served by re-employment strategies is also part of this picture, since distributional considerations are unlikely to be far from the surface in discussion of social welfare.

But not only is Ricardo's original, naturalistic treatment of population dynamics and wage determination upset by his attention to the effects of machinery introduction. No less significantly the role in his analysis for the physico-chemical law of the diminishing fertility of the soil is also affected. Specifically, Ricardo now

⁵. To be fair, this strong view represents Malthus's original formulation of his population laws. Subsequent editions of his *Essay* introduced qualifications.

clearly allows that technical progress may be successful in counteracting declining productivity in agriculture, since the introduction of machinery may result in a fall in the value of farm products due to their lower labor time requirements. Formerly the continual growth of industry was accompanied by a continual extension of the margin of cultivation that brought less and less productive lands into production. In the long run recourse to less fertile lands would ultimately bring the expansion of capital to halt, as nature placed fundamental boundaries on human endeavors.

But the special role of agricultural production in the first two editions of the *Principles* is implicitly absent from the third when seen from the perspective of the machinery chapter. Technical improvements throughout industry are now sufficient to prevent the continual extension of agricultural cultivation to less fertile lands. This may be due directly to improvements in agriculture or indirectly to labor saving machinery introduction elsewhere. While it still is the case, of course, that nature provides land limited in extent, that this land is no longer really limited in quality when technical progress can either improve existing lands or make marginal lands unnecessary means that the boundaries nature imposes on production are less important than originally thought by Ricardo. In a more modern formulation, technical progress through discovery of substitute resources eases many of the limitations on production that natural resources appear to create. For the nineteenth century, the advance of technology essentially meant that agriculture and nature would no longer direct the development of production, but that human society would do so in virtue of its expenditure of effort and wealth upon knowledge and innovation.

That Ricardo apparently did not recognize the deeper implications of his added chapter for his original argument is clear from his failure to alter other passages in the *Principles* that concerned technical improvements in agriculture. Thus at one point it is still said in an unchanged earlier chapter that diminishing returns in agriculture are at most "checked at repeated intervals by the improvements in machinery" (*Works*, Vol. I, p. 120). Yet while the principle of diminishing returns is indeed still valid in the abstract, the implicit argument of the machinery chapter is that diminishing returns in agriculture may actually be overcome when machinery introduction reduces employment and gross revenue over time. Why was this relatively obvious discrepancy not noticed by Ricardo? One answer is that he was unable to appreciate the significance the added chapter had because he was so strongly attached to his underlying vision in the *Principles* of an economy guided by natural principles. Another possibility is that Ricardo may have thought that the new chapter involved a set of relatively self-contained qualifications to his main argument regarding the distribution of the social product, and that this left him little reason to make a closer examination of its implications. In fact, the damage on this score was worse than he supposed.

Indeed an important consequence of the argument in the added chapter is that the pattern of distribution of the social product alters from what it was argued to be in the first two editions of the *Principles*. There the extension of the margin of cultivation produced rising rents for landlords together with falling profits for capitalists. But with technical progress holding the corn cost of wages constant,

rents need not rise nor profits fall. Indeed profits may well increase with the accumulation of capital, and rents come to represent a smaller share of social product. Ricardo was interested in relative income shares and predicted in the original *Principles* that rents would rise at the expense of profits. In the machinery introduction world of the third edition, it may be argued that just the opposite occurs. At the same time, since it is capitalists who decide to replace laborers with machinery, the class antagonism implied by the machinery chapter is now directly between labor and capital, rather than between landlords and capitalists. The added chapter, then, effectively puts much of Ricardo's original understanding of distribution into question, substituting a new conception of the principal class conflict associated with the incipient process of industrialization.

What, then, were the effects of Ricardo's new conclusions on the policy prescription most often associated with his book, namely, the repeal of the Corn Laws? Previously Ricardo had argued that repealing the Corn Laws would counter the tendency for profits to fall and that free trade in corn was in the laborer's interest, since the promotion of capital accumulation would tend to lower the values of commodities and improve standards of living. Yet with machinery introduction and the replacement of labor by machinery capitalists would likely become relatively indifferent to the cost of food production and thus consequently find themselves less committed to repeal of the Corn Laws. Similarly, landlords would no longer have quite the same interest in maintaining the Corn Laws, since import protection would not succeed in holding up corn prices when machinery introduction was possible. In contrast, laborers would still be interested in repealing import duties on corn, since a low price for corn would reduce the capitalist's incentive to replace circulating capital with fixed capital, thus sustaining higher levels of employment. Ricardo clearly recognized the force of this last point: "In American and many other countries, where the food of man is easily provided, there is not nearly such great temptation to employ machinery as in England, where food is high and costs much labour for its production" (p. 395).

An important implication of all these effects concerns Ricardo's Smithian vision of the free market system as a basis for social harmony. Recall that the class antagonism of the original argument in the *Principles* is due to restrictions on market activity that produce the rising share of rents. Profits need not fall, nor need there be social conflict if free trade is the rule. However, in the third edition capitalists' free market behavior combined with technical progress is now seen to be detrimental to the interest of the laboring class and consequently the free, unhindered operation of markets may fail to produce a naturally harmonious condition in society. Indeed, social harmony may rather be promoted when policy initiatives moderate capitalists' and landlords' discretion over the use of their net incomes, encouraging them to exercise a social responsibility of sorts alongside their pursuit of self-interest. More simply, some intervention in economic life, not full scale laissez faire policy, is likely to ameliorate social antagonism, so that social harmony is as much a creation of society as of nature.

What does this then imply about Ricardo's overall stance toward economic policy after the machinery chapter? It might be argued that Ricardo's later

reflections on labor displacement made his thinking about economic policy more flexible and better attuned to historical circumstances than it had been in the first two editions of the *Principles*. His analysis of labor's re-employment attendant upon capitalists extending production with savings resulting from falling prices shows that the displacement of labor varies according to economic conditions. This implies that the importance of policies regarding displaced labor varies according to historical circumstances. While the same thing cannot obviously be said about his posture toward free trade measures, such as the repeal of the Corn Laws, the fact that free markets do not always produce the best result means that economic policy is no longer simply a matter of calling for non-interference in the economy on principle. Rather, judgment must generally be exercised, and this demonstrates that social decision-making plays a role in determining the nature of economic relationships.

That Ricardo adopted, if somewhat unintentionally, this more flexible view of economic policy after having been elected to Parliament is likely no accident. In addition to increased acquaintance with the multitude of ways in which the government and the House of Commons were able to influence the operation of the economy, Ricardo also became sharply aware of the extent of labor unrest and concern laborers had over technological unemployment. Accordingly his admission that laborers had correctly apprehended the laws of political economy where the impact of machinery introduction on employment was concerned was of no small importance taken in this charged political context. It went against the traditional view of the upper classes that laborers were unable to form reasonable opinions on subjects of any significance. It also gave indirect support to those who had protested in mass meetings at Peterloo and elsewhere, and who were regarded by many as engaged in sedition. This was a time when arrests, imprisonment, deportations, and executions were extensive and talk of revolution was common. In such circumstances, thought about economic policy would not easily have been framed solely in terms of natural principles.

The Challenge to Ricardo's Economic Methodology

Since Ricardo defined political economy as a science that investigated the laws regulating distribution of the social product, the question arises whether the machinery chapter's effects on Ricardo's thinking about distribution might be accompanied by effects the chapter had on his thinking about the nature and method of economics. Ricardo is known to contemporary economists not only for his substantive conclusions, but also for his distinct views about the nature of economic science. Whereas Smith and Malthus thought of political economy as an inquiry into the nature and causes of wealth, Ricardo rather confined himself to an examination of laws and tendencies that operated in economic life. To some extent, this merely involved an extension of the Smith-Malthus conception, since laws and tendencies presumably reflected cause-and-effect relationships that were

unchanging and permanent. Yet no doubt it also reflected Ricardo's well-known preference for putting aside transitory features of market economies, in order to explain those relationships which would prevail in the long run. Writing to Malthus in 1817, Ricardo had seen the difference as important to his conception of political economy: "It appears to me that one great cause of our difference in opinion ... is that you have always in mind the immediate and temporary effects of particular changes - whereas I put these immediate and temporary effects quite aside, and fix my whole attention on the permanent state of things which will result from them" (*Works*, Vol. VII, p. 120; Ricardo to Malthus, 24 June 1817).

What, then, were included in Ricardo's laws and tendencies? Having said that political economy concerns the laws that govern distribution, Ricardo went on to refer in his chapter on rent to "the laws which regulate the progress of rent," as compared to "those which regulate the progress of profits" (p. 68), and then in his chapter on wages to "the laws by which wages are regulated" (p. 105). These laws of political economy, clearly, themselves depend on laws of nature in the form of Malthus's population principle and the law of diminishing returns in agriculture. By characterizing the former as laws, especially in relation to natural laws upon which they depended, Ricardo clearly implied that the fundamental principles governing rent, wages, and profits were of a similarly permanent nature. In contrast, tendencies were weaker principles that reflected relationships only likely to prevail in the future. They might be thought of as "contingent predictions" as De Marchi termed them (1970, p. 259), that is, as states of affairs that would obtain were certain conditions to hold. Most notably in this connection, Ricardo spoke of a "tendency of profits ... to fall" which is "checked at repeated intervals by the improvements in machinery ... as well as by discoveries in the science of agriculture" (p. 120). Also included as tendencies are the directions in which Ricardo believed that rents and wages would likely move over time.

Note that tendencies are stronger than empirical generalizations based on past observation, in that tendencies presuppose the existence of laws that take effect under certain conditions. This gives tendencies a special value with respect to prediction, since, contra Hume, the operation of the laws underlying tendencies provides grounds for thinking that the future will reflect the past as predicted. It follows that were there to arise doubts regarding the existence or nature of the laws presupposed in the analysis of some given tendency, then there would then be little to distinguish the tendency in question from a related empirical generalization as a guide for predicting the future. Indeed one such indication that there are justified doubts regarding the existence and nature of the laws involved in accounting for some tendency is that the tendency does not appear to predict the future when the requisite conditions obtain.

The structure of Ricardo's methodological thinking, then, was to provide credibility for his policy prescriptions by basing them on an analysis of the economy's tendencies, which in turn depended for their plausibility on there being laws of political economy themselves embedded in natural laws. The addition of the machinery chapter, however, called this structure into question at a number of

points. First, the account of natural laws was now of mixed value. On the one hand, it was hardly clear any longer that Malthus's population principle was indeed a law of nature. On the other hand, while the physico-chemical properties of the soil presumably still reflected laws of nature, they no longer seemed to have important implications for the laws of political economy. Second, while it seems fair to say that rents and profits are still determined in the same manner as in the first two editions of the *Principles*, and thus might be said to still involve laws of political economy, wages with the addition of the machinery chapter are not determined as previously, nor does there seem to be any lawlike behavior associated with their determination when social forces intervene in connection with debate over re-employment strategies. Third, while the tendencies that Ricardo originally argued for in the movement of rents, wages, profits no longer appear to hold in his third edition -- rents and profits being reversed and wages being unclear--perhaps more importantly these new projections lack obvious foundation in natural laws. True, profits are still a residual and rents are still based on infra-marginal produce. However, that wages are determined in good part by social decision implies that the movement of profits and rents no longer rests on laws of political economy based on laws of nature. Fourth and finally, Ricardo's policy prescriptions are more *ad hoc* after the machinery chapter addition. What is recommended depends on actions taken that cannot be predicted. Thus policy needs to be adjusted to the course of events. Moreover, policy now also depends significantly on debate over social goals, the formulation of which was rooted in the political process.

None of this implies that political economy cannot still be defined in terms of principles explaining the distribution of the social product. But Ricardo's original way of conceiving this project in terms of a set of laws regulating distribution lacks its original solid foundation after the addition of the machinery chapter where less than lawlike forces influence rents, wages, and profits. From this it further follows that Ricardo's preference expressed to Malthus about the need to pay greater attention to "the permanent state of things," as compared to "the immediate and temporary effects" of changes, is less persuasive. Malthus would indeed appear to have been correct in thinking that short run considerations are often central to our understanding of long run trends. In fact, tendencies now appear a less justifiable way of explaining trends in the economy than reference to empirical generalizations based on limited past experience. Ricardo's methodological strategies, it may thus be concluded, received a serious challenge with the addition of the machinery chapter to the third edition of the *Principles* and accordingly might well have undergone not insignificant changes had Ricardo lived longer. The addition of the chapter to the *Principles* itself demonstrates that Ricardo was willing to reverse himself when he thought reasonable argument suggested he should. More time for reflection, then, might well have shown him that the implications of the added chapter were more far reaching than he had believed.

Concluding Remarks

The addition of the machinery chapter to the *Principles* perhaps raises more questions about Ricardo's thought than it answers. What the chapter nonetheless indicates is that Ricardo's thinking was in a state of development late in his career. This is not an unimportant point to emphasize given the popular view of Ricardo as a skilled deductive thinker who carefully and exhaustively examined all his assumptions before drawing inferences from them. This view is quite possibly a product of the fact that Ricardo did not live a long life. That is, one might say that, because Ricardo died prematurely, he lost the opportunity to re-examine many of his early assumptions, and bring the power of his intellect to bear on the possible transformation of his original ideas such a re-examination might involve. Indeed Ricardo's thought exhibits comparatively modest development compared to that of a number of other great economists who worked through series of adjustments in their ideas. Marx and Keynes, to name just two, developed their most influential ideas only after subjecting their early ideas to critical examination.

Yet though there was really more promise of change than actual development in Ricardo's later thinking, we can identify factors that might have brought more serious reflection had he survived for another, say, dozen years of prime working life. It was suggested earlier that Ricardo's entry into Parliament in 1819 was a contributing factor to his willingness to give machinery introduction the attention he did in the third edition of the *Principles*. The mass assemblies of working people in the postwar years, the protests of weavers against the power-loom, and the passage of the infamous Six Act to halt impending "revolution" may have inspired him to take another look at Barton's arguments or other evidence regarding the process of industrialization, even where this might point to increasing militancy on the part of the working class. Indeed, we saw in the previous chapter that Ricardo adopted positions regarding the democratic reform of Parliament that gave little support to traditional class boundaries. Thus events likely did have an impact on his thinking and the image of the man as a highly self-contained individual and deductive thinker ever guilty of the "Ricardian vice" of abstract thought is probably at best misleading.

There was yet another important source of development in Ricardo's late-life thinking. As was seen above, Ricardo's correspondence and debates with Malthus were central to his intellectual development and the maturing of his vision of the economy as it was ultimately manifested in the *Principles*. Yet while his conception of distribution was established by 1814 and never in his own mind really changed after that date, his labor value analysis underwent continual change and development across the three editions of the *Principles*. Moreover, at the end of his life he was working on a manuscript entitled "Absolute Value and Exchangeable Value," which was meant to address a number of important difficulties Malthus had drawn attention to in Ricardo's analysis of an invariable standard of value. It is this last intellectual episode in Ricardo's life that remains to be investigated.

Chapter XII

THE SEARCH FOR A MEASURE OF ABSOLUTE VALUE

I have been thinking a good deal on this subject lately but without much improvement--I see the same difficulties as before and am more confirmed than ever that strictly speaking there is not in nature any correct measure of value nor can ingenuity suggest one, for what constitutes a correct measure of some things is a reason why it cannot be a correct one for others.--

Ricardo to Mill (5 September 1823)

In the last few weeks of his life, Ricardo was at work on a paper entitled "Absolute Value and Exchangeable Value." He completed one rough draft of the paper and was at work on a second version that at the time of his death was still unfinished. His subject was the measure of value and he addressed it by further developing not only his own previous views on the matter, but also through criticism of the views of Malthus, McCulloch, Mill, and Torrens in the completed version of the paper and then criticism again of Malthus and McCulloch in the later unfinished version. Until the discovery of the drafts of the papers by Sraffa in the Mill-Ricardo papers, commentators had been unaware of their existence. Apparently the papers had been sent to Mill upon Ricardo's death, but Mill had not thought them worthy of publication or mention, perhaps because Ricardo had indicated in correspondence just before his death that he was not satisfied with them (*Works*, Vol. IX, p. 387; Ricardo to Mill, 5 September 1823) and perhaps because Mill wanted to minimize the appearance of disagreement in political economy. There was, however, one early reference to the papers by McCulloch, who noted in the first versions (but then omitted from later ones) of his *Life and Writings of Mr.*

Ricardo that in the summer of 1823 Ricardo was "engaged, with his usual ardour, in a profound and elaborate investigation concerning the absolute and exchangeable value of commodities. But he was not destined to bring this investigation to a close!" (McCulloch 1825). The papers are nonetheless important for understanding Ricardo's thinking about value, since, as Sraffa points out, they consciously employ "the notion of a real or absolute value underlying and contrasted with exchangeable relative value," where previously in Ricardo's writings on value there had only been "hints and allusions" on this theme (*Works*, Vol. IV, p. 359).

The immediate stimulus for Ricardo's efforts was, as seen above, Malthus's publication of his own *Measure of Value* in April 1823. Yet Ricardo was likely less impressed with Malthus's book and more concerned with his own thinking on the subject, since he had felt after the appearance of the third edition of his *Principles* that still more needed to be done to clarify his thinking about an invariable standard of value. Writing to McCulloch in January 1821, he addressed the problem of identifying a standard of value when capitals were of different compositions and different degrees of durability and admitted that, he was "not satisfied ... with the account I have given of value, because I do not know exactly where to fix my standard," though he did think he was on the "right course" (*Works*, Vol. VIII, p. 343, 344; Ricardo to McCulloch, 25 January 1821). And it was clear to Ricardo that little was new in Malthus's most recent approach to the matter. Immediately upon receiving and reading Malthus's new book, he wrote to Malthus saying, as he had in his "Notes on Malthus," that he could not agree that labor, that is, the labor that commodities commanded, provided a "good measure of value," since in his view labor in this sense functioned as a "variable measure for an invariable standard" (*Works*, Vol. IX, pp. 280, 282). There followed a lengthy correspondence between the two individuals dating to the end of August of that year shortly before Ricardo became ill. At that point Ricardo in his last letter to Malthus declared himself "done" on the matter, insisted he still thought that Malthus's measure was inadequate, and allowed that his own measure was not perfect (pp. 380-2). Sraffa suggests that Ricardo also broke off work on his second, incomplete paper on the subject of absolute and relative value at this time, so he may have only been "done" with Malthus's view at this point.

Ricardo's Two Problems in Thinking About an Invariable Standard

It has been argued that there were two stages and dimensions to Ricardo's thinking about an invariable standard of value prior to his concentrating on the matter in his last papers (Kurz and Salvadori 1993). The first was associated with Ricardo's attempt to find a standard by which to measure the value of commodities at different times and places, that is, to measure their real or absolute value intertemporally and interspatially in terms of their difficulty of production. The

second was associated with an entirely different sort of measurement problem that related to the impact of changes in the distribution of income on commodity values for any given technical environment. In each case the functions an invariable standard needed to perform were quite different. Ricardo, however, did not entirely sort out these differences in his own mind, first focusing on the problem of an intertemporal and interspatial standard, and then becoming increasingly aware of the problem that a changing income distribution created for an invariable standard. Thus it was arguably a changing and mixed, not always clearly distinguished set of concerns that Ricardo brought to his "Absolute Value and Exchangeable Value" papers when he attempted to account for the character of real and absolute value.

