




JOSEPH A. SCHUMPETER,  
Historian of Economics

*Perspectives on the History of Economic Thought*

Edited by Laurence S. Moss



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# JOSEPH A.SCHUMPETER, HISTORIAN OF ECONOMICS

Joseph A.Schumpeter was one of the greatest economists of the twentieth century. His *History of Economic Analysis* is perhaps the greatest contribution to the history of economics, providing a magisterial account of the development of the subject from Ancient Greece to the mid-twentieth century.

Schumpeter's views on his predecessors have proved to be a constant source of controversy. Here individual chapters examine such disparate questions as Schumpeter's apparent disregard for the American Institutionalists, his grudging respect for Adam Smith, the perspicacity of his views on Quesnay, and his preference for Walras over Pareto. Four chapters are devoted to the early medieval schools, neglected in all of his writings. Schumpeter's magnum opus is related to the rest of his economic output, especially his views on money and on methodology.

With contributions by leading historians of economics from six countries, this volume analyses Schumpeter's contribution to the history of economics, considers its lasting significance, and uses it as a benchmark to assess the current state of the field.

**Laurence S.Moss** is Professor of Economics at Babson College, Massachusetts.



# JOSEPH A.SCHUMPETER, HISTORIAN OF ECONOMICS

Perspectives on the history  
of economic thought

Selected papers from the History of Economics Society  
Conference, 1994

*Edited by Laurence S.Moss*



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Laurence S.Moss  
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# INTRODUCTION

*Laurence S.Moss*

The twenty-first annual meeting of the History of Economics Society was held at Babson College, 10–13 June 1994. Since 1994 marked the fortieth anniversary of the publication of Joseph A. Schumpeter's *History of Economic Analysis (HEA)*, a request went out to those presenting papers at the conference to appraise what Schumpeter said about their subjects (if, indeed, he said anything at all) and to assess how well Schumpeter's treatment stacks up to contemporary thinking on their areas of expertise. The point of this exercise was not only to pay homage to perhaps the greatest work by one of the greatest economists of the twentieth century but also to use the *HEA* as a benchmark against which to measure progress in our small but thriving subdiscipline within economics. I was delighted that many of the 130 presentations harked back to Schumpeter's majestic *HEA*, either to document an alternative treatment of a current topic of interest or else to commend the esteemed Harvard economist for his pioneering investigations.<sup>1</sup>

At the end of the Babson conference a referee committee was set up and charged with the practical responsibility of deciding which of the papers submitted for publication would be accepted for inclusion in this volume. Eighteen of the thirty-six submissions were selected to become chapters. Together these chapters offer a rich tapestry of commentary and reflection on economic literature spanning several centuries. What they have in common is their connection to Schumpeter's magisterial volume or (with several exceptions) to important themes that Schumpeter raised in that volume.

Schumpeter had not completed his work on the *HEA* manuscript at his death in 1950. It remained for his third wife, the scholar Elizabeth Boody Schumpeter, to cull fragments, incomplete chapters, and nearly completed sections of the early drafts. She assembled a coherent and monumental study that ranged from Ancient Greece to Keynes and, in the words of one eminent reviewer, aimed "to account for every writer who made a significant contribution to the development of economic theory" (Viner 1991:327). Of course, no book could do all that, especially for a discipline like economics in which the outer frontiers were changing as its scope enlarged and its methods of investigation developed. Despite its many blemishes, Viner got it right when he described Schumpeter's *History of Economic Analysis* as "the most constructive, the most original, the

most learned, and the most brilliant contribution to the history of analytical phases of our discipline which has ever been made” (1991:328). When asked to prepare a suitable introduction to the 1994 reprinting of the *HEA*, Mark Perlman concurred with Viner’s assessment while acknowledging that in certain areas the work remained unfinished: “Flawed by its incompleteness (due to the author’s sudden death), there is, nonetheless, nothing else like it in the English language; and even when one turns to other cultures, nothing has appeared which has its appeal, if not its scope” (Perlman 1994:xxi). The task of remedying this incompleteness is what motivated several of the authors who have prepared chapters for this current volume, as I shall explain below.

The following chapters were selected as high-quality contributions to economics and its historical development but they were chosen with a broader goal in mind. The chapters taken together highlight some of the most interesting facets of Schumpeter’s book: its treatment (or mistreatment) of certain thinkers and topics and most remarkably its relationship to the whole of Schumpeter’s scientific contribution made during the first half of the twentieth century.