The first set of concerns was a familiar one to political economists, having been discussed authoritatively by Locke in his *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money* (1692). It made its initial appearance in Ricardo's writings in his contribution to the Bullion controversy of 1810 and was the subject of a brief exchange with John Broadly six years later. At issue was the Bank's over-issue and depreciation of currency not convertible into specie. In order to make his main arguments on the subject, Ricardo first paused to "shew what is the standard measure of value in this country, and of which, therefore, our paper currency ought to be the representative, because it can only be by a comparison to this standard that its regularity, or its depreciation, may be estimated" (*Works*, Vol. III, p. 65). On the one hand, he argued, there can be no "permanent measure of value" in a country with both gold and silver as circulating mediums, since the two metals constantly vary in value in relation to one another. On the other hand, "though the variations in the *value* of gold or silver may be considerable, on comparison of distant periods, yet for short spaces of time their value is tolerably fixed" (p. 65n). From this latter perspective, either gold or silver functioned adequately as a measure of value against which changes in paper currency's value could be determined through time. Thus there was, as he had maintained, a clear basis for arguing that the "depreciation in the actual value of bank-notes has been caused by the too abundant quantity which the Bank has sent into circulation," and that "[e]very increase in its quantity degrades it below the value of gold and silver bullion" (p. 78).

In the first edition of the *Principles*, where a theory of value was added to the distributional argument originally set forth in his 1815 essay on profits, Ricardo did initially recall his original understanding of the task of an invariable standard. Indeed he only departed from the traditional treatment of precious metals as the *de facto* invariable standard that he had adopted in *The High Price of Bullion* to emphasize that to be invariable in value a commodity such as gold or silver ought to require "at all times, and under all circumstances, precisely the same quantity of labour to obtain it" (*Works*, Vol. I, p. 27n). That is, a proper measure of value had to be invariable both intertemporally and interspatially. Thus his principal innovation regarding the nature of invariability concerned his view that this was specifically a matter of the measuring commodity's unchanging labor production requirements.

In the opening section of his chapter on value, Ricardo had begun by setting forth his own view of labor value by contrasting it with Smith's. The relative value of a commodity depended upon the relative quantity of labor needed for its production, not upon the greater or less compensation that is paid for that labor. From this it followed that:

It cannot then be correct, to say with Adam Smith, "that as labour may sometimes *purchase* a greater, and sometimes a smaller quantity of goods, it is their value which varies, not that of the labour which purchases them," and therefore, "that labour *alone never varying in its own value*, is alone the ultimate and real standard by which the value of all commodities can at all times and places be estimated and compared;" -- but it is correct to say, as Adam Smith had previously said, "that the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another"

(Pp. 16-17)

The "ultimate and real standard" of value, Ricardo went on, was a commodity with unchanging labor production requirements.

If any one commodity could be found, which now and at all times required precisely the same quantity of labour to produce it, that commodity would be of an unvarying value, and would be eminently useful as a standard by which the variations of other things might be measured.

(P. 17)

The difficulty was in finding a commodity which always required "precisely the same quantity of labour to produce it." This, however, did not strike Ricardo as being as important as having a correct understanding of what an invariable standard of value involved and this he unhesitatingly now believed was a matter of the standard having unchanging labor production requirements. Clearly here invariability, understood as having an "ultimate and real standard," was a matter of constancy of value through change in time and space.

Yet Ricardo was also aware from the first edition of the *Principles* that with differing proportions of fixed and circulating capital and differing durabilities of fixed capital, a change in wages caused relative commodity values to deviate from their relative labor requirements. As discussed above, he did not believe this to be a fundamental problem with his analysis, since were he to say that money was produced with unassisted labor, meaning unassisted by fixed capital, it was apparently the case that no commodities rose in value when wages increased. Any commodity that is produced with some fixed capital had to fall in value when compared to a standard produced with none at all. But in saying that "in this whole

argument I am supposing money to be of an invariable value; in other words, to be always the produce of the same quantity of unassisted labour" (p. 63), Ricardo had now added a further specification to his characterization of money as an invariable standard that was tied specifically to the income distribution problem. On the one hand, then, money was said to possess unchanging labor requirements in connection with its task of measuring change in commodity values across time and place. On the other hand, money was also produced with (an unchanging quantity of) unassisted labor in connection with its task of measuring change in commodity values in the presence of wage changes. This latter theme, moreover, was to become Ricardo's chief focus, as suggested by the conclusion to his value chapter meant to answer his critics: "commodities may be lowered in value in consequence of a real rise of wages, but they never can be raised from that cause" (p. 66).

This particular conclusion, however, did not stand for long. Torrens soon brought to Ricardo's attention the fact that commodities' circulating capitals could also be of unequal durability, where this was a matter of their unequal turnover times. Ricardo accordingly added a third source of variation in commodity values to his discussion of the topic in the second edition of the *Principles*, but left his claims about the implications of using an invariable standard produced with unassisted labor untouched. Malthus, in his *Principles of Political Economy* that came out after Ricardo's second edition, then drew attention to Torrens' case, and argued that in this instance

upon a rise in the price of labour and fall of profits, there will be a large class of commodities which will rise in price; and it cannot be correct to say, "that no commodities whatever are raised in exchangeable value merely because wages rise; they are only so raised when more labour is bestowed on their production, when wages fall, or when the medium in which they are estimated falls in value"

(*Works*, Vol. II, pp. 64-5).

The passage Malthus quoted had been Ricardo's second edition attempt to preserve his unassisted labor conception of an invariable standard (*Works*, Vol. I, p. 63). Now it was clear that his conclusions regarding commodity values and distribution required a new foundation and that he faced a more serious difficulty than he had previously believed. Ricardo granted as much in his "Notes on Malthus" commentary when he allowed that this converse case did indeed hold, saying that Malthus was "quite right" about these other possible effects of wage increases when circulating capital was of varying durabilities (p. 64).

Thus while in the first two editions of the *Principles* Ricardo had attempted initially to reason in terms of the intertemporal-interspatial dimension of the problem of finding an invariable standard of value, he became increasingly aware that there was an important obstacle to finding a standard of value associated with the effects of income distribution changes on commodity values in the presence of differing capital goods structures. In a simple world before capital accumulated

these problems obviously did not arise. Relatedly, if commodities' fixed and circulating capitals were proportional and their fixed and circulating capitals of equal durabilities, it would still be possible to use a commodity with an unvarying labor requirement to measure changes in relative commodity values, though wages and profits changed. But in a world in which commodities possessed different proportions and durabilities of fixed and circulating capitals, changes in profits and wages would cause the commodity chosen as a standard to vary in value though its labor requirements were unchanging. Here one encountered a given technical environment and assumed that the labor requirements for one's standard were constant through change of time and space, but still lacked a fully adequate standard for measuring relative commodity values.

Despite these developments, Ricardo had reason to be optimistic as he turned to the third edition of the *Principles*. Though the standard he had offered in the first two editions had failed, he had begun to acquire a better understanding of just how commodity values depended upon distribution. Admittedly he had yet to sort out just how commodity values varied as wages increased, but he could see that they deviated from their relative labour requirements in some systematic fashion. This indicated that the labor embodied in commodities was indeed a cause of their value --not their sole cause, but apparently their chief cause. Thus when he turned to the topic of an invariable standard in the third edition of the *Principles* it was mainly with the income distribution problem in mind, not the intertemporal-interspatial problem facing an invariable standard with which he had originally begun.

The third edition chapter on value is notable for its addition of an entirely new section, "On an invariable measure of value." Sraffa states that Ricardo "came close to identifying the problem of a measure of value with that of the law of value" (*Works*, Vol. I, p. xli). If, Ricardo believed that "to every theory of value there corresponds an appropriate 'invariable measure'" (p. xli, note 1), then indeed his embodied labor value analysis ultimately required that he close off this last issue. The third edition also registered a change in Ricardo's conception of his project. No longer did Ricardo think that it was possible to actually find some particular commodity that would function as a perfect measure of value. Rather his search for an invariable standard became an investigation into the theoretical requirements of there being an invariable standard in an embodied labor value analysis. In the first two editions of the *Principles* it had been allowed that the perfect measure of value was yet to be found. In the third edition Ricardo argued that no such commodity could in principle be found, since any candidate standard of value would always vary in relative value in some degree with changing wages.

Of such a measure it is impossible to be possessed, because there is no commodity which is not itself exposed to the same variation as the things, the value of which is to be ascertained; that is, there is none which is not subject to require more or less labour for its production. But if this cause of variation in the value of a medium could be removed -- if it were possible that in the production of our money for instance, the same quantity of labour should at all

times be required, still it would not be a perfect standard or invariable measure of value, because, as I have already endeavoured to explain, it would be subject to relative variations from a rise or fall of wages, on account of the different proportions of fixed capital which might be necessary to produce it, and to produce those other commodities whose alteration of value we wished to ascertain.

(Pp. 43-4)

Ricardo also extended the last point to differing degrees of durability in fixed and circulating capital as before. Note that at the outset of this passage Ricardo expresses skepticism about whether any commodity exists possessing constant labor requirements. Gold production, he goes on to say, is accompanied by technical improvements resulting in labor savings which tend to reduce its relative value over time. Thus in practical terms not even the intertemporal-interspatial invariable standard problem can be perfectly addressed. Yet this concession only seemed to further cement Ricardo's new approach to an invariable standard as theoretical rather than practical. And, it may also have strengthened his confidence in his labor value analysis, since the obvious, though not insignificant, difficulties involved in locating some commodity to act as a measure of value could now be ignored and attention shifted to the question of what a labor value analysis implied about such a standard. Indeed, since Ricardo had little doubt it made perfect sense to understand relative commodity values in terms of embodied labor, explaining the standard of value for that analysis surely was simply a matter of working out the needed conceptual solution.

That conceptual solution, however, did not emerge in Ricardo's mind as he worked to complete his changes for the third edition of the *Principles* and thus he settled for only giving a general characterization of the sort of solution he thought was necessary. He proceeded in two steps. First, allowing that gold would "never be a perfect measure of value for all things" (p. 45), he argued that gold could nonetheless be employed as a standard of value, because the income distribution problem had small effects on gold's relative value, and because we might assume that gold's labor production requirements tended to be relatively constant.

[B]ut I have already remarked, that the effect on the relative prices of things, from a variation in profits, is comparatively slight; that by far the most important effects are produced by the varying quantities of labor required for production; and therefore, if we suppose this important cause of variation removed from the production of gold, we shall probably possess as near an approximation to a standard measure of value as can be theoretically conceived.

(P. 45)

He was comfortable, that is, with the approximate expression of his theory of labor values in the practical world. But there was an additional, new rationale for regarding gold as a standard of value. Secondly, then,

May not gold be considered as a commodity produced with such proportions of the two kinds of capital as approach nearest to the average quantity employed in the production of most commodities? May not these proportions be so nearly equally distant from the two extremes, the one where little fixed capital is used, the other where little labour is employed, as to form a just mean between them?

(Pp. 46-7)

Thus he gave up the idea that gold was produced with unassisted labor to suggest that it was produced with proportions of fixed and circulating capital that reflected the average proportion of most commodities. Essentially, Ricardo took the "comparatively slight" effect of income distribution changes on relative commodity values and further reduced its significance by judging gold's capital structure as intermediate among commodities. The "comparatively slight" effect of income distribution changes on relative commodity values then might appear almost entirely negligible since the standard of value itself minimized this effect (cf. *Works*, Vol. VIII, p. 193; Ricardo to McCulloch, 13 June 1820). Accordingly, not having a full theoretical solution to the matter, Ricardo contented himself in the short run with controlling the importance of the problem in practical world. At the same time, he signaled how he would attempt to sort out the issue in more careful fashion, given the luxury of further reflection.

As we know, Ricardo's career in Parliament postponed any extended and concentrated investigation of the problem of fully explaining an invariable standard of value, so that he was only able to return to careful reflection on what remained to be done with the argument of the *Principles* after two years' delay. How, then, did the state of his understanding on the topic that he brought from the third edition of the *Principles* influence his approach in his "Absolute Value and Exchangeable Value" papers? Two questions deserve attention. First, Ricardo's decision to treat the problem of an invariable standard as a theoretical matter constrained him to regard the measure of value as a standard with certain properties. Specifically, the standard of value had to possess an intermediate type of capital structure to function as he supposed. But what was Ricardo to say if in fact gold or any other recognized standard of value lacked this structure? Second, Ricardo's commitment to the medium capital structure view arose out of his discovery of the income distribution change problem. But his original concern had been the intertemporal-interspatial problem. Thus an important issue was whether the different requirements these two problems imposed on explaining a standard of value would be clearly distinguished in Ricardo's subsequent investigation. Did Ricardo, then, make clear progress in distinguishing the two problems involved?

"Absolute Value and Exchangeable Value"

Sraffa was able to date the writing of the completed draft of this paper due to the fact that it was written on covers of letters addressed to Ricardo that included dated postmarks. Based on this, the full draft was written not earlier than the second week of August 1823, with insertions and changes being added not earlier than the last week of that month. Sraffa concludes that the incomplete version of the paper upon which Ricardo was working when he became ill must have been written between the last few days of August and the fifth of September, since it contains passages from letters to McCulloch (24 August), Malthus (25 August), and Ricardo's own letter to Malthus (31 August). Thus the papers (and the concurrent letters) were not only Ricardo's very last writings, but were also composed in a fairly brief period of time.

The First Draft

Ricardo begins by stating that the only requirements of a measure of value are that it should itself have value, and that value should be invariable, just as a foot or a yard as a measure of length has length and is regarded as an invariable length. On these grounds, Malthus's proposed measure, the pay of a day's labour, was not successful in that while the pay of labor has value, that value on his Malthus's own view was not invariable when the number of laborers itself fluctuated, such as when there was a large influx of laborers from other countries. Only, Ricardo comments, when all commodities were produced with labor alone and brought immediately to market would "Mr. Malthus's proposed measure ... be a perfect one, for however abundant or however scarce might be the number of hands yet the exchangeable value of a day's labour would be always precisely the same as the commodities that a day's labour could produce" (*Works*, Vol. IV, p. 364). Then, in fact, Malthus's measure would be the same as Ricardo's original measure in the first two editions of the *Principles*. But of course that commodities were produced under differing circumstances with different amounts and kinds of capital meant that "difficulty or facility of production is not absolutely the only cause of variation in value [sic] there is one other, the rise or fall of wages, which though comparatively of little effect and of rarer occurrence yet does affect the value of commodities and must not be omitted" (p. 368). Indeed, Ricardo goes on, only were "all commodities produced exactly under the same circumstances," should we then have "no difficulty in fixing on a measure of value" (p. 368).

Ricardo thus sees solving the income distribution problem as central to any explanation of the standard of value. He again allows that only imperfect measures of value are available and then states that his goal, one that he had from the outset, is to settle on a measure "which will give some idea whether when labour varies as compared with commodities it is the value of labour which has undergone a change or whether it is the commodity which rises or falls" (p. 372). His imperfect

standard, moreover, remains the one he selected to deal with the income distribution problem in the third edition of the *Principles*: "not a commodity produced by labour alone ... nor a commodity whose value consists of profits alone, but one which may fairly be considered as the medium between these two extremes, and as agreeing more nearly with the circumstances under which the greater number of commodities are produced than any other which can be proposed" (p. 372). Thus little is added at this point to the thinking in the third edition of the *Principles* and one has the impression that in this first draft of his paper Ricardo is reviewing the main points of his understanding of the matter as he had last left it.

The discussion continues with criticisms of Torrens, Mill, and McCulloch that draw upon this position. Ricardo sets forth a twelve point statement of his thinking that begins with the basic propositions of his labor value analysis, but then turns again to focus on the measure of value-measure of length analogy. The point he stresses is that there is an important difference between a measure of value and a measure of length.

If I have any doubt whether my foot measure is of the same length now that was of 20 years ago I have only to compare it with some standard afforded by nature, with a portion of the arc of the meridian -- or with the space thro which a pendulum swings in a given portion of time. But if I have similar doubts with respect to the uniformity of the value of my measure of value at two distant periods what are the means by which I should arrive at the same degree of certainty as in the case of the measure of length.

(P. 380)

The problem is that because the value of our standard of value does not remain constant through time and space, it fails to function as natural standards do. But this clearly is the intertemporal-interspatial problem confronting a standard of value rather than the income distribution problem. Addressing the income distribution problem involves explaining a standard of value for a given technical environment, not one that may change over "two distant periods." Consequently, Ricardo represents the income distribution problem--as he had seen it in the third edition of the *Principles*, and had just re-stated it vis-à-vis Malthus--as a problem of finding a natural standard of value through time and space when it was in fact not that problem at all.

The discussion that follows continues this emphasis on the intertemporal-interspatial problem, as Ricardo adds that there seems to exist in the eyes of some a candidate "standard in nature" for valuing commodities in the form of the unchanging "average strength of 1000 or 10,000 men," suggesting that commodities have "an absolute value directly in proportion to the quantity of labour bestowed upon them" (pp. 381, 382). But whereas the problem we encounter in searching for a natural standard is variation in our candidate measures through time and across space, the income distribution problem, which Ricardo now again reviews, precludes our saying, he asserts, that commodities exchange simply in proportion to

the labor bestowed upon them. But this does not follow. It is true that intertemporal-interspatial change is a barrier to there being a natural standard of value. Yet this is not a matter of whether commodities exchange in proportion of the labor bestowed upon them when wages rise. In effect, then, Ricardo had mistakenly concluded that since non-proportionality meant commodity values were not translatable into (natural) labor contents, a natural standard of value could not exist to measure commodity values across time and space.

The general upshot of this reasoning was that any standard we chose had to be an imperfect one. This conclusion was a fair one for the intertemporal-interspatial problem, but not obviously a correct one for the income distribution problem. Aware, then, that he possessed the elements of a solution to what was in fact the latter problem, but associating the incompleteness of his analysis with the imperfection of a standard for the former problem, Ricardo recommended we adopt the standard that appeared the best suited to the majority of those commodities whose values were to be measured. Summarizing his discussion, he states: "If we succeeded in our object we have shewn that one of these measures is best calculated to measure one class of objects and that another of them is more applicable to a different class" (p. 389). Yet since we can only have one measure of value, which cannot be ideal for all commodities, it follows that our choice is "governed only by expediency," and we must select the standard that works best for the "generality of commodities" (p. 389). This is the measure Ricardo offered at the outset of his discussion, the one that he selected in the third edition of the *Principles*, namely, that commodity produced in intermediate or average circumstances of production. It was a measure that addressed the income distribution problem, but not the intertemporal-interspatial problem.

To get a sense, then, of Ricardo's thinking as he moved to the second, unfinished draft of his paper, we ought to note an interesting set of insertions that he made at several points toward the end of his first draft. In the last, closing pages of the discussion Ricardo returns to criticism of the view developed by Torrens that "there is no measure of absolute value and all we can know any thing about is relative value" (p. 394). Here, and on three additional occasions in the remaining several pages of the paper, Ricardo added the word "absolute" to his text to change "value" to read "absolute value." The term occurs infrequently earlier in the paper (cf. pp. 373, 382), and is not inserted as a change to the earlier text. Interestingly, two loose pages follow the first draft, characterized by Sraffa as transitional or introductory to the second draft (p. 360), that give special emphasis to the idea of absolute value. Ricardo begins the first page with a statement that seems meant as stage-setting.

It is a great desideratum in Polit. Econ. to have a perfect measure of absolute value in order to be able to ascertain what relation commodities bear to each other at distant periods. Any thing having value is a good measure of the comparative value of all other commodities at the same time and place, but will be of no use in indicating the variations in their absolute value at distant times and in distant places.

(P. 396)

In both appearances of the expression "absolute value" in this passage the word "absolute" has been inserted after the initial text was written. However, in the second loose page, which appears to replace the first loose page and constitute an opening passage of the second draft, this statement is essentially repeated but with the expression "absolute value" already in the original text. Ricardo seems to have thought that the notion of absolute value deserved special emphasis were he to make clear his understanding of the problem of finding a measure of value. This is not to say that he had not employed the notion earlier. In fact he had used the term in the first edition of the *Principles* (*Works*, Vol. I, p. 21), indicated in correspondence his concern over selecting a "standard of absolute value" just after finishing the third edition of the *Principles* (*Works*, Vol. VIII, p. 344; Ricardo to McCulloch, 25 January 1821), and had most recently charged Malthus with only having a measure of exchangeable value, not one of absolute value (*Works*, Vol. IX, p. 299; Ricardo to Malthus, 28 May 1823). There does, nonetheless, seem to be a shift in strategy of presentation as Ricardo moves from his first draft to the second, where in contrast to the first we see the discussion begins explicitly with the distinction between absolute and exchangeable value. We thus turn to the second, unfinished draft.

The Unfinished Draft

Unlike the first draft which lacks section headings, the second draft begins with two: the opening paragraph of the draft is preceded by the heading "EXCHANGEABLE VALUE," while the second paragraph is preceded by the heading "ABSOLUTE VALUE." The former paragraph involves nothing new, and recalls Ricardo's treatment of the exchangeable value dating back to the first chapter of the first edition of the *Principles*. The second paragraph on absolute value, according to Sraffa, was to begin with the second of the two loose pages noted above (that replaces the first loose page). This second loose page begins with the statement that "although in the case just supposed we should know the relative value of these commodities we should have no means of knowing their absolute value" (*Works*, Vol. IV, p. 399). It concludes by saying that the "question is can we obtain ... a measure of absolute value and what are the criteria by which we are to satisfy ourselves that we have obtained [sic]," and that "it would be a great desideratum in political Ec. to have such a measure of absolute value" (p. 399).

Having provided this new introduction to his discussion, Ricardo then re-launches out upon his measure of length analogy, stating at the outset that "All measures of length are measures of absolute as well as relative length" (p. 399). What this means, he reviews, is that when we measure the length of things we always suppose an alteration in the length of the thing measured is due to that thing having changed length, rather than an alteration in our measure of length. Accordingly,

In the same manner if we had a perfect measure of value, itself being neither liable to increase or diminish in value, we should by its means be able to ascertain the real as well as the proportional variations in other things and should never refer the variation in the commodity measured to the commodity itself by which it was measured.

(Pp. 399-400)

These passages, and Ricardo's recourse to the terms "perfect" and "real" to add to the meaning of the term "absolute," are interesting in that they show Ricardo insisting on understanding the concept of any standard of measure in ideal terms. Whereas many of his predecessors and contemporaries in political economy had been comfortable with conventional standards of value, such as gold or silver, which were as a matter of fact used as standards of value, Ricardo clearly wants to emphasize that one cannot talk coherently about standards of measure without first having an explicitly rational conception of a standard. But given this, what precisely does a rational conception of a standard require?

In this regard, Ricardo's analogy between standards of length and a standard of value takes on important meaning in that standards of length are now described as having their basis in a system of nature apart from human affairs.

There can be no unerring measure either of length, of weight, of time or of value unless there be some object in nature to which the standard itself can be referred and by which we are enabled to ascertain whether it preserves its character of invariability.

(P. 401)

Nature, that is, displays a constancy in its essential relationships that guarantees many natural objects an unchanging character. In effect, since nature is governed by laws which are constant and unchanging, that is, natural laws, we may assume that "the arc of the meridian, or ... the vibrations of the Pendulum" may be counted on to provide the "uniformity of our measure of length, the foot" (p. 401). But note that there are other possible foundations for rational conceptions of a standard of value. In fact Ricardo's thinking about what a standard would need to accomplish to address the income distribution problem involved an attempt at rationally explaining the task a standard of value would need to fulfill and there was nothing in this conception that required reference to laws of nature. Ricardo, then, seems to have associated having a rational conception of standard of value exclusively with the idea of intertemporal-interspatial constancy afforded by laws of nature, but used this notion to characterize both of the tasks a standard of value was to fulfill.

To be sure, references to absolute and natural value had been present in Ricardo's thinking from early on and were thus not something new to his last paper. What especially distinguishes the second draft of his paper on this score from his previous discussions of an invariable standard, however, is the paper's logical

organization of the subject so as to establish one particular set of criteria to govern its investigation. To understand the leverage this strategy offered, it must be remembered that from the time of his selection of a standard of value produced in intermediate circumstances of production in the third edition of the *Principles*--the standard used for solving the income distribution problem--Ricardo had been aware that his standard was an imperfect one. Here, his conclusion from a comparison of standards of length and standards of value was that any standard of value would never provide the constancy that a natural standard of length provided. Thus if his readers were persuaded by this analogy to natural standards of length that a standard of value conceptually needed to be rooted in nature and agreed that it was never possible to actually find such a standard, then his incomplete and admittedly imperfect solution to the income distribution problem dating from the third edition might be evaluated on purely pragmatic grounds. That is, by arriving at agreement upon the logical requirements for having a standard of value, so that fairly obviously none of his rivals' candidate measures would work perfectly either, the only matter that remained was to say which imperfect measure worked the best. Ricardo's methodological strategy in his second draft, it thus seems, was to convince his readers that natural standards of measure were a necessary and yet also impossible model for standard of value. Apparently he had great confidence in the pragmatic value of his third edition standard.

Thus in the pages that follow Ricardo goes on to give a proof of sorts of the proposition that a perfect measure of value rooted in nature cannot be found. First he notes that the one "standard in nature" to measure value that had frequently been offered is "the labour of men," say, "the average strength of a thousand or of ten thousand men" (pp. 401-2). A natural standard of value would then be that commodity which always required the same quantity of labor. Second, he argues, in the way he had in his first draft, that the problems associated with using such a standard show that while this candidate "appears to be the best ... [it] is far from being a perfect one" (p. 402). From this he then concludes:

It must then be confessed that there is no such thing in nature as a perfect measure of value, and that all that is left to the Political Economist is to admit that the great cause of the variation of commodities is the greater or less quantity of labour that may be necessary to produce them, but that there is also another though much less powerful cause of their variation which arises from the different proportions in which finished commodities may be distributed between master and workman in consequence of either the amended or deteriorated condition of the labourer, or of the greater difficulty or facility of producing the necessaries essential to his subsistence.

(Pp. 404-5)

Note that what is now "left to the Political Economist ... to admit" goes beyond the argument Ricardo has just developed concerning the availability of a perfect

standard of value. Of course, he had made a more careful case on many previous occasions regarding the fundamental importance of the relative strength of variations in commodity values in terms "the greater or less quantity of labour that may be necessary to produce them," and did not need to reproduce that argument to make his point about the kind of standard we may seek. But that the follow-up claim regarding the principal source of variation in commodity values has the apparent plausibility it does, it seems fair to say, is due in good part to Ricardo having made a "standard in nature" the standard by which to evaluate measures of value. That is, since it is by standards in nature that we wish to measure value, commodities' labor requirements, or natural difficulty of production, even if imperfectly measured, presumably constitute the correct sort of basis for their evaluation.

In a shift in the level of his discussion, then, Ricardo's consideration of rival candidates proposed by others as standards of value now proceeds largely according to practical considerations. Having determined the conceptual framework in which he believed the question of a standard of value could be pragmatically investigated, he now felt comfortable in surveying the world seen from this particular perspective. Again the issue, as in the first draft of the paper, is whether the standard of value we select is produced under circumstances comparable to those of the majority of the commodities we wish to evaluate. Ricardo thus comments, "shall we select one which is produced by labour alone, or one produced by labour employed for a certain period, say a year?" (P. 405) What he means by the latter is a standard produced with both labor and capital, or more accurately a standard intermediate between the extreme cases of a commodity with "labour and advances for much more than a year" and a commodity with "labour employed for a day only without any advances" (p. 405). This, of course, is not very specific, but it did serve to demonstrate that Malthus's candidate was as an extreme sort of standard. Moreover, as a proposal it also had the advantage of indicating at least roughly how one might further investigate the properties of a standard of value in terms of the actual array of commodities to be evaluated.

Still left unaddressed in this unfinished draft, however, are the two questions raised above regarding the state of Ricardo's position at the end of the third edition of the *Principles*. As review of the two drafts of "Absolute Value and Exchangeable Value" demonstrates, all that has really changed in Ricardo's treatment of the matter is the character of his defense of the idea of an intermediate or medium standard. The introduction of the standard in the third edition was tied closely to the income distribution problem. In the two drafts, Ricardo adds a methodological justification of this standard. However, he does not seriously investigate whether existing standards of value, such as gold or silver, possess medium commodity properties. Also, he still does not distinguish the different sorts of requirements created for a standard of value by the two problems he had addressed in the *Principles*.

Interestingly, when Ricardo was engaged in writing the two drafts of his paper, McCulloch wrote to him saying that what has been treated as the

interspatial-intertemporal problem facing a standard of value, was insoluble in principle.

There is a radical and essential difference between the circumstances which determine the exchangeable value of commodities, and a measure of that value, which I am afraid is not always kept sufficiently in view. If you are to measure value, you must measure it by the agency of some one commodity or other possessed of value, and not as Mr Malthus proposes by referring to the agent employed to give value; and as the circumstances under which every commodity is produced must always be liable to vary none can be an invariable measure, though some are certainly much less variable than others and may, therefore, be used as approximations. It is evident I think that there neither is nor can be any real and invariable standard; and if so it must be very idle to seek for that which can never be found. The real inquiry is to ascertain what are the circumstances which determine the exchangeable value of commodities at any given period -- and these I think are all clearly reducible to one -- the comparative quantities of labour bestowed on their production

(*Works*, Vol. IX, p. 344; McCulloch to Ricardo,
11 August 1823).

Here McCulloch abandons the search for an intertemporally-interspatially invariable standard of value on the grounds that commodities are inevitably produced under changing circumstances through time. This leaves the problem of ascertaining the value of commodities "at any given period," which confines the task of finding an invariable standard to explaining why commodities with unchanging labor requirements change in value when wages and profits change. However, in his reply (p. 358), Ricardo disagrees, leading McCulloch to repeat his point and comment on Ricardo's objections to narrowing the search for an invariable standard:

If I were seeking a standard to measure values at distant periods [your objections] would apply and would be decisive; but this is no part of my object -- I am only endeavouring to ascertain the circumstances which determine the comparative values of the commodities in the same market.

(P. 369)

Then, referring to the dispute between Ricardo and Malthus as being one over "what are the circumstances necessary to give invariability of value to any commodity," McCulloch concludes, "This is a question which I believe is quite insoluble" (p. 369).

Had Ricardo followed McCulloch's lead in this regard, his strategy in his last papers might have been different. On the one hand, seeing change in commodity values in the presence of wage changes strictly in terms of the dependence of

relative values on distribution, he might have had more success in developing the idea of a standard produced with average circumstances of production. On the other hand, investing less significance in the idea that a standard of value had to operate through changes and time and space, as did measures of length, he might have been less inclined to say that absolute value was to be understood in natural terms. Thus in an attempt to see how Ricardo might have proceeded had he limited his investigation to the income distribution problem, the following section turns briefly to Sraffa's interpretation of Ricardo on the topic of an invariable standard of value.

Sraffa's Interpretation

The wider context of Sraffa's interpretation of Ricardo on an invariable standard of value is a dispute in the literature on Ricardo over whether Ricardo retreated from the labor theory of value across the successive editions of the *Principles* and in his final years. The view, originally associated with Hollander (1904) and Cannan (1929), was largely based on the changes in Ricardo's third edition of the *Principles*, where Sraffa allows that there were indeed "considerable alterations" in Ricardo's characterization of an invariable standard (*Works*, Vol. I, p. xl). In Sraffa's view, however, not only did Ricardo remain strongly attached to his labor value analysis in the third edition, but also in his subsequent correspondence and in the two drafts of the papers reviewed above--the latter materials that were unavailable to Hollander and Cannan. What clearly gave the appearance of doubt on Ricardo's part is his obvious struggle with the analysis of an invariable standard in the framework of his system. Facing significant problems in this endeavor, Ricardo's proposal in terms of an intermediate commodity may have seemed a half, hesitating step toward their solution.

It is interesting that Sraffa's own *Production of Commodities by Means of Commodities*, that appeared relatively soon after his edition of Ricardo's *Works and Correspondence*, advances the standard commodity as a measure of value that addresses the income distribution problem by using a development of Ricardo's intermediate commodity idea. The standard commodity, however, has no bearing on the intertemporal-interspatial problem Ricardo investigated, because Sraffa's system presupposes a given technological environment. Though we should not suppose that Sraffa's goal in his own book was simply to re-work Ricardo's project, certainly Sraffa was inspired by Ricardo's work and believed that Ricardo's prospects in working out an acceptable account of an invariable standard of value in his system were more promising had he restricted his attention clearly to the income distribution problem.

Henderson, who had conversations with Sraffa about Ricardo's labor value analysis, argues a related issue that bears on our understanding of Ricardo and

Sraffa's interpretation of Ricardo. For Henderson, a value theory had two different (though interrelated) purposes, one being to explain relative prices and exchangeable value, and another being to analyze production and distribution (Henderson n.d.). In the latter case, one wanted to be able to account for the real or absolute value of the social product, so as to be able to then account for income distribution in terms of shares of aggregate product. In Henderson's view, this was Ricardo's main interest. Similarly, Sraffa states that Ricardo was concerned with "the division of the national product between classes and in the course of that investigation he was troubled by the fact that the size of this product appears to change when the division changes" (*Works*, Vol. I, p. xlvi). These points suggest that whether one focuses on the first or the second task that a value theory may accomplish is likely to influence one's view of Ricardo's success and commitment to the labor value theory. On the Hollander-Cannan reading, Ricardo was primarily concerned to use his labor value theory to produce an analysis of relative prices or exchangeable values. Thus that he failed to make much sense of the first invariable standard problem (the changing labor requirements problem) and focused his late-life efforts on a different matter, the income distribution problem, may have seemed to indicate that a labor value analysis presented more difficulties--as a theory of exchangeable value--than Ricardo initially believed. However, were it the second task of a value theory that chiefly preoccupied Ricardo, then his final papers show him no less committed to sustaining that theory. The Hollander-Cannan view that Ricardo was in retreat from the labor theory, then, fails not so much for their lack of acquaintance with Ricardo's last writings as for their mis-conceiving Ricardo's primary goals in employing a labor value analysis.

On Sraffa's interpretation, Ricardo's basic thinking was established in his early, pre-value-theory treatment of income distribution in terms of a one commodity corn model of the economy. Corn, rather than labor, provided the natural basis upon which the total product and income shares were determined. In this instance, the income distribution problem could not arise since changes in wages and profits necessarily left the size of aggregate output unchanged. In the *Principles*, then, Ricardo introduced his labor value analysis, intending to make the same arguments he had previously made regarding accumulation and profits. Here, labor constituted the natural foundation for "real value" as he originally termed it (*Works*, Vol. I, p. 42), where this concerned a new means of establishing the definitive size of aggregate output. In applying his new value analysis to exchangeable values, however, Ricardo soon discovered that changes in income distribution could produce changes in exchangeable values that left commodity values no longer proportional to the labor bestowed on them. His reaction, he emphasized on a number of occasions, was that his original distributional conclusions still held if one abstracted from differences in capital proportions and durabilities. This seems clearly to imply that his overriding goal in his labor value analysis was the second one delineated above, not the first, which emerged as an attendant project with the attention to individual commodity values in the

Principles. On Sraffa's interpretation, then, Ricardo's confidence in the labor value theory would only have been shaken had the adoption of this theory contradicted his original view of distribution. But as the third edition and the two drafts of his last paper indicate, Ricardo always felt he had the essentials of an explanation of an invariable standard that would sustain his distributional analysis and also justify maintaining the labor value theory.

Returning to the issue of an invariable standard, Sraffa's view, in both his interpretation of Ricardo and in his own elaboration of the related standard commodity measure, is that not only was the first changing labor requirements problem insoluble, but that solving the income distribution problem was important to Ricardo's main project of explaining income distribution. It may be that Ricardo was distracted from this latter focus by his continual debates with Malthus, who was rather interested in finding an invariable standard of value to explain the exchangeable values of commodities. Indeed, that Ricardo did not succeed in clearly distinguishing two tasks an invariable standard of value might fulfill in his last paper led him to continually cast his proposal for an intermediate type standard in terms of absolute value.

What Ricardo had concluded specifically about the income distribution problem in the drafts of his final paper is that when we set rent aside, such that "the value of all commodities resolves itself into wages and profits" (*Works*, Vol. IV, p. 392), a commodity is invariable in value if, as wages rise and profits correspondingly fall, the fall in its profit component is equal to the rise in its wage component. An invariable standard of value, then, was that commodity which possessed just that sort of capital structure which permitted these balancing movements. However, as Sraffa subsequently demonstrated, Ricardo failed to appreciate that those commodities that entered into the production of an invariable standard themselves possessed capital structures whose components would vary as income distribution changed. That is, he did not appreciate, as the title to Sraffa's own book has it, that commodities are produced by means of commodities, and thus that finding an invariable standard required that he extend his reasoning regarding balancing movements in wage and profit components back through previous layers, as it were, of a commodity's capital structure. Sraffa thus argued:

the relative price-movements of two products come to depend, not only on the 'proportions' of labour to means of production by which they are respectively produced, but also on the 'proportions' by which those means have themselves been produced, and also on the 'proportions' by which the means of production of those means of production have been produced, and so on

(1960, p. 15).

From this he concluded that, contrary to Ricardo's supposition, the relative price movements of commodities might well not move as their immediate proportions of labor and means of production suggested they would move when previous layers of production exhibited significantly different capital structures.

This interdependence of the production process also meant that one single commodity was unlikely to function as a standard of value. Sraffa's own composite commodity analysis of the standard commodity builds on this result.

Sraffa's interpretation of Ricardo on the subject of an invariable standard has not gone unchallenged. Peach (1993, pp. 222-3) argues that Sraffa took Ricardo's medium standard idea beyond what Ricardo had intended in his thinking on the matter, and there is no reason to think that Ricardo was concerned with constancy of aggregate output to explain income distribution changes. No doubt Peach is correct in emphasizing, as he does, the impact of Malthus on Ricardo's late-life thinking about an invariable standard. He is also correct in saying that Ricardo did not actually work out, as Sraffa would agree, the balancing analysis set forth above. His principal concern, it seems, is that Ricardo lacked an identifiable intention to produce something more than an imperfect standard, which Sraffa's extrapolation of his thinking would involve, and that Ricardo was accordingly satisfied with a standard that appeared practically robust, especially in comparison to that offered by Malthus. Yet though it is true that Ricardo never hesitated to say after the third edition of the *Principles* that his was an imperfect standard, he also, as the discussion above of his drafts of "Absolute Value and Exchangeable Value" indicates, sought a rational, logical approach to the matter. That he had not found a perfect measure of value in his framework does not imply that he would not have employed one had he been successful in his investigation. Indeed, it was always Ricardo's preference to approach his subject matter systematically. Thus, while he clearly did not carry his thinking forward to an analysis of interdependent production, were he to have restricted his attention to the income distribution problem, Sraffa's interpretation is consistent with an extension of Ricardo's own intermediate standard approach.

Sraffa's interpretation of Ricardo has the merit of isolating Ricardo's concern to explain the laws which regulate distribution, "the principal problem in Political Economy" (*Works*, Vol. I, p. 5). Though the first of the two problems Ricardo encountered in attempting to explain an invariable standard of value, the changing labor requirements problem, was less immediate to this concern than the second, income distribution problem, Ricardo mixed the two problems together in his final approach to the topic in his last paper. He did, however, make the latter problem a chief preoccupation of his later thinking, and this focus demonstrates his continuing commitment to his original goal. It is idle, of course, to speculate upon whether Ricardo would have been more successful in thinking about an invariable standard had he lived longer.

Chapter XIII

A CRITIQUE OF THE TWENTIETH-CENTURY PERSPECTIVE

Recalling his student days at the London School of Economics, Lord Robbins has described the essence of a conversation he once had with his mentor, Edwin Cannan. Robbins had offered the proposition that the test of whether one grasped the significance of economics, "whether an economist had the root of the matter in him," was the degree to which he understood Ricardo's theoretical formulations. Cannan, the famous editor of the definitive edition of the *Wealth of Nations*, reflected for a few moments and then replied: "Hum! You do get a sort of affection for him in spite of all his muddles" (Robbins 1935, p. 396).