In the remainder of this Introduction I shall highlight the interconnections between the chapters below and the light they throw on both Schumpeter’s historical treatise and other aspects of his scientific contribution. I make no claim whatsoever that the interpretive opinions of the nearly two dozen economists presented here add up to an embroidered whole; admittedly, we have a patchwork quilt of one sort or another. The linkages that I record here would probably be no surprise to the individual authors, but no vote has been taken on them. This volume provides an interesting and, I hope, not too controversial companion to the *HEA*. At the same time it represents the twelfth in the History of Economics Society’s “Perspectives on the History of Economic Thought” series. In its topics and in the distribution of its authors, this volume of the series continues the Society’s history of bringing together distinguished economists from around the globe and promoting inquiry into the history of economics and related areas of intellectual history.<sup>2</sup>

The best place to start is with Schumpeter’s personal understanding of what it was that he was trying to do in *HEA*. Schumpeter announced that his book was to be a history of economic analysis: “theorems and not persons [were to be] the heroes of [his] story.” In point of fact, the great book never stuck to this or any single historical approach. The reviewers of the book acknowledged as much in 1954, when the book first appeared. According to Viner, a legitimate history of economic analysis can be written from a variety of perspectives. First, one can concentrate on ideas and concepts, the “intellectual ingredients of theories.” Second, one can write about the history of theories as ingredients in large systems of thought. There is always the third alternative, of writing about the economists or philosophers themselves and their respective schools of thought. Finally, one can concentrate on the history and use of particular analytic tools. Viner concluded that Schumpeter provided his readers with a little bit of every conceivable approach and “move[d] from one to another freely as

he [went] along” (Viner 1991:328). The reader senses a hypnotic quality to the work as Schumpeter declares what is or is not important about the immense literature that he somehow managed to survey in a thousand or so pages of small text. Still, despite the unanimous praise, it is part of a scholar’s business to scratch beneath Schumpeter’s rhetorical swirls and erudite opinions to ask what it is that Schumpeter *thought* he had accomplished and, equally as important, what it is that he *actually* accomplished.

Mark Perlman’s “Assessing the Reprinting of Schumpeter’s *History of Economic Analysis*” (Chapter 1) provides a stimulating opening for this volume. It is well known that Schumpeter praised Léon Walras for his vision and technical accomplishments in formulating the idea of general equilibrium. What is so puzzling to scholars like Perlman, then, is why Schumpeter did not heap the same quantity of praise on Vilfredo Pareto, whose broader sociological concerns line up so closely with what Schumpeter considered to be important to economic sociology and economic history. With its emphasis on the nonrational aspects of human action, Pareto’s sociology should have had strong appeal for Schumpeter “the man” as well as Schumpeter the “social scientist.” Yet it is Walras and not Pareto who emerges as the hero in the work that was, most ironically, supposed not to have any heroes at all. Mark Perlman asks why Schumpeter generally overlooked the importance of Pareto’s sociology. Schumpeter’s obituary of Vilfredo Pareto was prepared a year or so before Schumpeter himself died, and it is tempting to speculate on how Schumpeter might have revised his treatment of Pareto had he been blessed with more time to finish the *HEA* (Schumpeter 1949). It is clear that both Schumpeter and Pareto emphasized the “nonrational” side of human action, although Schumpeter considered it mostly in terms of preanalytic visions that subsequently motivate the development of analysis (which then somehow escapes the limitations of the preanalytic vision). Pareto, on the other hand, stressed that nonrational elements are manifest in all human action. Other contributors—Roger E. Backhouse (Chapter 2), Antonio Callari (Chapter 17), and Yuichi Shionoya (Chapter 18)—also touch on the problem of the presuppositions of economics and how they shape analysis.