The Robbins proposition, and Cannan's reply to it, are highly suggestive of the way in which David Ricardo always has been interpreted. On the one hand, from the day he published his first tract on monetary theory up to the present time, Ricardo has always been recognized as an "economist's economist." But at the same time even his contemporaries could not always follow his reasoning, though they usually enthusiastically supported and agreed with his conclusions. Ricardo's great analytical insight and his ability to conceptualize the theoretical implications of the economic problems England faced in his day, set him apart from his contemporaries. He became the "spirit" of political economy in the 1820s, though not the political leader of the economists.

Editors' note: This chapter as constituted here was prepared by Henderson for a meeting, apparently in Texas, the identity of which he could not recall. It seems appropriate that it serve as the concluding chapter of this volume.

Unlike many of his colleagues, perhaps best represented by his friend Malthus, Ricardo never allowed particular exceptions to interfere with his analysis of the theoretical issues. When Malthus suggested that their differences could be resolved by asking businessmen to explain the behavior of prices and market forces, Ricardo retorted that businessmen knew as little about the analysis of markets as any other uninformed group. They could tell you what price a particular good might bring on a particular day, but not why that price prevailed. Many years later, when he sat on the Agricultural Committee in the House of Commons, Ricardo observed that the farmers who came forward to testify merely exposed "their ignorance of the first principles which should guide our judgements" (*Works*, Vol. VIII, p. 370; Ricardo to Trower, 21 April 1821).

For Ricardo, analysis was the key to the great issues of economic policy, and this dedication to abstraction from the particular events of the times made him the first great economic theorist. Marx's accolade, that Ricardo was "the economist *par excellence* of production" (quoted in Dobb 1973, pp. 28-29, n*), was not based on agreement with particular formulations or policy conclusions, but on Marx's recognition of the great clarity of Ricardo's analytical reasoning.

The "muddles" Cannan referred to arose in part because Ricardo was a *political* economist and his primary objective was always the formulation of a correct *policy*. Though he enjoyed a theoretical argument, whether in print or conversation, policy always flowed from his analysis; he did not theorize for theory's sake. He entered Parliament in order to guide policy, not for prestige or because he could afford to purchase a rotten borough. This emphasis upon policy was one of his great strengths, but it was also a source of some of his theoretical difficulties. His insight into particular problems typically led him to policy conclusions as to resolution of the situation. But the step by step reasoning required to move from point A to point G sometimes was tortuous and not everyone was able to follow his abstract path, either in his day or later. Moreover, when new theoretical obstacles arose from events in the real world, Ricardo freely added subscripts and detours to the original line of reasoning. These intricacies of analytical abstraction were the "muddles" which confused his readers.

To illustrate, Ricardo wrote *An Essay on Profits* (1815) in order to demonstrate that continued protection to agriculture was detrimental to profits and to further capital formation. But the *Essay* ignored the relative price effect upon nonagricultural goods that would result from an increasing difficulty in agricultural production. If the use of inferior land resources had limited repercussions beyond the agricultural sector, then it would be difficult to argue that protection for this sector, as a category of national income, had implications for gross profits. But if, as Ricardo perceived, the effects of increasing difficulty of production in agriculture generated a rippling effect upon the production costs of all goods, causing oscillations throughout the system, then the general level of all profits would be affected.

To resolve the question of the effect of agricultural production upon the division between profits and wages in other sectors, Ricardo rewrote the *Essay on Profits*, incorporating a model for explaining the primary and secondary movements

of exchange values. The revision of the *Essay* resulted in a new volume, *The Principles of Political Economy and Taxation* (1817). This second work was intended to leave intact Ricardo's initial formulation of the problem of agricultural protection. The new work, of course, contained the famous opening chapter "On Value," formulated to explain the principle that relative prices did not change in a direction which would allow profits to rise when the conditions of agricultural production moved in the direction of utilizing inferior resources. The theory of value thus formulated assigned no role to demand in the determination of the exchange ratios between commodities, since such ratios were alone a function of the material conditions of production. Said ratios were influenced by two factors only, the quantity of labor time necessary for the production of each commodity (the primary cause), and the quantity of fixed capital employed in the production of each commodity (the secondary cause).

As to the primary cause, when wages rose because of the increase in the cost of wage goods, there would be no effect upon exchange ratios since the amount of labor time required to produce them would remain the same. This proposition was not proposed as an afterthought, but represented Ricardo's major disagreement with Smith's analysis of value. Smith's failure, claimed Ricardo, was his inability to recognize that while the amount of labor time necessary for production determined the size of the pie, it did not fix the size of the respective slices assigned to wages, profits and rents. Nor did the size of the respective slices have any influence upon the primary determinant of its size (*Works*, Vol. I, pp. 13-20).¹ Food being the most essential wage good, an increase in the difficulty of agricultural production would cause aggregate wages to rise and aggregate profits to fall, but there would be no changes in the numerous exchange ratios between goods in the system. Since candles were also a wage good, presumably an increase in the difficulties associated with their production would also cause aggregate profits to fall, but the policy issue was agricultural production and not candle production.

Apparently no one, including Malthus, disputed Ricardo's assertion as to the primary cause of exchange ratios, nor his conclusion that the quantity of labor time necessary for the production of commodities was unaffected by a rise in the cost of wage goods. But between the time of the publication of the *Essay on Profits* and the first edition of his *Principles*, Ricardo's continuing controversy with Malthus centered on the singleness of the effect upon relative prices of an increase in the difficulty of agricultural production (*Works*, Vol. VII).² As to prices, Malthus argued for a role being assigned to demand as well as supply and for some consideration for the influence of relative amounts of fixed capital. So far as demand was concerned, Ricardo never assigned it a role. He claimed production

¹ The contrast between Ricardo's own formulation and Smith's is found only in the Third Edition of the *Principles*, but from his correspondence while he was writing the First Edition, it is clear that Ricardo was responding to Smith, as well as to Malthus.

² The significant exchanges between Malthus and Ricardo commenced in August 1816.

conditions accounted for relative exchange ratios, and not the demand in particular markets at a particular time (*Works*, Vol. I, Chapter XXX, pp. 382-385).³

All I mean to contend for is that profits depend on wages, wages, under common circumstances, on the price of food, and necessaries, and the price of food and necessaries on the fertility of the last cultivated land.

(*Works*, Vol. VII, p. 78; Ricardo to Malthus,
11 October 1816)

As to the influence of fixed capital, Ricardo agreed that there was a second cause for the various exchange ratios between commodities, since a rise in wages would not affect those particular commodities produced with larger portions of fixed capital as much as it would those produced with small quantities of fixed capital. But here was the great *coup de maitre* in his argument with Malthus. If wages rose, the prices of goods produced with fixed capital would *fall* in price and not rise. Ricardo now had two strings in his bow; the first being that a rise in wages would not "produce any alteration in the relative value of these commodities" produced through labor intensive methods, while prices would *fall* for those produced with capital intensive methods. In no instance would prices rise when wages rose, for this would nullify the consequence of the rising wages. In the first edition of the *Principles*, Ricardo wrote,

It appears too that no commodities whatever are raised in absolute price, merely because wages rise; that they never rise unless additional labour be bestowed upon them; but that all commodities in the production of which fixed capital enters, not only do not rise with a rise of wages, but absolutely fall: . . .

(*Works*, Vol. I, p. 63)

In commenting on this "peculiar" result, Dobb has suggested,

Not only did a rise of wages *fail* to raise the prices of commodities, but it actually caused the prices of some commodities to *fall*. Thus the secondary effect of unequal proportions of capital, far from qualifying and weakening the anti-Smith corollary of his primary value principle, served to reinforce it with something of the effect of paradox. It was hardly surprising in the circumstances that he [Ricardo] should have treated his primary cause (quantity of labour) as being "never superseded" by the 'second cause' (variation in capital proportions and durability) "but only modified by it."

(Dobb 1973, p. 81; italics in original)

³ On 16 October 1816, Ricardo wrote to Malthus, "I do not quite understand the expression that profits depend on the demand compared with the supply of capital." (*Works*, Vol. VII, p. 78)

Schumpeter has claimed that Ricardo's discussion of the influence of fixed capital, his sections 4 and 5 of the first chapter, are as difficult to absorb as is anything the reader may run up against in economic literature" (Schumpeter 1954, p. 475). It is not surprising, in view of Schumpeter's remarks, that not only Ricardo's contemporaries had difficulty understanding his line of reasoning, but that subsequent generations of economists have become lost in the subscripts and "qualifications" to the primary cause of the exchange value of commodities. What is necessary to recognize, therefore, is that Ricardo added his analysis of value theory to strengthen his major premise that "as wages rise, profits fall." When wages rise for commodities produced under labor intensive conditions, the results are obvious, *ceteris paribus*. But, suggested Malthus, what of those commodities produced under conditions where capital was intensive? For an answer, Ricardo reached his "triumphant conclusion," namely that the prices of commodities produced under capital intensive methods actually fell. Since he had started out to show the adverse effects upon aggregate profits when cultivation of agriculture at the margin required the use of inferior land resources, his system with a theory of value was actually strengthened, as against the initial formulation in the *Essay*. The policy conclusion remained intact, for the protection of English agriculture from the lower cost grains of Europe was detrimental to British profits and the progressive benefits of further capital accumulation. All else was "sound and cymbal."

The key to understanding Ricardo, as with any theorist, is the recognition that he was concerned with the first principles of the matters addressed and not with the exceptions that might be found along the way. The exception to the primary cause of the relative exchange value of commodities did not alter his major conclusion, nor were the cases of "some rare statues and pictures" (*Works*, Vol. I, p. 12) of significance, since such exceptions did not constitute the common circumstances of production. Moreover,

. . . in this whole argument I am supposing money to be of an invariable value; in other words, to be always the produce of the same quantity of unassisted labour. Money, however, is a variable commodity; and the rise of wages as well as of commodities, is frequently occasioned by a fall in the value of money. A rise of wages from this cause will indeed be invariably accompanied by a rise in the price of commodities: but in such cases, it will be found that labour and all commodities have not varied in regard to each other, and that the variation has been confined to money.

(Works, Vol. I, p. 63)

In this statement of the hypothesis that money is a veil, whose circulation, whether oscillating or not, has no affect upon the real exchange relations between commodities in the system, Ricardo was once again drawing attention to the limited character of his economic system. But by drawing attention to the limited character of Ricardo's system of analysis, one should be quick to recognize that this

does not reduce its significance to the development of economic theory or to the important issues of his day. The vast number of analytical concepts to be found in an economist's tool box are limited by the constraints of the assumptions surrounding their formulation. At one point in her illustrious career, Joan Robinson wrote,

The main theme of this book is the analysis of value. It is not easy to explain what the analysis of value is, without making it appear extremely mysterious and extremely foolish. The point may be put like this: You see two men, one of whom is giving a banana to the other, and is taking a penny from him. You ask, How is it that a banana costs a penny rather than any other sum? The most obvious line of attack on this question is to break it up into two fresh questions: How does it happen that the one man will take a penny for a banana? and: How does it happen that the other man will give a penny for a banana? In short, the natural thing is to divide up the problem under two heads: Supply and Demand.

(Robinson 1933, pp. 6-7)

Mrs. Robinson approached the given problem with Marshall's scissors in hand, while the proposals of a Ricardo or a Jevons would be each quite distinct, reflecting in each instance different analytical frameworks. Each approach would be formulated for a specific purpose and the singleness of purpose of a theorist should not reduce the significance and importance of his system of analysis. Not all the tools in a carpenter's kit are used at the same time, nor is there any equality in the frequency of use. If one desires to study the economics of an auction conducted in order to sell a rare painting, then certainly Jevons's theory of value is more useful than Ricardo's, as the latter would be the first to admit. What Cannan perceived to be Ricardian "muddles" had by Schumpeter's time become a "vice"--a "Ricardian vice." That is,

. . . the habit of establishing simple relations between aggregates that then acquire a spurious halo of causal importance, whereas all the really important (and, unfortunately, complicated) things are being bundled away in or behind these aggregates.

(Schumpeter 1954, p. 668; see also 473 and 1171)

According to Schumpeter, there were two economists who were most addicted to this depravity, Ricardo and Keynes. Both bundled away the important issues behind their aggregates, in Schumpeter's view. But also in each instance there was an overriding concern with policy and a need to develop a theoretical framework which would isolate and emphasize the importance of certain key variables in the system of analysis. If this be a vice, then it is a habit of behavior to which many theorists fall victim. Ricardo was just one of the first.

The Partial Eclipse of Ricardian Theory

The long controversy between Malthus and Ricardo can be separated into three distinct phases. But as their argument over value theory moved forward, the number of their contemporaries who really understood what the differences were between them grew smaller, as did their interest in the theoretical issues involved.

The first phase of the controversy was marked by the publication of Malthus's *Grounds of an Opinion on the Policy of Restricting the Importation of Foreign Corn* and Ricardo's *Essay on Profits*. Malthus's *Grounds* appeared in print on 10 February 1815 and fourteen days later Ricardo had his *Essay on Profits* in the shops of the London booksellers. Both pamphlets were political tracts, each presented in the expectation of influencing the coming vote in Parliament. Ricardo's pamphlet was much more theoretical than Malthus's *Grounds*, containing his derivation of Malthus's rent theory, presented in order to show the effect upon profits of an increasing need for cultivation of inferior land.

Malthus won the first round--in one sense because Parliament continued to protect British agriculture, and in another sense because not many readers of Ricardo's *Essay* could understand what it was he was trying to say. There were many knowledgeable people who agreed with Ricardo, of course, but it was not because of the convincing force of his argument presented in the *Essay*. The latter was tightly reasoned, much more so than Malthus's *Grounds*, even though both were familiar with the rhetoric of political debate.

The second phase of the Malthus-Ricardo controversy covered the period of the publication of their respective *Principles of Political Economy*. In this instance Ricardo published first, with his first edition of the *Principles* appearing in 1817, and a second in 1819. Malthus, in the meantime, had been at work on his own *Principles* and in 1820 he published his first edition. The points on which they agreed did not amount to a baker's dozen, while their differences were myriad. Ricardo had two alternatives in dealing with Malthus's *Principles*, the first being to revise his own *Principles* in such a way as to counter each of the points on which he disagreed with his friend Malthus. But this procedure would have emasculated his own theory as formulated in his *Principles*. He rejected this first alternative, and accordingly brought out the third edition of his *Principles* in 1821. While there were numerous references to Malthus's *Principles* in Ricardo's third edition, particularly in the first chapter, it was not intended as a fully developed counter argument. On the other hand, Malthus's *Principles* was published as an answer to Ricardo and therefore the latter could not ignore it, so he devised a second alternative method for presenting an answer.

Ricardo's scheme for answering Malthus, as already seen, was to publish his own edition of the Professor's work, together with a page by page commentary on its contents. The volume, as envisioned, would contain on each page the written text as presented by Malthus, as well as Ricardo's counter argument. It would be a highly controversial publication. After he had prepared his "Notes on Malthus," he gave them to his old friend Hutches Trower to read, to his new friend James

McCulloch, and to his editor, James Mill. All advised against publication, with the advice from Trower being particularly pertinent.

It would be a great pity, that your criticism on Malthus should not meet the public eye. But I confess I do not think, that in their present shape they would answer the purpose. Very few persons are sufficiently interested in the Science of Political Economy, especially in the controversies respecting to its abstruser points, to go through the labor of continually turning from the text to the comment, and examining the reasoning by which the opposite opinions are supported:--If Malthus is to be answered *effectually*, it must be by mixing up with the comments such an abstract of his work as shall put the reader into possession of the arguments, which are combatted, so as to enable him to follow out the reasoning without the labor of constant reference to the original works.

(*Works*, Vol. VIII, p. 395; Trower to Ricardo,
24 June 1821; italics in original)

So far as McCulloch was concerned, Ricardo's "Notes" were "far too controversial." Moreover, Ricardo was told he had not been "either so perspicuous or so successful in what you have said about value" (*Works*, Vol. VIII, pp. 340, 339; McCulloch to Ricardo, 22 January 1821). What Ricardo should do, according to the advice from McCulloch, was to publish something to show that Malthus was in error on the issue of limits to capital accumulation (but that was before McCulloch had seen Ricardo's third edition of the *Principles*). In his third edition, Ricardo of course had added a chapter "On Machinery" and in McCulloch's view this new chapter meant that he had shaken hands with Malthus "to give it all up." McCulloch was bitter.

The fundamental differences that formerly existed (for I am sorry to think they have now nearly disappeared) between you and Messrs. Malthus and Sismondi induced many to believe that Political Economy was a thing of fudge, a fabric without a foundation--And I certainly think that those who were formerly of that opinion have a good deal better ground for entertaining it now--

(*Works*, Vol. VIII, p. 382; McCulloch to Ricardo,
5 June 1821)⁴

On the advice of McCulloch, Mill and Trower, Ricardo put aside his "Notes on Malthus." While the notes were sometimes mentioned in correspondence during his last two years, Ricardo mostly let them be forgotten. The fact that Ricardo's "Notes on Malthus" were not published is as significant as if they had appeared. This

⁴ See the letter from Malthus to Sismondi, in which he informs him that Ricardo had gone "a little farther than I should go" on the subject of the effect of machinery on the laboring classes of society. (*Works*, Vol. VIII, p. 377; Malthus to Sismondi, 12 March 1821)

failure to gain support from his allies was an indication of the gap that was developing between his own views and those who supposedly agreed with him.

By 1821, Ricardo's major supporters among the political economists were confined to Mill and McCulloch, even though there were those like Trower who also stood with him, but these people were not considered very important in influential circles. Moreover, by this time, Mill was no longer active as an economist and he did not even read Ricardo's "Notes on Malthus." His advice to Ricardo on the issue of his differences with Malthus was that of a champion, namely, "not to notice any of the attacks which have been made" (*Works*, Vol. VIII, p. 333; Ricardo to Trower, 14 January 1821), since that would merely acknowledge that there was controversy among political economists. In Mill's view, political economists would present a united front to the public, the Reverend Malthus aside. McCulloch, therefore, was the only economist who actually stood with Ricardo, and as Malthus wrote to Sismondi,

The *Edinburgh Review* has so entirely adopted Mr. Ricardo's system of Political Economy that it is probable neither you nor I shall be mentioned in it. I know indeed that a review of your work was written and sent, but it appears to have been rejected through the influence of the gentleman [McCulloch] who is the principal writer in the department of Political Economy, and who is known to have adopted fully and entirely all Mr. Ricardo's views. The article however which you have so ably controverted in the sheet you were so good as to send me was written by another convert of the name of Torrens. *In general however I would say that though Mr. Ricardo's doctrines have certainly captivated some very able men, they are not spread very much among the great body of political Economists and I am inclined to think that many of them will not stand the tests of examination and experience.*

(*Works*, Vol. VIII, pp. 376-377; Malthus to Sismondi,
12 March 1821; italics added.)

By the end of the second phase of the Malthus-Ricardo controversy, the one centering upon their respective *Principles*, McCulloch had come to believe that Ricardo was wrong and unconvincing on the issue of value and that Malthus and Ricardo really no longer had any basic disagreement over the effects of machinery. In other words, McCulloch to a major degree was beginning to question Ricardo's theoretical framework, even though they were partners when it came to policy matters. But it is important, in this respect, to remember that McCulloch became the self-appointed *residuary legatee* of the Ricardian tradition and if he had not assumed the role there would have been no one to pick up the pieces. On the issues of value theory and the effects of machinery upon the laboring classes, Ricardo had lost his only convert by the end of phase two of the Malthus-Ricardo controversy.

Phase three of the Malthus-Ricardo controversy was concerned with whether there was such a concept as an invariable measure of value, for by this time Ricardo recognized that the size of the pie changes when there is an alteration in the division of the national product between classes. He had been discussing the problem with Malthus for several years and when the latter published his *Measure of Value* (1823) Ricardo set to work on his last manuscript, "Absolute Value and Exchangeable Value."

So far as the absolute value of commodities was concerned, only a change in the amount of labor time necessary to the production of said commodities could affect their relation, but the exchangeable value of commodities could be affected by a change in the distribution between wages and profits, the same problem with which Ricardo had been struggling with Malthus since 1815. The discussion had now reached the point where only Malthus and Ricardo themselves actually were aware of the theoretical issues involved in their dispute. James Mill had long since dropped out of any serious discussion and while McCulloch was cognizant of Ricardo's views, he showed little interest in the theoretical issues. On 3 February 1823, the topic "What are the circumstances which determine the exchangeable value of commodities" was put before the Political Economy Club for discussion, but whether Ricardo was in attendance, or which member initiated the question, it is not known (Political Economy Club 1921, p. 18). Nor is there any suggestion of a discussion of absolute value, a concept limited in use to David Ricardo.

By the third phase of their controversy, Ricardo and Malthus were involved in such an abstract topic that when Ricardo died his manuscripts on the subject were put aside and ignored. Malthus's *Measure of Value* rarely makes it even into the most encyclopedic of the histories of economic thought. Schumpeter, for example, does not even give it a citation in his *History*, a fact of no mean significance.

The story of the decline in influence of Ricardo's theory of value has been told on numerous occasions, by Meek (1967, pp. 51-74), Schumpeter (1954, pp. 469-480 and *passim*), Roll (1971, pp. 318-342) and most recently by Dobb (1973, pp. 96-110). In each instance the story is essentially the same, with some modification for emphasis.

In terms of individuals, much of the failure of Ricardian theory to survive is blamed upon McCulloch, the only real disciple who stood by to the last. But as Malthus pointed out to Sismondi, McCulloch was in charge of political economy for the *Edinburgh Review*, and it always helps to have a journal editor in one's camp. However, in the circles of the Political Economy Club, McCulloch was not able to garner the support which Ricardo had enjoyed, nor was he equal to the theoretical task that was required to maintain the supremacy of Ricardo's views. As the earlier discussion has revealed, there were developing rifts between Ricardo and McCulloch even as early as 1821, and while McCulloch continued to champion Ricardian principles, he was no match for the likes of Torrens and Malthus.

The arena where Ricardian principles were debated most vigorously was the Political Economy Club and not the pages of the *Edinburgh Review*. In the Club which he had started, Ricardo had few supporters among those who counted. Malthus, of course, was the Professor in residence, and while he claimed to

Sismondi that Torrens was a Ricardo convert, that actually was not the case. Again, a distinction must be drawn between the agreement on policy conclusions, and agreement on first principles of theory. Naturally Torrens was a great advocate of free trade, and also a strong supporter of the rent theory of the free traders, since he himself had been one of the first to publish on the subject. But Torrens never supported either Ricardo's value theory or the derivation of his theory of profits and wages. It is not surprising, therefore, that by 1831 Torrens was summarized by Mallet as claiming "that all the great principles of Ricardo's work had been successively abandoned" (Political Economy Club 1921, p. 223; Diary entry for 13 January 1831). In 1828, Torrens had proposed that the Club accept a set of definitions in order to have a common nomenclature. His definition for value was: "the general power of purchasing" (Political Economy Club 1921, p. 30). Whether Torrens's definition of value was accepted or not, it is not known, but it is suggestive of the swing to a demand dominated theory, rather than one grounded in production as Ricardo would have insisted.

Besides McCulloch, Malthus and Torrens, Nassau Senior became a member of the Political Economy Club in 1823 and he could hardly be expected to be a Ricardian. In 1836, John Stuart Mill became a member and he kept the name of Ricardo alive, primarily because of the personal relationship he had with him in his youth. His father had not been to a Political Economy Club meeting since 1822, so that the Millian influence was absent during the time that Torrens and Malthus were reshaping the orientation of the Club by whittling away at the Ricardian doctrines.

While he was still alive, Ricardo's views were not limited to the printed page. The man himself was present and he was a great persuader and expositor, not only in a small group but also in the House of Commons, where he was given great respect. He stood head and shoulders above all of his contemporaries who were political economists, save perhaps Malthus, who was his only peer. The power of Ricardo's personality, his great warmth, and above all the razor sharpness of his mind provided a formidable fortress from which he could deal with his detractors. His ability to argue successfully and to drive home his conclusions each contributed to his prestige and reputation. When the personal presence was no longer there, Ricardian doctrine lost much of its power and character. Mallet remarked in 1831, for example,

. . . it is a great drawback on Ricardo's work that it is almost a sealed Book to all but men capable of pursuing abstract reasoning by a strict and mathematical analysis; and this, after all, with anything but certainty of arriving at the truth.

(Mallet 1921, p. 224; Diary entry for 13 January 1831)

But it would be in error to attribute the eclipse of Ricardian economics to the success or failure of particular individuals. That Malthus, Torrens and McCulloch each had a role in the process there can be no denial, just as Ricardo's premature death was of great significance. But even if he had lived Ricardo would not have

been able to carry the day with his fellow Political Economy Club members, for ideologically he was moving in one direction, the majority in another. Besides his views on value theory and the derivation of his theory of profits, his thoughts on machinery, religion and universal suffrage were at odds with his contemporaries. Had he lived, Ricardo would undoubtedly have become an early Chartist.

The list of topics discussed by the Political Economy Club in the late 1820s and 1830s is heavily salted with two recurring subjects:

1. Are there any circumstances in which Machinery, in competition with Manual Labour, can be injurious to the Labouring class?
2. What have been the effects of the Factory Regulation Act; and should any, and what, alterations be made in it?

The answers to these questions by the majority of Club members would be as easy to predict as a vote of economists in 1977⁵ on the issue of a minimum wage. But what is more significant is the fact that by the late 1820s the land question had dropped out of the discussion and the arguments had begun to shift to the significance of wages in particular industries, such as mining and manufactures. The shift was to the consideration of individual sectors and away from Ricardo's emphasis upon aggregate wages and aggregate profits.

The architects of a new theory of value and profits were numerous, with Bailey, Senior, and Longfield following the early groundwork of Say, Malthus and Torrens. Dobb has fit all of these pieces together, and the emerging fresco provides an excellent backdrop for viewing the changing social and economic condition of England in the mid-nineteenth century. The transformation was so dramatic, from Ricardo being *the* economist to that of a reject, that by 1870 Jevons was able to make his claim that the "able but wrong-headed man, David Ricardo, shunted the car of Economic science on to a wrong line" (Jevons 1931, p. li).

Despite the disclaimers of Torrens, Malthus, Bailey and finally Jevons, the spirit of Ricardo continued to dominate a large amount of economic thinking, if for no other reason than that he was the "economist's economist." All of his theory was wrong, according to his detractors, but Ricardo still lived. Why? There are several explanations which are pertinent and relevant.

In the first place, Ricardo's monetary and trade theories remained intact, representing perhaps some of the best theoretical formulations which have ever made up the corpus of thought. Ricardo's theory of money became the standard doctrine for almost all economists, to the effect that

. . . the quantity of money, viewed both as a standard of value and a medium of exchange, was irrelevant to the determination of any of these essential relationships [of exchange]. Since money represented merely a convenient technique of exchange, either for

⁵ The use of this date is likely indicative of when Henderson wrote this text -- ed..

calculation or as an exchange-intermediary, it could make no difference to the essential productive relationships, and hence could not (in the last analysis) affect the system of exchange-ratios. An increase or decrease in the quantity of money, since it would ultimately tend to affect all prices equally, would leave the relation between them unaffected . . .

(Dobb 1940, p. 39)

The origins of the neutrality of money hypothesis can be traced to Adam Smith, of course, since it represented a major ingredient of his anti-mercantilist doctrine. But with Ricardo, and his particular monetary formulations, the neutrality of money concept acquired a new significance, becoming almost a truism of economic reasoning and one which withstood the sands of the times, until Keynes threw it over in the *General Theory*. Coupled with Ricardo's monetary view, there was his theory for the basis of the international exchange of commodities, where the veil of money was pushed aside so as to reveal the actual conditions of exchange and labor specialization, grounded in the respective productivity capacities of trading nations. The basis of trade between two individuals living in different countries was no different than trade between two people in Sussex, for in each instance trade was dependent upon the productivity of labor in the different vents of trade. Money was merely a veil in both cases, albeit confounded by two currencies in the foreign instance.

The Ricardian formulations in monetary and trade theory were so dominant that economists even ignored the fact that the basis of international exchange was but a special case of the Ricardian labor theory of embodied labor. Even the most vociferous of anti-Ricardians, those who rejected as nonsense his hypothesis that the ratios of exchange value were a function of the amount of embodied labor, nonetheless were able to set out the law of comparative advantage by reference to the number of bushels of grain, or tons of steel, that workers in two countries could produce in a day's time. In this type of formulation, the usual textbook presentation of the law of comparative advantage is analogous to Adam Smith's exchange between the hunters of beaver and deer.

A second reason for the continuing influence of Ricardo, despite the protests of Torrens and Jevons, was the fact that intuitively one could hardly ignore his primary emphasis upon production. In stressing the preeminence of the exchange of commodities which somehow already existed, the early members of the neo-classical tradition ignored Ricardo's stress upon production conditions. In his *Principles*, Ricardo is explicit on the matter;

In speaking then of commodities, of their exchange value, and of the laws which regulate their relative prices, we mean *always* such commodities *only* as can be *increased in quantity* by the exertion of human industry, and on the production of which *competition operates without restraint*.

(Works, Vol. I, p. 12; italics added).

Alongside of this formulation of the production conditions of exchange, were those set out by Carl Menger:

Suppose . . . a hunter has a great abundance of furs . . . but only a very small store of foodstuffs . . . A nearby farmer is assumed to be in precisely the opposite position.

(Menger 1950, p. 176)

Menger's exchange system is one of trading inventories, or a marketing exchange relation, and not one associated with the conditions which will allow the commodities to be produced under competition over a continuum. In Menger's world, as Frank H. Knight used to claim, "bygones are bygones," and the past costs associated with the coming into existence of the goods exchanged by the hunter and farmer are irrelevant to the exchange system. The analysis of two people meeting in the forest to exchange their respective surpluses ignores the issue of whether they will return to trade another day and somehow economics has always returned to the material conditions of the production process, for they cannot be ignored. It was for this reason, as is well known, that Marshall developed his famous scissors analogy, with the result that he insisted upon restoring the Ricardian emphasis upon supply, even though he gave it a peculiar neo-classical twist by stressing its preeminence only in the long run.

The third reason for the continuance of the Ricardo ghost arose because of his formulation of the special case of agriculture, which in neo-classical times became the general case of all economic activity of the firm, with its well behaved production function, along with the requisite "stages."

Over the relevant range of output variation to which a sector or industry would be subject, Ricardo assumed that the facility of production or the homogeneity of inputs was constant, *except in the case of agriculture*. In the latter case, because of the niggardliness of nature, it was necessary to bring "land of a worse quality, or less favorably situated into cultivation" (*Works*, Vol. IV, p. 14). As a result, the real cost of cultivation rose, along with rent, as the agricultural sector was subject to the conditions of diminishing returns. In setting out the conditions of production in the special case of agriculture, Ricardo formulated the economic theory of an industry subject to a rising supply price, with its resultant effects upon rents, wages and profits. While his examples in the *Essay on Profits* were mainly concerned with production occurring at the extensive margin of cultivation, those found in the *Principles* suggest the possibility and likelihood of cultivation at the intensive margin. Nonetheless, in both the instances of extensive and intensive cultivation, the results lead to rising supply price (Joan Robinson 1941).

Ricardo's special case of agriculture, what might be called his "rent theory," was not singularly his formulation, since, as he admitted openly, the theoretical aspects were also worked out by Malthus and Edward West. But Malthus's *Essay into the Nature and Progress of Rent* (1815 [1870]) was exclusively a theoretical piece and in no way was intended as being directly associated with the restrictions on the importation of corn. For Ricardo, of course, the theory of rent was an

integral part of his theoretical schema, and while a special case, it was an essential underpinning to his theory of profits.

In one sense, Ricardo used Malthus's *Theory of Rent* to build an argument to refute the latter's positive stance in favor of agricultural protection. Accordingly, while the theory of the rising supply price of agricultural production was really the work of Malthus, it was with Ricardo that rent theory became associated, due to the theory's key role in his system. In contemporary times, an analogous case could be drawn by the fact that the majority of Ph.D. students in economics believe Keynes invented the theory of the multiplier.

As Stigler has demonstrated, the most accurate and clear formulation of the theory of diminishing returns was that of West (Stigler 1952, pp. 195-200, especially 197), but he moved to India and made no other contribution to economic theory, except to claim that Ricardo stole his idea, a charge which does not stand the scrutiny of the passage of time.

To sum up at this point, there was a great body of economic theory which owed its origin to the work of Ricardo. As Knight has shown, the whole corpus of the modern theory of the firm, based upon the well behaved production function, can be traced to Ricardo's formulation of diminishing returns (Knight 1935). What Knight did not stress, of course, even though finding Ricardo guilty of "seven aberrations," was Ricardo's limitation of diminishing returns to agriculture, as neo-classical economics has largely ignored the Ricardian general case of constant returns over the relevant range of output for firms in manufacturing. Nevertheless, the Ricardo special case, his monetary and trade theories, and his emphasis upon the production aspects of political economy, could not very easily be expiated, or expunged, from the body of economic theory, despite what Jevons had said about his wrongheadedness.

But if Ricardo still lived in the pages of Marshall's *Principles*, viewed as one of the greatest of theorists, what of his value theory? If one were to read Ricardo's *Principles*, there was that "muddled" first chapter, where "labour" is "the foundation of all value." The first chapter presented problems, even as early as the 1830s, for, as Meek has noted,

. . . the majority of economists were very much aware of the dangerous use to which a number of radical writers were putting certain Ricardian concepts . . .

(Meek 1967, p. 70)

As time passed, and a certain unemployed European political economist worked away in the British Museum, Ricardo's labor theory acquired a new significance and importance. Writing in the 1890s, after having taught the same interpretations at Cambridge for several decades, Marshall's colleague, Herbert S. Foxwell, claimed,

I am more and more impressed, as I study the literature of socialism, with the far-reaching, disastrous consequences of the

unfortunate colour given to economic teaching by Ricardo . . . it was Ricardo's crude generalizations which gave modern socialism its fancied scientific basis, and provoked, if they did not justify, its revolutionary form. There are times when we are disposed to underrate the value of that drill in method which is a principal part of academic training. At such times we should think of Ricardo. Ricardo, and still more those who popularized him, may stand as an example for all time of the extreme danger which may arise from the unscientific use of hypothesis in social speculations, from the failure to appreciate the limited application to actual affairs of a highly artificial and arbitrary analysis. His ingenious, though perhaps over-elaborated reasonings became positively mischievous and misleading when they were unhesitatingly applied to determine grave practical issues without the smallest sense of the thoroughly abstract and unreal character of the assumptions on which they were founded. Thus, as Jevons has observed, Ricardo gave the whole course of English economics a wrong twist. It became unhistorical and unrealistic; it lost its scientific independence and became the tool of a political party. At one time, indeed it went very near to losing its rightful authority in legislation and affairs; nor did it regain its old position until by the greater precision of the theorists on the one side, and the broader treatment of real questions by the historical school on the other side, this elementary blunder in method was rectified. Meanwhile, by a singular irony of fate, it happened that Ricardo, by this imperfect presentation of economic doctrine, did more than any intentionally socialist writer to sap the foundations of that form of society which he was trying to explain, and which he believed to be typical and natural, if not, indeed, the ideal social state.

(Foxwell 1899, pp. xl-xlii)

To rescue Ricardo from the charges of those like Foxwell, who saw great danger associated with the study of that "wrong-headed man," it became necessary to deprogram Ricardo and to separate him from the labor theory of value. The leading deprogrammer was Marshall, of course, who wrote in his *Principles*,

Ricardo's theory of cost of production in relation to value occupies so important a place in the history of economics that any misunderstanding as to its real character must necessarily be very mischievous; and unfortunately it is so expressed as almost to invite misunderstanding. . . . he knew that demand played an essential part in governing value, but . . . he regarded its action as less obscure than that of cost of production, and therefore passed it

lightly over in the notes which he made for the use of his friends, and himself; for he never essayed to write a formal treatise; . . .

(Marshall 1920, p. 503)

Ricardo was now a Marshallian seamstress, scissors in hand.

In an Appendix on "Ricardo's Theory of Value," Marshall alleged that Ricardo's "exposition is as confused as his thought is profound," and that his words must be given "interpretation" when they appear "ambiguous," and that he "seems to be feeling his way towards the distinction between marginal and total utility." Moreover, Ricardo

would always delighted in short phrases, and he thought that his readers supply for themselves the explanation of which he had given them a hint . . . And he was more guilty than almost anyone else of the bad habit of endeavouring to express great economic doctrines in short sentences

(Marshall 1920, pp. 813, 814, 816)

Of Ricardo's *Principles*, it

. . . makes no pretense to be systematic. . . . *if in writing it he had in view any readers at all*, they were chiefly those statesmen and businessmen with whom he associated. So he purposely omitted many things which were necessary for the logical completeness of his argument, but which they would regard as obvious.

(Marshall 1920, p. 813; italics added)

Anyone who was as active a pamphleteer as Ricardo and who pushed his *Principles* through three editions, would be surprised to learn that he was merely passing sketchy notes amongst a small circle of friends. That Ricardo was not proficient at writing there is little doubt, nor that he intended to write a treatise there is also no doubt. But that he did not intend to convey the ideas expressed in his *Principles* is pure fabrication.

Jacob Hollander claimed that the textual changes in Ricardo's second edition should be regarded as "highly significant" since they showed "an appreciable increase of reserve in the advocacy of 'embodied labour' as a universal measure of value" (Hollander 1904, pp. 479, 481). Hollander also argued that the numerous revisions in the third edition of the *Principles* made Ricardo's chapter "On Value" very different in content and tendency from his earlier formulations, since greater emphasis was given in this edition to the "modifications of the principles which determine relative value." Hollander attributed Ricardo's modifications to his recognition of the effects of variations in durability of capital (Hollander 1895, p. 72).

The same type of interpretation of Ricardo's theory of value was given by Edwin Cannan, who spoke of Ricardo's "unwilling admission of the influence of interest on capital as a modification of the pure labour-cost theory of value" (Cannan 1929, p. 185). Cannan further claimed that Ricardo's discussion of the role of capital in the determination of value was "weak from the beginning, and he weakened more and more as time went on and criticism multiplied." (Cannan 1929, p. 176)

As a consequence of the interpretations of Marshall, Hollander and Cannan, the traditional view of Ricardo's theory of value was that he modified, or retreated from, the position taken in the first edition of his *Principles of Political Economy*. Although usually assumed that he began, in the first edition, with a theory that the quantity of embodied labor determined the ratios of exchange value, Ricardo was alleged to have rejected this formulation in subsequent editions of the *Principles*. The reason for his retreat, it was claimed, was his recognition that varying degrees of durable capital also influenced the exchange value of commodities.

It was this view that permeated the textbooks in economic thought during the 1930s and even into the 1940s. Most agreed with Alexander Gray that Ricardo "appears to have been increasingly dissatisfied" with the labor theory of value (Gray 1931, p. 189)--so dissatisfied that he was "compelled . . . finally to abandon this theory in its purity" (Haney 1949, p. 288).⁶

The Sraffa Edition of Ricardo

The watershed allowing for the interpretation of Ricardo and the development of his economic theory was the publication in 1951 of the first four volumes of the Piero Sraffa edition of the *Works and Correspondence of David Ricardo*. With the publication in 1973 of the eleventh volume, a detailed Index of the first ten volumes, Sraffa finally finished the project of the Royal Economics Society which from initiation to fruition covered a span of some forty-eight years. Sraffa himself was engaged in the project for forty-three years, as apparently it took Keynes five years to find someone to assume the duties of an executive editor of the Ricardo *Works*.