Schumpeter’s notion of a preanalytic “vision” must have seemed an odd idea to those economists who in the second part of this century campaigned to make economics a rigorous science more like physics than like psychology. By the 1960s, however, Schumpeter’s pattern of thought had become popular among historians of science through the related Kuhnian construct of the “paradigm,” which came to dominate historiographical writing. Roger E. Backhouse (in Chapter 2) persuades us that Schumpeter’s notion of vision actually anticipated the one made famous by Thomas Kuhn. Indeed, the *HEA* recognizes at one place after another that economics, like all sciences, emerges from the activities of collections of thinkers who have some conscious understanding of the involvement of the others. These discussions add up to an implicit contribution of the now fashionable field of “sociology of science.” Backhouse’s observations are firmly supported



by Shionoya (Chapter 18), and both credit Schumpeter for his contributions to the fledgling field of sociology of science.

Although Schumpeter had a remarkable tendency to uncover clusters of intellectuals and construct from them veritable “schools of thought,” there are places in his *HEA* where he seems to turn a blind eye to important bodies of economic literature. In some cases, these omissions are not the sorts of matters that Schumpeter might have corrected in a final, polished version of his *HEA*. Many of the chapters that follow focus on errors and omissions in the story Schumpeter tells about the history of our discipline. William Barber, who has done much to call attention to the American economic contribution, suggested that Schumpeter’s selective vision may have seriously biased his handling of American economic thought in the *HEA*. Schumpeter was distinctively unkind to the Wisconsin school of thought—a school that included John R. Commons. The Wisconsin school’s considerable impact on the New Deal policy during the 1930s merited at least a mention. (Could Schumpeter’s opposition to the New Deal have biased his historical judgment?) The great institutionalist John R. Commons, who pioneered an intelligent appreciation of the role legal institutions play in giving shape to the market process, does not receive as much as a nod in the *HEA* (indeed, his name does not even appear in the *HEA* if we can rely on the author index). Another example is the great Darwinian-style economist, Thorstein Veblen, who is mentioned several times but is not fully appreciated. (In Chapter 15, Professor Broda offers an interesting comparison of the methodological approaches of Commons and Veblen, repairing this obvious gap.)

Of course, there are several American economists that do receive praise for their analytic achievement, but Barber suggests that an ideological bias on Schumpeter’s part may have clouded his judgment. Barber finds it hard to avoid this verdict, especially given the praise Schumpeter heaped on Henry C. Carey, for whom the bulk of the American economics profession had only contempt. Similarly, Bette Polkinghorn (in Chapter 4) expresses puzzlement as to why Harriet Martineau and Millicent Fawcett, both of them English writers with publications enjoying major market successes and not without some analytic acumen, receive no attention from Schumpeter.

Part I concludes with a stimulating chapter by Annie L. Cot and Jérôme Lallement. In the grand tradition established by Schumpeter himself, Cot and Lallement try to define the historical moment when the concept of “the economy” arose. The emergence of this distinct mental entity separate from other longstanding notions—“community,” “empire,” “borough,” “church,” and so on—required the juncture of new categories of thought. Cot and Lallement identify three “ruptures” that occurred over two centuries and that are represented in important writings by Bernard Mandeville, John Locke, and Jeremy Bentham. The junction of these ruptures with the past establishes the frontiers of a new discipline which we now recognize to be “economics.” Economics studies the novel idea of “the economy.” Cot and Lallement suggest that one cannot suppose

that ideas about prices, commodities, interest rates, and self-seeking human behavior were always there to be studied as “economic facts,” as Schumpeter contended. Instead, it may be impossible to write a history of analysis that does not situate economics in a cultural nexus of understandings and special meanings. Cot and Lallement can be interpreted as proclaiming that Schumpeter’s research program in *HEA* was more than marred by several errors and omissions; indeed, the project was flawed from top to bottom.

According to Cot and Lallement, who draw inspiration from Michel Foucault’s pioneering work on the archaeology of the human sciences, what Schumpeter tried to accomplish was virtually impossible (Foucault 1994). How can anyone write a history of economic analysis going back to ancient times when the concept of an economic system is of such recent vintage? Most of the authors in this volume, however, would not go so far as Cot and Lallement and rule out the search for the historical roots of ideas about the economy that Schumpeter pioneered so fruitfully. What unites most of the other contributors, in fact, is an apparent agreement that Schumpeter’s goal was a legitimate one but that he made several errors and many omissions.