The idea to assemble the *Works* of Ricardo came into being in 1925 when the Royal Economic Society initially agreed to finance such an undertaking. Undoubtedly, the support for such a scheme came from a variety of sources, not the least of which was the long held belief that Ricardo was, after all, "the economist's economist." The year 1923 marked the centennial of Ricardo's death and while there is no evidence of any ceremony or professional meeting to note that event, the centennial could hardly have gone unnoticed. Moreover, during the last decade of

⁶ Gide and Rist remarked that Ricardo "acknowledged his failure to explain value." For this reason this famous book in the history of economic thought did not even discuss Ricardo's value theory. (Gide and Rist 1948, p. 156)

the nineteenth century a large amount of Ricardo's correspondence had been published for the first time and there was a continuous interest in just what it was that he said and thought. The interpretations of Marshall, Hollander and Cannan, and the interest of Marxist economists in the origins of the labor theory of value were also pertinent. Writers like Marshall had alleged that Marx was in error when he traced his roots to Ricardo, since the greatest of all classical authors had in fact discarded that particular theory of value and was "feeling his way" to utility. Moreover, the end of the first World War witnessed a growing concern with Marxian economics, in part because of events in the Soviet Union and also because of the increased political militancy of the British laboring classes.

Also in the 1920s, there was a growing concern with the relation between economic concepts and religion, as represented by the work of Max Weber (1904, 1905) and R. H. Tawney (1926). While the major emphasis in their direction was over the relation between the changing views of Protestants regarding usury and profit, with the advance of the market system and capitalism, the general question of the relation between religion and theory was paramount. There were innuendos scattered about which pointed to the obvious fact that the two leading advocates of the labor theory of value had both emerged from Jewish backgrounds, as against the utility notions which had been advanced by good Anglicans like Marshall. The separation of Ricardo from the labor theory was in part motivated by a need to clear his name, so to speak, with perhaps Hollander the representative of this view. That anti-semitism had somehow died out was a myth, for obvious reasons.

Probably as important as anything else in leading to the publication of letters and manuscripts of Ricardo, as well as others, was the great proclivity of Oxbridge dons to collect old and rare books. As Maurice Dobb once observed, in the 1920s the dons at Cambridge had two interests, collecting rare books and drinking port wine. The mornings were spent looking through the latest book seller's catalogue and the evenings imbibing.

In 1887 James Bonar published a volume containing the Ricardo side of the famous Malthus-Ricardo correspondence and in 1895 Jacob Hollander published Ricardo's letters to John Ramsey McCulloch, the self-appointed disciple and defender of the Ricardian faith. In 1899 Bonar and Hollander jointly published Ricardo's letters to his old stock jobber friend, Hutches Trower, as well as some miscellaneous letters of Ricardo that had come to light. In 1919 Ricardo's great-grandson, Frank Ricardo, inadvertently found the manuscripts containing Ricardo's *Notes on Malthus*, which he turned over to the British Museum.

Accordingly, in 1925, when the Royal Society made the decision to bring out a definitive Ricardo *Works*, there was already in print a large amount of Ricardo memorabilia. But there were several missing pieces to the Ricardo puzzle, namely the Ricardo correspondence with James Mill and Malthus's letters to Ricardo. Only two of Malthus's letters had ever been found. One of these was dated 11 August 1823, and had been sent to McCulloch by Ricardo in order to permit him to follow the content of the controversy then taking place between Malthus and Ricardo over the issue of the measure of value. Bonar had included it in his volume of Ricardo's letters to McCulloch, as if it had been found in the McCulloch papers. The second

of Malthus's letters had been located by Foxwell in 1907 (Foxwell 1907). This particular letter had found its way into the collector's circuit, as Ricardo had given it to Elizabeth Chandler Smith, a mutual friend of his and Malthus, who also happened to be an autograph collector. The letter was originally written 9 October 1814 and Malthus had told Ricardo he could use any of his "letters as you propose." Obviously, one of Mrs. Smith's heirs sold the letter to another collector.

It had become somewhat obvious, from what already was known about the formulation of Ricardo's ideas, that the responses and counterarguments coming from his friend and combatant Malthus were crucial. Also, no one had ever attempted to rationalize or coordinate the numerous changes which Ricardo had made in the process of the publication of the three editions of the *Principles*. On most economists' bookshelves in the 1920s there was the definitive Cannan edition of Adam Smith's *Wealth of Nations* and something similar to Cannan on Smith would be useful in working out the Ricardo "muddles."

At the time the decision to compile a Ricardo *Works* was taken, John Maynard Keynes was Secretary of the Royal Society and Sraffa credits him with being responsible for the Ricardo scheme.

The initiative in launching this enterprise was due to the late Lord Keynes, who to the end of his life showed the closest interest and lent his active support, particularly in the search for unpublished material and in advising on the planning and annotation of the volumes.

(*Works*, Vol. I, p. x)

Keynes's interest in Ricardo was in part motivated by his admiration for Malthus, as evidenced by his claim that economics would have been better off if Malthus, not Ricardo, had won the great debates (Keynes 1933, p. 110). The fact that Keynes held these views should not be taken in any way to detract from the importance of Keynes's efforts on behalf of the Ricardo *Works*. Keynes, one of the great collectors of rare books and old manuscripts, was as interested in finding Ricardo memorabilia as even Sraffa. But Keynes's interest in Ricardo was whetted in part by his admiration for Malthus, who he dubbed the first Cambridge economist.

After the war, when Keynes returned to his old quarters in King's College, he devoted the next several decades to his college and the improvement of economics at Cambridge University. It was in this role that he became the great influence upon the teaching of economics and the fostering of an interest in economic theory among undergraduates; it was an influence that Marshall had always hoped the younger Keynes would exercise in the tradition of his father, John Neville Keynes. In this capacity, Keynes became the friend of undergraduates and provided a great stimulus for the serious student. For those who obtained a first class pass at the end of their first year examinations in economics, Keynes invited them to gather each Monday evening in his rooms in King's College and to engage in serious debate. Apparently the meetings were in part social, but also highly formal, for on each

Monday evening a second year student would have the responsibility for reading a paper. A discussion would follow the presentation of each paper, concluding with Keynes's own criticism and appraisal of each evening's work.⁷ It was from these Monday night sessions that Keynes's Political Economy Club came into being again, for while he was away during the war the Club had ceased to exist. As Harrod tells us, Keynes also restricted the attendance to his formal lectures on Monday mornings, admitting only those who had obtained a first in their initial exams (Harrod 1963, pp. 325-326). Mondays represented a "full" day for the bright second-year students, with Keynes's lectures in the morning, and his Political Economy Club meeting in the evening. Exceptions to the limitation to bright second year students were made, of course, for those like Frank Ramsey, who while not enrolled in the economics tripos were still sufficiently interested in the subject to pass muster.

At the first session each year of Keynes's Political Economy Club, he would himself read a paper, but essentially always the same paper, namely the one concerned with Malthus, the first Cambridge economist.⁸ Each year the paper changed a bit and in time even its emphasis shifted, with the result that Keynes himself became a part-time student of the history of thought, particularly the thought of Malthus and Ricardo.

In April 1924, Keynes read the latest revision of his Malthus paper to the Political Economy Club of London, the one originally founded by Ricardo in 1821 and not to be confused with Keynes' Political Economy Club of Cambridge. From its inception, Ricardo's Political Economy Club did not publish the remarks of any members or guests, with the result that Keynes's piece on Malthus did not appear in print until 1933, when he included it in *Essays in Biography*.⁹ The reading in 1924 of his Malthus paper in London and Keynes's influence behind the 1925 decision of the Royal Society to publish a Ricardo Works, undoubtedly were connected.

Keynes, of course, was not a great student of the history of economic thought, as anyone who has read the *General Theory* can attest, since the term "classical" is hardly an umbrella for all his predecessors, nor Professor Pigou a universal surrogate. But Keynes had few peers when it came to prose style; biography was a specialty, and as his famous article on Marshall shows, he had a great sense for developing the background of the social framework of an economist's thought and writings (Keynes 1933, pp. 125-217). In addition, Keynes obviously took some

⁷ The description of Keynes's Monday evenings with the second year students, who had obtained a first in their initial examination, was given to the author by the late Maurice H. Dobb in the spring of 1975. Dobb himself was a member of Keynes's Monday night sessions in 1920. Dobb took a first class in economics at Cambridge in 1927, along with Austin Robinson, as well as in his first year.

⁸ In addition to Dobb's remembrances of the Monday evening sessions, Harrod has related his experiences in Harrod 1963, p. 328, and H. M. Robertson in Robertson 1957, p. 171. E. A. G. Robertson described his remembrances in his Memoir on Maynard Keynes (E. A. G. Robinson 1947, pp. 12-13).

⁹ According to Dobb, Keynes's interest in Malthus underwent something of a transformation, since initially (1919) he concentrated primarily upon an analysis of the *Essay on Population* and the theory of rent. In later years, reflecting his own growing interest in the subject, Keynes began to trace the evolution of Malthus's thought on the importance of effective demand and the Malthus-Ricardo controversy over gluts. It was this latter version which Keynes published in 1933.

delight in writing other people's obituaries.¹⁰ But in this regard, Keynes's two articles on Malthus and Marshall stand out, for they are far more analytical and critical than those pieces devoted to, say, Edgeworth or Foxwell. In his Malthus article, Keynes was highly critical of Ricardo, summing up his view by claiming it was tragic for economic theory that Malthus was not a better theorist, for otherwise Ricardo might not have been so successful in conquering England "as completely as the Holy Inquisition conquered Spain" (Keynes 1936, p. 32). Keynes's sympathies in the famous Malthus-Ricardo controversy over Say's Law are obvious and well-known, but at the same time he admired Ricardo's mind, telling his Political Economy Club that the latter possessed "the most distinguished mind that had found economics worthy of its powers" (Harrod 1951, p. 328).

Besides, Ricardo and Keynes had one great skill in common, namely their mutual prowess in the stock market. In contrasting Ricardo and Malthus, Keynes observed,

. . . Ricardo was the abstract and *a priori* theorist, Malthus the inductive and intuitive investigator who hated to stray too far from what he could test by reference to the facts and his own intuitions. But when it came to practical finance, the roles of the Jewish stockbroker and the aristocratic clergyman were, as they should be, reversed . . .

(Keynes 1933, p. 135)

Joan Robinson tells us that Keynes enjoyed making money in the stock market, provided it did not take up too much time (Robinson 1980, p. 175), and such a description certainly applies to Ricardo as well.

Although Keynes, as Secretary of the Royal Society, enthusiastically supported the idea of a Ricardo *Works*, it was not so with the 1929-1930 President of the Society, H. S. Foxwell. As a contemporary of Marshall at Cambridge, Foxwell had had the responsibility for teaching money and banking, but his primary interest was with "the progress of economic thought and literature" (Keynes 1936b, p. 601). He was a "devotee of businessmen" (Keynes 1936b, p. 591), an arch conservative, if not a rigid Tory. When he was not chosen as Marshall's successor to the chair in economics at Cambridge, he never again lectured or tutored on the banks of the Cam River. His hatred for Marshall, whom he knew had managed Pigou's election to the chair in economics, was matched by his disdain for Ricardo, and it did not help matters that Marshall defended Ricardo from attacks of Jevons and Foxwell. Foxwell's view that Ricardo's theoretical work gave aid to the socialist cause was all-pervading.

As President of the Royal Society in 1929-1930 and prior to Edwin Cannan the proposed editor of the definitive edition of Adam Smith, Foxwell was well

¹⁰ In the 14-year period, 1925-1939, Keynes wrote obituaries for (1) Francis Y. Edgeworth, (2) Professor A. A. Tschuprow, (3) F. P. Ramsey, (4) C. P. Sanger, (5) The Earl of Balfour, (6) Sir Henry Cunynghame, (7) Andrew Andreades, (8) Herbert Somerton Foxwell, (9) George Broomhall, and (10) Alfred Hoare. All of these obituaries appeared in the *Economic Journal*, of which Keynes was editor for 33 years (1911-1944).

grounded in the history of thought and keen to the problems of editing the collected works of any literary figure. By his training and interest he should have supported a project such as the Ricardo *Works*, which the Society was undertaking. But Foxwell refused to deliver the traditional presidential address, because as Keynes claimed,

. . . he excused himself on the ground that his onslaught on the man [Ricardo], who had convinced the world of the dreadful heresy of a necessary conflict between the interests of capital and labour, would have been too provocative.

(Keynes 1936b, p. 592)

The timing of Foxwell's presidency of the Royal Society and the fact that he held such strong opinions on Ricardo, were highly significant, for it was in 1930 that Keynes finally was able to find someone to assume the responsibility of editing the Ricardo *Works*. The individual chosen, of course, was the famous Piero Sraffa, who at the time had no official duties at Cambridge, even though he had been "in residence" for four years. Keynes' choice of Sraffa to be editor of the Ricardo *Works* was extremely propitious, if not prophetic. Not only did Sraffa turn out to be one of the greatest editors of all time, but he brought to the work of Ricardo a new appreciation for the theoretical problems with which the great theorist struggled. Unlike the vast majority of English-speaking economists on both sides of the Atlantic, Sraffa was not influenced by the almost slavish indoctrination in Jevonian and Marshallian neo-classicism, and he approached Ricardo's economics with an understanding of value theory which made that theory something more than just a matter of demand and supply.

Like Ricardo before him, Sraffa early in his career rejected the approach of what is best described as the Marshallian "scissors" analysis, with the result that demand never became an active participant in either of their schemas. Moreover, Sraffa's own particular orientation preceded his editing of Ricardo's *Works*, and perhaps it was because of this orientation that he was capable of solving many of the so-called Ricardian "muddles." Neither Ricardo nor Sraffa, for example, were products of the English public school system, and even though Ricardo lived in England all of his life, it was his non-English approach to matters that made his economics so controversial, not only during his own lifetime but long after.

Ricardo's non-English approach to economic matters, his highly theoretical instincts about the pressing economic issues of his time were grounded, as has been argued in earlier chapters, in the emphasis upon logic and deduction which were a part of his Jewish tradition. That Talmudic logic frequently is tortuous cannot be denied, such as the rule that the banning of marriage between holy festival days only can be violated by a man who takes back his divorced wife. Nevertheless, Talmudic studies fall under the general rubric of the study of logical processes. It is better pedagogy to use the Talmud, for example, than the Iliad and the Odyssey in order to attempt to train a logician. The classics, Greek literature, and the history of the English monarchy, each was foreign to Ricardo, and in the grand tradition of a logician, his most frequent openings were: "let us assume," or "let us suppose." In

a sense, Ricardo needed a non-Englishman to understand his economics, and for this reason Sraffa was an ideal choice.

Having received his undergraduate degree from the University of Turin at the conclusion of the first World War, Piero Sraffa became a member of the Italian left-wing intelligentsia, of which Antonio Gramsci was the leading figure. Sraffa and Gramsci met while both were undergraduates at Turin, days that marked the beginning of a long and enduring friendship. Gramsci exercised perhaps the first initial influence over Sraffa, an influence which continued for many decades, even though they lived apart in different countries.¹¹

Sraffa's first association with Keynes, who perhaps exercised more influence over his professional academic career than anyone else, occurred in the early months of 1922. Keynes was in Italy at the time, attending an International Conference. The two met at a cocktail party in Florence, to which Sraffa had been invited by a woman of high fashion, so that he might meet the well-known and influential English economist. In addition to his attendance at the Conference, Keynes was then gathering manuscripts, or potential authors of manuscripts, for his series of collected essays on *Reconstruction in Europe*, published as *Supplements to The Manchester Guardian*, commencing in 1922. Harrod attests that Keynes "laboured hard to attract authoritative writers" for his *Supplements* (Harrod 1951, p. 315), and one of these was Piero Sraffa, who contributed an article on the nature of Italian banking. In the article, Sraffa drew attention to the widespread corruption which permeated the Italian banking system, calling for widespread reform and control over existing monetary practices and procedures. A version of Sraffa's article also appeared in the Italian press, where it created such an uproar that Mussolini personally telegraphed the senior Sraffa, to the effect that such writings by his son would not, and must not, be tolerated.

Soon after the Mussolini overtures, Piero Sraffa traveled to London. One purpose of this trip was to provide an opportunity for him to improve his English, and so he enrolled in a series of lectures at the London School of Economics. While in London, Sraffa visited Cambridge several times and renewed his friendship with Keynes, at the same time meeting many of the inner circle of the Keynes group. In 1925, however, Sraffa returned to Italy, where he participated in a conference on the history of economic thought, presenting a paper which set out his original version of

¹¹ Gramsci was undoubtedly one of the most powerful and leading political leaders of post-war Italy, and an exceedingly strident critic of Italian fascism. He was in every sense of the term a premature anti-fascist, and leader of the Italian Communist Party. Finally, Gramsci was imprisoned by Mussolini in 1926, and despite being crippled in early childhood, a condition which greatly impeded his mobility, was maintained under the closest and strictest surveillance. No less than eight guards were assigned to his prison cell, on a twenty-four hour basis. In the early 1930's, Gramsci developed tuberculosis, and died in prison in 1937. During the entire period of imprisonment, Gramsci's major contact with the outside world was provided by Sraffa, who maintained an open account with a London bookseller so that the imprisoned Italian could obtain whatever volumes the Mussolini regime permitted. Sraffa in 1935, through his own family connections in Italy, was instrumental in having Gramsci transferred to a prison with hospital and medical facilities, a factor that undoubtedly prolonged his life.

a later famous article on the relation between costs and the quantity of production (Sraffa 1925).¹²

The year following the publication of Sraffa's original article on costs, there were several unsuccessful attempts to assassinate Mussolini, with the result that in April 1926 the Italian government passed legislation which provided for the death penalty for anyone engaging in activities against the monarchy or the Fascist regime. The promulgation of this law was followed by widespread arrests, with the great majority of the communist and socialist politicians and theorists being sent to jail. In the late spring of 1926, Piero Sraffa returned to Cambridge, where he still resides, a Fellow of Trinity College [Sraffa died in 1983--ed.].

When he arrived in Cambridge in 1926, literally a refugee from Italian fascism, Sraffa had no position and little income. Even though his family was well off, his father being a banker, the strident Italian exchange control laws made it difficult for Sraffa to receive funds from home, not to mention his political associations which made him suspect.

Keynes, in his capacity as Bursar of King's College, arranged for Sraffa to live in rooms in a building owned by the College, at Number 17b King Edward's Passage, right off of King's Parade. Some years later, in 1935, the building became the site of Keynes's Cambridge Theatre, a legacy of the latter's campaign to elevate the level of Cambridge culture.

In addition to the living quarters which Keynes provided Sraffa, he also arranged for him to have free dining privileges at King's College, even though he was not a fellow, nor did he ever live in King's. Many years later, in 1939, Sraffa was elected a Fellow of Trinity College. At the same time, in 1939, Sraffa's quarters at 17b King Edward's Passage were occupied by his mother, who being widowed had moved to England. The 1975 occupant of 17b King Edward's Passage was Luigi Pasinetti.

Besides providing him with free lodging and dining facilities, Keynes also arranged in 1927 with Mary Paley Marshall for Sraffa to have some duties in the Marshall Library. In 1930, Sraffa was given the sinecure of Librarian of Marshall Library, a post which he still holds [sic].

From the moment he arrived in Cambridge in the late spring of 1926, Sraffa became a member of Keynes's inner circle; a party to the famous Cambridge "oral tradition." His name "lurked" in other people's prefaces, as his advice was sought by economists of varying hues. Joan Robinson claimed in her Foreword,

Mr. Sraffa's article must be regarded as the fount from which my work flows, for the chief aim of this book is to attempt to carry out

¹² One interesting aspect of this article is its dedication to Maffeo Pantaleoni, a supporter of the fascist regime. Piero Sraffa wrote an Obituary to Maffeo Pantaleoni, which was published in the *Economic Journal* (Sraffa 1924). One common bond between Pantaleoni and Sraffa was that they both attacked the corruption of Italian banking, with Pantaleoni's main work being *La Caduta del Credito Mobigliare* (1895). Sraffa claimed, in his Obituary note, that Pantaleoni's *La Caduta* was comparable in importance to Walter Bagehot's *Lombard Street* (1873).

his pregnant suggestion that the whole theory of value should be treated in terms of monopoly analysis.

(Joan Robinson 1933, p. x)

A. C. Pigou sought out Sraffa as well, writing in 1941,

. . . I owed much to Prof. Dennis Robertson, who read, in their earlier stages, drafts of a large part of the book, and made valuable comments. Also to Mr. Sraffa, to whose critical judgment I submitted it at a later stage, and who, instead of, as I had expected, blowing it sky-high, encouraged me to go on.

(Pigou 1941, pp. vi-vii)

Moreover, Sraffa not only was an influence in economics, but Frank Ramsey, the mathematician, and Ludwig Wittgenstein, the philosopher, each sought his counsel, and from Wittgenstein there is the impression of a brief period of a triumvirate of international intelligentsia. (Frank Ramsey died in 1930.) In the "Preface" to his *Philosophical Investigations*, published in 1945, the great Wittgenstein comments on the change in his views, from what they had been when he first published his *Tractatus Logico-Philosophicus* in 1922. In *Philosophical Investigations*, Wittgenstein reported that he wished to correct

. . . grave mistakes in what I wrote in that first book. I was helped to realize these mistakes--to a degree which I myself am hardly able to estimate--by the criticism which my ideas encountered from Frank Ramsey Even more than to this--always certain and forcible--criticism I am indebted to that which a teacher of this University, Mr. P. Sraffa, for many years unceasingly practiced on my thought. I am indebted to *this* stimulus for the most consequential ideas of this book.

(Wittgenstein 1958, p. x^e; emphasis in original)

As editor of the *Economic Journal*, which he apparently accomplished with little fanfare, Keynes received manuscripts submitted by economists from all over the world. Most of these he read himself, either rejecting or accepting them quickly, for his "file cabinet" consisted of the top right hand drawer of his desk, where no significant "backlog" ever accumulated; it was not necessary in those days, of course, to publish the date of admission and acceptance of manuscripts, since the regression coefficients did not change that frequently.

As with any editor, on the other hand, Keynes would parcel out individual manuscripts to members of the inner circle; particularly Austin Robinson, R. F. Kahn, Joan Robinson and naturally the Cambridge Professor of Political Economy, A. C. Pigou. For Piero Sraffa, Keynes reserved the manuscripts which were apart, those which required the appraisal of one not committed to the orthodoxy of the neo-classical mold. His strategy was "to give it to Piero, and see what he thinks,"

since Sraffa was looked upon as the in-house genius, best informed on all aspects of theory and not just the neo-classical theory which could be tailored with Marshall's scissors.

Although the Cambridge "oral tradition" is famous, it nevertheless has been necessary to publish something, and for Piero Sraffa and R. F. Kahn (Kahn 1931) one article was sufficient to establish their respective reputations. In the case of Sraffa, his reputation was established within six months of his 1926 arrival in Cambridge. Having provided Sraffa with lodging and board, Keynes next suggested the desirability of publication, a not unheard of suggestion in academic circles. Accordingly, Sraffa showed Keynes a copy of his article which had been published the previous year in the Italian journal. Apparently, Keynes indicated that in its original form the article would not be sympathetically received by English economists since it neglected the role of demand in the determination of price, thus being concerned with only half of the scissors. Because the Italian article has never been translated, it is difficult to know just what it is that Keynes reacted to, for even though there are several translations currently floating around Cambridge, Sraffa has never agreed to have any of them published and they remain in private hands. In any event, it is possible to quote one passage from the article as it finally appeared in the *Economic Journal*, and to guess as to what it was that Keynes suggested would be unacceptable to an English audience. Sraffa says, for example, that:

Reduced within such restricted limits, the supply schedule with variable costs cannot claim to be a general conception applicable to normal industries; it can prove a useful instrument only in regard to such exceptional industries as can reasonably satisfy its conditions. In normal cases the cost of production of commodities produced competitively--as we are not entitled to take into consideration the causes which may make it rise or fall--must be regarded as constant in respect of small variations in the quantity produced. And so, as a simple way of approaching the problem of competitive value, the old and now obsolete theory which makes it dependent on the cost of production alone appears to hold its ground as the best available.

(Sraffa 1926, pp. 540-541)

The footnote within the above paragraph is even more suggestive:

The absence of causes which tend to cause the cost either to increase or diminish appears to be the most obvious and plausible way from which constant costs can arise. But as these constitute the most dangerous enemy of the symmetry between demand and supply, those writers who accept this doctrine, in order to be able to relegate the constant costs to the category of theoretical limiting cases which in reality cannot exist, have persuaded themselves

that they are something extremely complicated and improbable, since they "can only result from the accidental balancing of two opposite tendencies; the tendency to diminution of cost . . . and the tendency to increase of cost . . ." (Sidgwick, *Principles of Political Economy*, 1st ed., p. 207; to the same effect see, e.g., Marshall, *Principles*, IV. xiii, 2, and *Palgrave's Dictionary*, *sub voce* Law of Constant Return). The dictum of Edgeworth, that "to treat *variables* as *constants* is the characteristic vice of the unmathematical economist," might to-day be reversed: the mathematical economists have gone so far in correcting this vice that they can no longer conceive of a constant except as the result of the compensation of two equal and opposite variables.

(Sraffa 1926, p. 541, n.1; italics in original)

Accordingly,

This first approximation, as far as it goes, is as important as it is useful: it emphasises the fundamental factor, namely, the predominant influence of cost of production in the determination of the normal value of commodities, while at the same time it does not lead us astray when we desire to study in greater detail the conditions under which exchange takes place in particular cases, for it does not conceal from us the fact that we cannot find the elements required for this purpose within the limits of its assumptions.

(Sraffa 1926, p. 541)

It must be emphasized that the foregoing Sraffian formulations were written some four years prior to his acceptance of the duties of editing the Ricardo *Works*. As earlier discussion has indicated, however, Sraffa's formulations are in a direct line with Ricardo's emphasis upon cost of production and the formulation of his general case of constant cost, in opposition to the neo-classical emphasis upon his special case of diminishing returns in agriculture. Sraffa's *Economic Journal* article has only six citations, two to Marshall, and one each to Keynes, Sidgwick, Palgrave and Edgeworth, and while he refers to the "now obsolete theory" of constant cost, the name of Ricardo is never mentioned. In his Italian article, there are three brief references to Ricardo, but by and large the overwhelming majority of citations are to Alfred Marshall and there is an impression that Sraffa was little concerned with Ricardian formulations when he wrote his 1925 and 1926 articles.

To placate his friend the Editor, Sraffa revised the Italian version of his notion on the relation between cost and output. First, he summarized the long and documented discussion of the laws of returns found in the Italian article, and then added a portion on the characteristics of a demand schedule facing a firm under condition of monopoly. Thus,

Everyday experience shows that a very large number of undertakings--and the majority of those which produce manufactured consumers' goods--work under conditions of individual diminishing costs. Almost any producer of such goods, if he could rely upon the market in which he sells his products being prepared to take any quantity of them from him at the current price, without any trouble on his part except that of producing them, would extend his business enormously. It is not easy, in times of normal activity, to find an undertaking which systematically restricts its own production to an amount less than that which it could sell at the current price, and which is at the same time prevented by competition from exceeding that price. Business men, who regard themselves as being subject to competitive conditions, would consider absurd the assertion that the limit to their production is to be found in the internal conditions of production in their firm, which do not permit of the production of a greater quantity without an increase in cost. The chief obstacle against which they have to contend when they want gradually to increase their production does not lie in the cost of production--which, indeed, generally favours them in that direction--but in the difficulty of selling the larger quantity of goods without reducing the price, or without having to face increased marketing expenses. This necessity of reducing prices in order to sell a larger quantity of one's own product is only an aspect of the usual descending demand curve, with the difference that instead of concerning the whole of a commodity, whatever its origin, it relates only to the goods produced by a particular firm; and the marketing expenses necessary for the extension of its market are merely costly efforts (in the form of advertising, commercial travellers, facilities to customers, etc.) to increase the willingness of the market to buy from it--that is, to raise that demand curve artificially.

(Sraffa 1926, p. 543)

Keynes was right, of course, since Sraffa became famous not because of his view that the constant cost assumption of the classical economists was the theoretically correct one, but that the individual demand curve facing the monopolist was pivotal to the problem of price determination in the real world. For several decades, economic theory pursued this will-o-the-wisp, especially in Cambridge, Massachusetts, where Edward H. Chamberlin labored it through six or seven revisions of his *Monopolistic Competition*. Joan Robinson, on the other hand, immediately lost interest in the whole idea of the demand curve facing the individual firm under imperfect conditions and took up the cause of the role of aggregate demand in the determination of income and employment in the short run. It is noteworthy in this regard that Keynes's insistence upon the essential role of

demand in his discussions with Sraffa, over the theory of value, was perfectly consistent with his own view that Malthus had been slighted by Ricardo, since the latter refused to give credence to the idea that the level of effective demand was crucial to the problem of gluts.

Sraffa, meanwhile, was unaffected by the line of thought opened up by his views on the nature of the demand curve,¹³ as he continued to pursue his work with an emphasis upon production under competitive conditions. In 1930 he commenced the editing of the Ricardo *Works*, which among other memoranda resulted in his now famous "Introduction" to the *Principles of Political Economy and Taxation*. The threads of Sraffa's views on the relation between cost and output are woven from his 1925 and 1926 articles, through the "Introduction" to Ricardo, and finally to his 1960 manifesto, *The Production of Commodities by Means of Commodities*. In the latter work, Sraffa returns to the analysis of relative prices under the constant cost case and was accused by Harrod of neglecting "the composition of consumer demand" (Harrod 1961, p. 785; for Sraffa's response, see Sraffa 1962) a criticism echoed by other reviewers.¹⁴ Like Ricardo, Sraffa's discussion of relative prices was intended not as a method for analyzing particular prices but as prelude to a system for delineating the theory of profit, so as to reveal the repercussions upon the whole matrix of prices when the facility of production diminishes in one sector, namely agriculture. In such a system, demand will determine the respective *quantities* to be consumed out of the total basket of goods being produced, each in accordance with constant returns, but demand coefficients will not affect the relevant exchange ratios.

The value of a commodity, or the quantity of any other commodity for which it will exchange [said Ricardo], depends on the relative quantity of labour which is necessary for its production, and not on the greater or less compensation which is paid for that labour.

(Works, Vol. I, p. 11; italics deleted)

Nor do the exchange values of any two goods depend upon their respective demand schedules, since this exchange ratio is a function of the level of their respective costs of production, where the latter are not variable over the respective relevant ranges of output.

When he wrote his 1926 article, Sraffa had to satisfy the request of his friend, Keynes, but by 1960 he was free of this limiting factor. In the same fashion that

¹³ The "technical apparatus" of Joan Robinson's demand curve was derived from Harrod (1931), and Pigou 1920, *passim*.

¹⁴ Harry Johnson greeted Sraffa's volume with the comment: "Of all the exasperating books that have come out of Cambridge since its emergence as a centre of economic theory, this one might easily be considered the most. . . . the complete absence of demand from his system makes it extremely difficult both to formulate these criticisms and to evaluate their significance. . . . The system is therefore left open, and its bearing on neo-classical theory uncertain. It could be closed into an equilibrium system by relating demand to distribution. . . ." (Johnson 1962, pp. 464-465). For a general evaluation of the response of neo-classical economists to Sraffa's work, see Levine (1974). As Levine observes, "Sraffa has not always been felicitously interpreted by his contemporaries." (Levine 1974, p. 873)

Ricardo ignored the criticism of his friend, Malthus, a criticism which stressed the fact that he had not given sufficient importance to the role of demand, so was Sraffa able to work out a system of analysis which assigned no role to demand as a price determinant. It is in this way that the Sraffa edition of Ricardo reveals the consistency of the line of reasoning which begins with Ricardo, through Marx and finally to Sraffa himself. As Dobb has observed,

Apart from its special corollaries, what is particularly striking (some might say revolutionary) about the Sraffa-system viewed as a whole is its rehabilitation of the Ricardo-Marx approach to problems of value and of distribution from the side of production; with the consequential result that relative prices are independent of the pattern of consumption and of demand.

(Dobb 1973, p. 257)

The Reaction to Sraffa's "Ricardo"

In 1933, when Keynes published his paper on Malthus, he commented on the much discussed missing letters of Malthus to Ricardo. He concluded his discussion on this topic thusly:

But Mr. Piero Sraffa, from whom nothing is hid, has discovered the missing letters in his researches for the forthcoming complete and definitive edition of the Works of David Ricardo, which he is preparing for the Royal Economic Society (*to be published in the course of the present year*).

(Keynes 1933, p. 138; italics added.)

The "present year" turned out to be 1951, not 1933. Moreover, it not only took Sraffa twenty-one years to publish the first of eleven volumes of Ricardo's *Works*, but another twenty-two years passed between the publication of the first and eleventh volumes. The definitive edition of the *Principles* (vol. I), Ricardo's *Notes on Malthus* (vol. II), and the two volumes containing Ricardo's pamphlets (vols. III and IV) appeared in 1951. The next year, 1952, Ricardo's *Speeches in Parliament* (vol. V) and the four volumes of correspondence were published, followed in 1955 by a volume of *Biographical Miscellany* (vol. X). The General Index, first promised in 1951, finally came out in 1973 as Volume XI.

Sraffa, of course, has never been known as a person with a reputation to rush into print, for he claimed that his *Production of Commodities by Means of Commodities* took shape and was partially written in the 1920s, although not published until 1960. There were some extenuating circumstances which contributed to the long delay in the publication of the Ricardo *Works* and not all of the problem could be attributed to someone's propensity to procrastinate. New items kept turning up, the first being the discovery in 1930 of most of the letters that Ricardo had received from friends and correspondents, as well as his own notes and

papers. These materials Sraffa called the "Ricardo Papers." Then in 1943, the "Mill-Ricardo Papers" were found and their discovery required the reassembling of all the correspondence volumes which had already been set in galley. Along the way individual letters of Ricardo, or one of his correspondents, also came to light, and each of these had to be fit into the puzzle. Then, of course, there was the war, with its disrupting influence, not the least of which was the fact that in July 1940, Sraffa, along with others, was incarcerated on the Isle of Man as an enemy alien. Keynes was able to get them all released, but only after some months had passed (Harrod 1951, p. 497).

The significance of the long delay in publication and more important the fact that the volumes had appeared over the course of five years, ignoring for the moment volume eleven, meant that the journal reviews of the Sraffa volumes were fragmented. This difficulty was alleviated in some instances by journal editors assigning the same reviewer to report on the successive volumes as they were published, but there was still an absence of continuity. Oswald St. Clair appears to have been the only reviewer who actually had as many as nine volumes in hand when he wrote his review of the Sraffa volumes (St. Clair 1953).

The list of reviewers of Sraffa's *Works* was impressive: Austin Robinson, T. W. Hutchison, George Stigler, S. G. Checkland, David McCord Wright, Vincent W. Bladen, Dudley Dillard, Arthur W. Marget, J. A. La Nauze, and Oswald St. Clair. These were the reviewers for the professional journals, as against the popular press, and accordingly should be viewed as the sounding board for the economics profession's evaluation of Sraffa's endeavors. The praises for Sraffa's skills were strong; Stigler referred to the "rare scholarship . . . meticulous care . . . and the erudition" (Stigler 1953, p. 586); Marget said the volumes were "monumental" (Marget 1952, p. 159); while Checkland said they represented one of "the greatest of all feats of economic scholarship" (Checkland 1952a, p. 372).

Despite the accolades tossed to Sraffa for his editorial skills, few of the reviewers discussed the implications of his general "Introduction" and the issue of whether Ricardo discarded the labor theory of value in subsequent editions of the *Principles*. Nor did many reviewers trace the evidence which reveals that Ricardo took up the issue of value in an attempt to elaborate and refine his theory of profits. No one indicated that Ricardo was not primarily concerned with why a banana sells for a penny, as Mrs. Robinson has put it, but exclusively with the factors which determine the distribution of gross output between wages, rents and profits. His value theory was designed for a purpose quite distinct from that which concerned the neo-classical writers, with the result that most of the reviewers of the Sraffa volumes leave the "muddles" where Cannan found them in the first place. It must be stressed that not all the reviewers were unaware of the significance of Sraffa's "Introduction," and while several dealt with the significant issue of Ricardo's theory of profits, at the same time others did not believe Ricardo to be a very good theorist. In fact Hutchison expressed views which reiterated those originally set out by Foxwell, to the effect that it was not a very good idea for economists to study Ricardo, since such study merely gave credence to Marxist theory (Hutchison 1952, pp. 416, 419-21).

If an opinion is warranted, it is that in the main the reviewers of Sraffa's *Works* either did not agree with Ricardo's theoretical structure or else they did not understand it. This could also be said about Sraffa's "Introduction" and its significance. Reading the reviews today, there appears to have been little indication of any recognition of the contemporary significance of Ricardo's work, except perhaps that he was wrong about Say's law, gluts and all that. Not all reviewers were agreed, as might be expected, but none suggested that perhaps within a decade there would be a grand rehabilitation of Ricardian theory. The rehabilitation would come with Sraffa's *Production of Commodities*, which is Ricardo once more, and flows from Sraffa's "Introduction" to the Ricardo *Works*. That is why the "Introduction" was of such great significance, for like Sraffa's own volume, it represents a "prelude to a critique" of neo-classical theory. As a consequence of these new trends, by 1971, Paul Samuelson could claim that it had become the "age of Leontieff and Sraffa" (Samuelson 1971, p. 400).

The initial reviewers for the *Economic Journal* (Austin Robinson) and the *Journal of Political Economy* (Arthur W. Marget) both recognized what Robinson referred to as a need for

. . . a review of the work as a whole at a later date, when it is possible to consider all the volumes together and to appreciate the light that the correspondence throws on the development of Ricardo's thought and his meaning at certain disputable points.

(E. A. G. Robinson 1951, p. 850)

The editor of the *Journal of Political Economy*, in a note to Marget's review of volumes III and IV, announced that Marget had already agreed to prepare an overall review of ten volumes after they were published (Marget 1952b, p. 274). However, neither journal ever followed through with the initial suggestion for a comprehensive review of the *Works* as a whole. So far as the *Economic Journal* was concerned, the initial brief review by Austin Robinson of volumes I and II was followed by even briefer sketches of III and IV by R. S. Sayers (1952), and of volume V by C. R. Fay (1952). The *Economic Journal* apparently ignored the four volumes of correspondence as well as Sraffa's volume of *Biographical Miscellany*. Marget's comprehensive analysis of the Sraffa *Works* for the *Journal of Political Economy* never materialized, as he became involved in Central American problems after his retirement, died in 1962 and was buried in Guatemala. Apparently, as a consequence of the Marget commitment, the *Journal of Political Economy* carried no reviews of any of the subsequent Ricardo volumes.

In the *Canadian Journal*, Vincent W. Bladen also recognized the need for an exhaustive evaluation of Ricardo's work and correspondence. But he declined himself, noting that his review would be only a simple description, for

the publication of this definitive and superb edition of Ricardo can stimulate the study of his work; it should lead to reinterpretation

and new evaluation. The material is, however so massive, that this fruit will not come quickly to harvest.

(Bladen 1952, p. 404 [?])