Of all Schumpeter’s alleged errors in the *HEA*, the one that seems to have stirred up the most debate among historians is Schumpeter’s remark about an alleged “great gap” in the flow of analytic economic discussion between the ninth and fourteenth centuries (Schumpeter 1954:73). That is why this volume devotes a considerable amount of space to the subject. Part II contains a most interesting and diverse collection of chapters relevant to this most notorious assertion of Schumpeter’s. I suspect that it is best to review Schumpeter’s apparent error first and then move on to a short summary of the arguments presented in the papers.

At the start of the second part of the *HEA*, in a remarkably polished chapter entitled “The Scholastic Doctors and the Philosophers of Natural Law,” Schumpeter explained to his readers why he was jumping 500 years ahead to St. Thomas and the thirteenth-century renaissance from early Christian thought (St. Augustine and the Roman Church fathers), thereby ignoring the enormous literature of the Eastern Byzantine Empire and by implication the literature of Egypt, Persia, Spain, India, China, Africa, and other places as well. Schumpeter acknowledged legal rights, monetary matters, including fiscal tax policy, and commercial and agricultural policy were of course subjects of an immense literature. This is undoubtedly true, but Schumpeter went on to assert that among the thousands of manuscripts and fragments that have survived between, say, AD 800 and AD 1300 there is precious little that amounts to a philosophical or speculative outlook about money, taxes, and law. For that reason, “no piece of reasoning that would have to be mentioned here has been preserved” (73). Is that true? Is there a great gap in the literature of analytic economics?

Hamid Hosseini does not think so, and in Chapter 6 he does his best to set the record straight by mining the Persian sources. Hosseini calls attention to many medieval Muslim writers, inspired by the Islamic ethos and influenced

by Greek and Iranian thought, who explained the economic realities of their societies during the centuries of Schumpeter's great gap. Louis Baeck follows in Chapter 7, with an interesting treatment of Ibn Khaldun, a cleric of the fourteenth century (at the tail end of Schumpeter's blackout period) who, Baeck argues, is the greatest social scientist of medieval Islam. Schumpeter was aware of Ibn Khaldun's seminal contributions as a historian and pioneer sociologist, but he perhaps understated Ibn Khaldun's contributions to the theory of economic development (Schumpeter 1993).

In Chapter 8, Nelson P. Lande provides a clear analysis of the linkages the great twelfth-century Jewish philosopher Maimonides detected between wealth and charity. Apparently, charity is justified not in terms of the salutary consequences it will have on the recipients but in terms of the personal impact it has on the state of mind of the donor. Maimonides ranked the different categorical ways in which charity may be given from most preferred manner of giving charity to the least preferred method. Lande does not make any attempt to distinguish religious or theological discussion from the rudiments of an emerging social science. Still, Lande's accurate and authoritative presentation of Maimonides's views will pave the way for a greater appreciation of this philosopher by historians of social science. The ground has been cleared for others to debate whether the work of Maimonides should be considered an exception to the "great gap." Interestingly, Maimonides is mentioned at least once in Schumpeter's *HEA* as the great Jewish theologian who, like St. Thomas, tried to reconcile religious doctrine with Aristotelian analysis.

Finally, in Chapter 9, Mark Tomass offers us a readable and extremely useful translation of the significant parts of the Egyptian Al-Maqrízi's pioneering essay on money, which was written at the start of the fifteenth century. Technically, this work, like Ibn Khaldun's, lies outside Schumpeter's blackout period, but it suggests that even in the literature Schumpeter did cover there is more work to be done. Ordinarily the manuscript would be classified as "late Renaissance" except that it was written in a tumultuous period: at the time, the Islamic community was nearing the end of its glorious age of accomplishment and prosperity. Al-Maqrízi's goal was to explain the depression-like crisis to the masses. His method was to review significant events in history with an eye toward making policy recommendations for ending the current crisis. In order to lay the foundation for policy formulation, Al-Maqrízi went beyond Maimonides in his writings. Al-Maqrízi claimed that it is not the quality of one's acts that is of prime importance but the consequences of the acts. He moralized about the evils of corruption, currency debasement, high rents, oppressive taxation, and so on, but his moral outrage is remarkably relegated to the strictly scientific claim that corrupt activities cause living standards in the realm to fall. Although Tomass is much more guarded in his praise of the analytic quality of this discussion than, say, Hosseini, his chapter suggests that Al-Maqrízi's special book may indeed be the beginning of modern social science. Tomass also argues that future histories of economic thought can ill

afford to do what Schumpeter did and omit references to fourteenth-century Islamic writers Ibn Khaldun and Al-Maqrízi, or for that matter the rich harvest of Persian and Jewish writers also.

Thanks to the research presented in this part and to a variety of important other writings and papers, some of which appeared in previous History of Economics Society conference volumes, Schumpeter's "great gap" has begun to be filled (Essid 1987; Ghazanfar 1991; Soofi 1995). As this century ends, historians can celebrate some success in responding to Schumpeter's implicit challenge. (The textbook literature in the history of economics has yet to take adequate notice of this literature, however.)

Part III contains two stimulating chapters responding to significant controversies sparked or at least fanned by the *HEA*. It is a well-known fact that Schumpeter intended to publish a major work on money and banking that would elaborate and in some ways supplant an earlier monograph that had been favorably received by economists (Schumpeter 1952). Schumpeter's major work existed in the form of a manuscript written in German that he had prepared in Europe and carried with him to Harvard, where he planned to make major revisions. That manuscript was finally published in 1970. It is clear that Schumpeter considered his theoretical manuscript on money, begun in the 1930s, to be inadequate and, according to Robert Loring Allen, he "had been fussing with it ever since." It is clear from Schumpeter's personal correspondence that as late as 1949 he was planning a revised English version (Allen 1991, 2:228–9). His unsettled views on money and credit and their relationship to the formal features of a capitalist society as expressed by the general equilibrium model must have shaped his understanding of the history of monetary economics. There are clues hidden in the *HEA*.

Two papers at the conference were addressed to Schumpeter's monetary views, and both have become chapters in this part. In Chapter 10, Ghislain Deleplace reviews the complicated discussion that Schumpeter offered in Part II, Chapter 6 of the *HEA* about the differences between real analysis and nominalist monetary analysis and how Schumpeter's personal views on the subject were in a confusing state of development. It is clear from Schumpeter's discussion that he drew heavily on the quantity theory of money to make his antimetallist position consistent with his real approach to production and exchange. According to Deleplace, Schumpeter, despite all of this, could not deal with the general equilibrium problem that confronts the general equilibrium school; namely, that in equilibrium any commodity can serve as the numeraire in which to measure prices and that money seems to have no place in such schema at all. Deleplace speculates about what Schumpeter's views on money would have been like had he paid more attention to the 1577 French debate about the separation between the "unit of account function" of money and the "medium of exchange function" of money. Had Schumpeter stepped beyond Bodin and Malestroit, he might have broken new ground and seen a way to integrate money into general equilibrium analysis. This distinction between

money as a “medium of account” and money as a “medium of exchange” does seem to be coming into its own in monetary economics, and there is some evidence that Schumpeter may indeed be named a pioneer of this development (Cowen and Kroszner 1994; Shah and Yeager 1991).

In Chapter 11, Richard Arena and Agnès Festré remind us of Schumpeter’s extensive search in his many theoretical books and articles for an alternative to mainstream economics, which posits that the financial sector plays a fundamental role in the development of a capitalist economy. Inventions do not instantly become innovations and thereby raise living standards. It is a complicated business to wrest resources free from other steady-state applications. In *Business Cycles* Schumpeter even went so far as to define capitalism as “that form of private property economy in which innovations are carried out by means of borrowed money, which in general, though not by logical necessity, implies credit creation” (Schumpeter 1939:1, 223). Arena and Festré amass an impressive list of references where Schumpeter tries to explain why the financial sector must have real effects, and they suggest that Schumpeter’s *HEA* ought to be informed by this insight as well. It remains for others to take this next important step and demonstrate the connections between financial intermediation and real economic development.

Part IV of this book moves on to the classical school of economics and fleshes out some details of Schumpeter’s thinking about this important development in economics. In Chapter 14, Steven Pressman gives Schumpeter high marks for a correct understanding of the Physiocratic notion of the *Tableau Economique*—the famous zigzag diagram. Schumpeter’s remarks in 1954, especially those to the effect that the *Tableau Economique* was neither a general equilibrium model of the economy nor an input—output schema, are remarkably coherent and have held up well. Pressman explains that the *Tableau* was not a general equilibrium model because it gave pride of place to money as the means by which economic exchanges allowed the surplus production in agriculture to nourish all classes. It was not an input—output model either, Pressman argues, because of the importance Dr. Quesnay attached to the surplus idea. Pressman praises Schumpeter for his perceptive understanding of the Physiocratic school.