As might be expected, there was a tendency on the part of all reviewers to cast a Keynesian eye at Ricardo's *Works* and to evaluate his controversy with Malthus over Say's law from the vantage point of the 1930s. To a generation of economists who had lived through the Great Depression and upon whom the impact of the Keynesian revolution was still apparent, it would have been surprising if such an evaluation had not occurred. But herein lies the great difficulty of evaluating an earlier writer's work in the light of contemporary events. In the early 1950s, to ignore the almost overwhelming importance of effective demand was near heresy, to be sure, but in the 1970s Ricardo's emphasis upon the reverberating effects of one sector having a rising supply price might make more sense, given the energy crisis. At the same time, Ricardo would be surprised to learn that the efficacy of his continuing debate with Malthus should hinge on their relatively brief discussion of Say's (Mill's) law. The issue of the distribution between wages, rents and profits, and the involvement of the determination of relative prices in such a system, was the major issue between them and not the possibility of a general glut.

Nevertheless, David McCord Wright (1952 and 1953b) and George Stigler (for a very special reason to be discussed later) evaluated Sraffa's *Ricardo* primarily in terms of Say's law and the controversy surrounding this issue. This approach gives Ricardo a short-run bias which yields him a poor grade. As Stigler noted (1953, p. 586), T. W. Hutchison (1953) flunked Ricardo as a theorist, in part because of his failure to comprehend the significance of short-run problems. To an extent, J. A. La Nauze pursued the same line, noting that Malthus "had glimpses of matters which never seemed to worry Ricardo" (La Nauze 1954, p. 116). La Nauze also claimed that Ricardo was "the worst writer of English ever to achieve enduring fame in any branch of speculation" (La Nauze 1951, p. 257) which is suggestive of his degree of receptivity to Ricardian complexity.

The two most sympathetic reviewers, both of whom were willing to evaluate Ricardo from his historical time perspective rather than their own, were economic historians, S. G. Checkland (1952a, 1952b, 1954, 1956) and Dudley Dillard (1953). Checkland brought to his reviews a vast knowledge of Ricardian England, enriched by his own research (Checkland 1949, 1953). His perception and awareness were strong. As to the Ricardian "muddles," he offered a new perspective. He noted that

We learn how he began with the idea of developing into a book the relatively simple propositions of his *Essay* of 1815, but shortly found the problem of value lying in wait for him; consequently the *Principles* appeared not as a tract focused upon the low price of corn or the profits of stock, leading to arguments so readily spiced with mild polemic, but as a treatise centred upon the inner mystery of value. We discover thereby that certain legends will comfort us no more. No longer can we point to the difficulties of

reading Ricardo, and remark that he was a poor expositor who excused himself from greater lucidity on the ground that he was writing for pundits. The new correspondence with Mill serves to remind us of the difficulties of his undertaking and the true dimensions of his achievement: the problem of exposition was inherent in the task he had set himself. It further deprives us of the legend, begun by Professors Hollander and Cannan, that Ricardo in successive editions was in retreat from the labour theory of value.

(Checkland 1952a, p. 373)

With respect to Marshall's claim that Ricardo was "feeling his way towards utility," Checkland recognizes that very early Ricardo was "attacking Say's subjective utility approach" (Checkland 1954, p. 322).

What perhaps is remarkable about Ricardo's value theory is that, though he was one of the Benthamite circle, and produced his system under the very eye of James Mill, yet both with respect to goods and to effort, subjectivism held no place, and it was left to Jevons to reach back to Locke and assert the subjectivist dichotomy. It is extraordinary that these exponents of felicity contributed to and admired a system in which it had no part. But surely it would be unwise to deduce from this that 'realistic' social thinking caused them to make an exception in political economy to the application of the subjective calculus as a guide to social welfare.

(Checkland 1954, p. 322)

The relation between distribution and value theory was clearly perceived in Ricardian terms and not from the viewpoint of neo-classical theory. Ricardian theory is not a prelude to neo-classical theory but provides the basis for an alternative view, an aggregate view of value theory.

Could Ricardo's theory of distribution be treated as a set of propositions the validity of which was independent of the conundrum of particular price or value? Could he have solved his problem as stated in the Preface without tackling value theory; more generally, is it possible to maintain a theory of distribution without integrating it with a set of deterministic statements about value? By the neo-classical approach, which imputes rewards to factors from their contribution to the product, the answer would appear to be no. But a theory proceeding in terms of a few more or less homogeneous social classes, each distinguished by the collective ownership of a particular factor, is much more likely to be independent of price or value phenomena. Such a system is

determined', though of course it may be unreal. Yet it is the orthodox followers of Marx, who, though maintaining a system of class distribution, most vigorously assert the necessary interdependence of distribution and value theory, and who energetically resist the heresy that the one can stand without the other.

Marx tells us that Ricardo 'starts' with the determination of value by labour time; this is clearly not so chronologically, and is dubious as a statement of emphasis. This was not the problem of the Preface; it was a left-over which threatened the destruction of his system. Ricardo more truly 'finished' with labour time, striving to the end to integrate it with his statement of the laws which regulate distribution. Why then did he himself attach so much importance to the attempt to merge his two chains of reasoning, from factors and from goods? There is of course the view that no theory is adequate unless it embraces the whole of a subject in all its aspects. Particular price had to be explained if a complete system was to emerge--Ricardo, like so many great thinkers, was struggling after universal explanation. But his distribution theory started from aggregates, bound together within categories each with its own peculiar law; to decompose these aggregates into their 'cell-forms' and establish the laws of value affecting them meant that unreal assumptions about productive units were unavoidable.

(Checkland 1954, pp. 322-323)

Although Checkland posed Ricardo's basic problem, he did not recognize the significance of the additional need for a measure of value. As Sraffa was later to show, the choice of a "standard of value" is the key to linking up the aggregate theory of distribution with a system of determinate prices. To borrow Marshall's phraseology, Ricardo in the draft of his "Absolute Value and Exchangeable Value" was "feeling his way" towards the transformation of values into prices. Although Checkland was astute with respect to just how value theory was a problem to Ricardo's theory of distribution, something missed by reviewers chained to the neo-classical view of the world, he failed to grasp the true significance of the third phase of the Malthus-Ricardo controversy. In his review of the fourth volume of Sraffa's *Works*, containing the draft of "Absolute Value and Exchangeable Value," his discussion is perfunctory and hurried (Checkland 1952b).

The significance of the foregoing did not escape Dudley Dillard.

The new Ricardo manuscript on "Absolute Value and Exchangeable Value," which is probably the most important new material in the first five volumes, also supports the view that Ricardo did not change his basic position on value toward the end of his life. There is one complete rough draft and an incomplete

second draft, both of which were written a few weeks before Ricardo's death in September 1823. In the *Principles*, Ricardo insisted that he was exclusively concerned with relative or exchangeable value, yet there are occasional references to absolute value, and the chapter "On Value" contains a section entitled "On an Invariable Measure of Value." Ricardo felt it would be a great advantage to have an invariable measure of value, comparable to a foot or yard in measuring length, against which all other values could be compared in order to ascertain which of two commodities had altered in (absolute) value when their ratio of exchange (exchangeable value) altered. He acknowledged that a perfect, that is, invariable, measure of absolute value was in practice impossible, but he was interested in ascertaining what the criteria of an ideal measure of absolute value would be. The significance of the material in the new manuscript lies in the emphasis on absolute value as a concept underlying exchangeable or relative value. The practical conclusions are not basically different from those of the *Principles*. The following passage from the manuscript seems to indicate that Ricardo continued to view labor as the measure of value and also as the source of value: "Every thing is originally purchased by labour--nothing that has value can be produced without it . . . That the greater or less quantity of labour worked up in commodities can be the only cause of their alteration in value is completely made out as soon as we are agreed that all commodities are the produce of labour and would have no value but for the labour expended upon them . . ."

(Dillard 1953, p. 98)

Of all the neo-classical economists who reviewed the Sraffa volumes, George Stigler was probably the most knowledgeable when it came to Ricardo's theory, as well as being the best theorist per se. Despite Stigler's acidic pen, not to mention his arrogance, he is [sic] a theorist of the first rank and an outstanding scholar in the history of economic theory, but perhaps not economic thought. In the same fashion that he said Ricardo's "policy recommendations were profoundly good but his theory was not of the highest quality," it can be said that Stigler's "theory is profoundly good but his policy recommendations are frequently bad." With respect to Sraffa's *Works*, it is significant that Stigler appears to have changed his interpretation of Ricardo on the question of value, even though it might be possible to interpret his writings in terms of being addressed to different topics, or they may be linked together, depending upon how they are viewed.

About a year prior to his review of Sraffa's *Works*, Stigler had published an article on "The Ricardian Theory of Value and Distribution" (Stigler 1952). It is, of course, an excellent article, tracing out the interconnections between the theories of population and rent, as each entered the Ricardian model, so as to determine the effect upon profits of diminishing returns in agriculture. Stigler's exposition relates

to the contributions of Malthus on population, and Malthus and West on rent theory, both of whom are correctly credited with having superior formulation to that of Ricardo. As Stigler says, Ricardo was "chiefly a borrower" in these matters of theory. What Ricardo did not borrow, however, was his theory of value, which was necessarily interspersed so as to prove that when wages rose there was no adverse effect upon the relative exchange value of goods in the system, in such a way that profits might rise *pari passu* with the rise in wages. In this fashion, Ricardo's theory of value guaranteed his pet proposition, that, "when wages rise, profits fall." As Stigler put it,

. . . a rise in wages relative to interest (profits) will raise the prices of goods made with little fixed capital or with capital of short life, relative to the prices of goods in which more, and more durable, fixed capital is used. But for broad purposes this refinement is not important: "The reader . . . should remark, that this cause of the variation of [relative values of] commodities is comparatively slight in its effects." It is unimportant because the relative prices of labor and capital can vary little, whereas the quantities of labor necessary to produce various commodities can undergo large changes. (He should also have specified that the ratio of fixed capital to wage payments cannot undergo large changes.)

As a corollary of this theory of value, there exists no perfect measure of value, i.e., a measure of value independent of the fluctuations of wage and profit rates. The varying proportions of fixed to circulating capital and the varying durability of fixed capital imply that, given a change in the ratio of wage rates to profit rates, the values of goods will change differently, depending on the choice of the commodity used to measure their values. But find a commodity which is produced with an average ratio of labor to capital (and this of average durability), then the ideal measure will be approximated.

(Stigler 1952, pp. 202-203; notes deleted)

Thus, as Stigler indicated, the validity of the Ricardian theory of distribution (the effect of rising wages) depended upon the theory of value, and the choice of a commodity with which to measure variations in the exchange values of commodities. Malthus, and to some extent Torrens, kept bringing in examples of where exchange values were affected by something other than the conditions of production (such as old wine) or where the ratios of circulation to fixed capital varied from one sector to another. Ricardo held on to the last, of course, either by assuming away the variations (rare statues and pictures), or more important, by showing that the prices of commodities produced with large quantities of fixed capital actually fell when wages rose (the secondary cause of a change in price).

The primary cause, according to Ricardo's theory of value, was of course the amount of labor time required to produce commodities. On this issue, Stigler's

1952 article is strangely silent. There is no discussion of Ricardo's labor theory of value, as such, and only if one is thoroughly familiar with Ricardo, is it possible to perceive that the labor theory of value is implicitly hidden in the crevices of Stigler's formulations.

Unlike Marshall or Hollander, Stigler does not say that Ricardo abandoned the labor theory of value, nor does he lend any support to a more recent statement, such as Lord Robbins's, that

By the end of his life, Ricardo was certainly far away from a real cost theory of value.

(Robbins 1970, p. 204, n.1; see also Fetter 1969)

Stigler is too careful a Ricardian scholar to raise such foolish arguments. But some economists, in reading Stigler's 1952 article, could come to the conclusion that the labor theory of value was not the sheet anchor of the Ricardo theory of distribution (his theory of profits).

Perhaps because he had published his piece on Ricardo's "Value and Distribution" only a year earlier, Stigler's review of the Sraffa volumes was limited to three topics: "the quality of the edition; Mill's influence on Ricardo; and Ricardo and Malthus on Say's law" (Stigler 1953, p. 586). Stigler's analysis of the latter point is superior to that of other reviewers who pursued this particular will-o'-the-wisp and as a good theorist, Stigler concluded,

The triumph of Ricardo over Malthus cannot be regretted by the modern economist: it is more important that good logic win over bad than that good insight win over poor.

(Stigler 1953, p. 599)

In 1958, Stigler returned to the issue of Ricardo's theory of value. Yes, Virginia, Ricardo did have a labor theory of value, but

I can find no basis for the belief that Ricardo had an *analytical* labor theory of value, for quantities of labor are *not* the only determinants of relative values. Such a theory would have to reduce all obstacles to production to expenditures of labor or assert the irrelevance or nonexistence of nonlabor obstacles, and Ricardo does not embrace either view. On the other hand, there is no doubt that he held what may be called an *empirical* labor theory of value, that is, a theory that the relative quantities of labor required in production are the dominant determinants of relative values. Such an empirical proposition cannot be interpreted as an analytical theory, any more than the now popular view that the price level is governed by the wage level and the productivity of labor can possibly be defended as an analytical proposition.

(Stigler 1958, p. 361; italics in original)

Moreover, Stigler continues,

. . . Among economists who were not methodologically self-conscious, who did not systematically consider the necessary and sufficient conditions for an equilibrium, the distinction would seldom be remarked. Ricardo's emphasis upon the quantitative importance of labor tended to be read as an analytical proposition that labour [sic] quantities were the sole regulators of value.

The failure to distinguish between analytical and empirical propositions has been a source of much misunderstanding in economics. An analytical statement concerns functional relationships; an empirical statement takes account of the quantitative significance of the relationships.

(Stigler 1953, p. 366)

The significance of Stigler's designation of Ricardo's theory of value as being empirical, rather than analytical, is that it limits the importance of the proposition that commodities exchange in proportion to the amount of labor time required in their production. In Sections 4 and 5 of his chapter "On Value," as discussed earlier, Ricardo certainly analyzes the effect of the degree of capitalization between industries, with the result that the significance of the primary cause is reduced to 93 or 94 percent (*Works*, Vol. I, p. 36). In addition, however, an empirical proposition is held to be inferior to an analytical proposition because of the greater universality of the latter, with the result that Ricardo's value theory is reduced to a mere quantitative proposition.¹⁵

A further significant aspect of Stigler's 1958 article is that it represents the first time an avowed neo-classical economist asserts that Ricardo's system of analysis is dependent upon the labor theory of value and that the distribution between wages and profits is so determined. This has always been the case with Marxian economists, of course, but it has been a long struggle for neo-classical writers to concede that the "economist's economist" held such muddled views. And if Lord Robbins is any indication, there are those who still cling to the ancient view.

When Mark Blaug published his *Ricardian Economics* (Blaug 1958), a volume prepared after the appearance of Sraffa's *Works*, he observed, with respect to whether Ricardo had a labor theory of value, that

. . . Ricardo's system does not rest, as Marx's system does, upon the philosophical significance of labor costs. If we drop the conception that labor alone imparts cost value to commodities, Ricardo's system remains unimpaired but Marx's theory loses its mainspring.

(Blaug 1958, p. 36)

¹⁵ For a discussion of the issue of whether there is any analytical theory of value, see Henderson 1976; reprinted in Samuels 1976 and 1993.

But philosophically, Ricardo and Marx struggled with one identical problem, namely that the distribution between wages and profits was independent and prior to the determination of the prices of commodities as these circulated throughout the system. On this score, Ricardo was concerned with the difference between the "real value of commodities" when considered as a whole, and the prices which the market assigned them individually. This was the sense in which the inclusion of durable capital required the development of the labor theory of value so far as the theory of exchange was concerned. As an explanation of aggregate profit, the labor theory of value appeared quite adequate, but as an explanation for the process of actual exchange, it required further elucidation to show just how prices followed from the values determined at the time of production.

It should not be inferred that Ricardo considered his theory of value to be incapable of providing an explanation of exchangeable value. He designed his value theory primarily as a foundation for the determination of profits by means of production coefficients, and there is strong evidence that he recognized the problems inherent in the derivation of a theory of price from his value formulation. In his last manuscript, he had not yet resolved these problems, but he indicates that he considered them capable of solution. He believed that the means to the solution was to show how absolute value regulated exchangeable value, since he considered the former to be the primary and dominant influence. Ricardo's analysis still rested on the assumption that a theory of profits was more significant than a theory of exchangeable value. The theory of profits had as its starting point the assumption that profits were the difference between the value of the fund necessary to maintain labor and the total value of the economy's output. From this fulcrum the issue of political economy would be to develop a theory which would explain the everyday movements of particular commodities. But the problem of exchangeable value was ultimately tied to absolute value and Ricardo said that as soon as he was "in possession of the knowledge of the law which regulates the exchangeable value of commodities" he would be near to the solution of the problem of the measure of changes in exchangeable value (*Works*, Vol. IX, p. 377; Ricardo to Trower, 31 August 1923).

The contrast between an underlying "absolute value" of commodities and the "exchangeable value" evident in the process of circulation, was referred to by Ricardo many times over the course of the years. In the first edition of his *Principles* he said, "no commodities whatever are raised in absolute price, merely because wages rise . . ." (*Works*, Vol. I, p. 63). In the third edition of the *Principles* he claimed there was a difference between "variations in the relative value of commodities" and the variations in their "absolute value . . ." (*Works*, Vol. I, p. 21). But these references were made in passing, and it was not until 1823 that Ricardo explicitly stated what he meant by "absolute value." Prior to the preparation of the manuscript, "Absolute Value and Exchangeable Value," Ricardo had at times used terms such as "positive value" and "real value" to designate the concept of an underlying value from which exchangeable value was derived. He told his friend Trower that "I do not, I think, say that the labour expended on a commodity is a measure of its exchangeable value, but of its positive value" (*Works*,

Vol. IX, p. 1; Ricardo to Trower, 4 July 1821) and that the "exchange value of a commodity cannot alter . . . unless either its real value, or the real value of the things it is exchanged for alter" (*Works*, Vol. IX, p. 38; Ricardo to Trower, 22 August 1821).

Eventually, in the unfinished manuscript on the two kinds of value, Ricardo contended that "absolute value" could only be altered by changes in the production process, while "exchangeable value" could be altered by a change in wages. This meant that exchangeable value could be affected by (1) changes in absolute value induced by difficulties or improvements in production, and (2) by changes in distribution of income which did not affect absolute value. If absolute value was altered by changes in the production process, then flexibility and adjustment in the long run caused exchangeable value to change proportionately with absolute value. But if exchangeable value was altered by changes in distribution, then absolute value would remain constant and the exchangeable values of commodities would deviate from the corresponding absolute values in accordance with individual ratios of durable and circulating capital. Therefore, a different relationship would exist between the absolute value and the exchangeable value of any commodity, depending upon its composition of capital. To determine the actual exchange ratios of any two commodities it was first necessary to find the ratio of absolute to exchangeable value for each commodity. This, of course, necessitated the isolation of an invariable standard of value. Enter Piero Sraffa and his Standard Commodity. As Samuelson has remarked,

In this age of Leontieff and Sraffa there is no excuse for mystery or partisan polemics in dealing with the purely logical aspects of the problem.

(Samuelson 1971, p. 400)

Conclusion

Ricardo's Ricardo was the economist's economist. Far from being muddled, he possessed insights into the intricacies of economic theory which escaped not only his contemporaries, but the traditional followers of orthodoxy. Only the refugee bookworm in the British Museum appreciated and understood the theoretical problems with which Ricardo struggled, despite the fact that the bookworm was unaware of Ricardo's last attempts to resolve the conundrum. A second refugee provided most of the missing pieces, even though there remains some doubt as to whether Sraffa's *Production of Commodities by Means of Commodities* has resolved all of the problems of the transition from values to prices.

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