Two characteristics of Schumpeter’s treatment of classical economics have been much commented on by reviewers. The first is Schumpeter’s apparent dislike for Adam Smith as an original theorist and his consequent dismissal of the *Wealth of Nations* for containing little that was original for its time (Viner 1991:338). The second is Schumpeter’s strong distaste for vulgar utilitarianism, which, according to Schumpeter, owes its popularity to Jeremy Bentham’s towering influence but which ironically had very little to do with the theoretical content of Bentham’s economics (Viner 1991:334). Both conclusions may have been hasty and overdrawn, as Chapters 12 and 13 demonstrate.

In Chapter 12, Spencer Pack argues that had Schumpeter a more complete knowledge of the entire body of Adam Smith’s writings—especially in the 1762–3 report of Smith’s lectures, which was rediscovered only in 1958 (Smith

1978)—he might have had more genuine praise for Smith's analytic contribution. Pack explains that the idea of the “invisible hand” is not a description of laissez-faire policy but instead a metaphor that Smith employed to communicate the subtle insight that customs, habits, and institutions often have unintended consequences, which may be undesirable as well as desirable. In the end, a careful study of the entire body of Smithian literature suggests that Smith was an epistemological skeptic and not at all unlike David Hume.

In Chapter 13, Nathalie Sigot examines the impact that Bentham's utilitarian approach to legislation had on the specific description and analysis Bentham offered of the segmented labor market. This presentation is enough to cast doubt on Schumpeter's claim in the *HEA* that the analytic stature of Bentham's economics is totally independent of his utilitarian theory of legislation. Sigot examines how the utilitarian approach influenced what Bentham had to say about wage rate determination.

The three chapters of Part V cover ground that is not directly related to Schumpeter's *HEA*. As we are reminded in Chapter 3, Schumpeter was maddeningly silent about the American Institutionalists as theorists. In Chapter 15, Professor Broda contrasts the use of evolutionary ideas in the writings of Thorstein Veblen and John R. Commons. This essay fills an important lacuna in the *HEA* in a manner that would have appealed to Schumpeter, who had a rich interest in related streams of thought in science.

In Chapter 16, Peter J. Boettke and David L. Prychitko review the considerable number of contributions to subjectivist economics that we find in the economics of Kenneth Boulding. Their discussion points up the irreconcilable contrast between a subjectivist economics that argues that the social world is not much more than a social construction of reality carried out under conditions of radical uncertainty and a general equilibrium framework that assumes that information is costlessly available to all and objective and measurable in character. It is clear that Schumpeter favored a thoroughgoing objectivism in economics, at times denying that “economic facts” were anything more than sense sensations. Boulding and the modern Austrian school represent an approach to economic literature that is from this point of view “anti-Schumpeterian” in both detail and spirit and yet deserving of a place in any comprehensive history of *analysis*.

In Chapter 17, Antonio Callari indicts classical political economy for its attachment to patriarchal modes of discourse that themselves help promote the subordination of women in our culture. I do not think that Schumpeter would have ever suspected that conceptual thought could have such an unintended effect on both social and political organization. Callari is convinced that a discourse that does not distinguish the gender of agents perpetuates, and even justifies, the lack of discussion about subordination. This is the great failing of modern social science. So long as economic discourse is patriarchal discourse, feminist economists are not likely to find much interest in either classical or neoclassical economics. Callari is concerned that those who have studied the methods of historical scholarship in our discipline—and Callari's list probably includes Schumpeter—are ignorant of

the way patriarchal modes of discourse divert attention from the reality of the situation in which women find themselves. With Callari's chapter we have passed far beyond the style and content of the history of economics that characterized Schumpeter's *HEA* to the politics of discourse itself.

Finally, in Chapter 18, we return to the broad problem of historical scholarship in Schumpeter's great book and how that effort interrelated with Schumpeter's contribution to economics and methodology. Professor Yuichi Shionoya, Japan's most distinguished Schumpeter expert and past president (1990) of the International Schumpeter Society, has provided us with an erudite and perhaps definitive account of Schumpeter's ideas about the sociology of science. According to Shionoya, "the sociology of science draws attention to the actual activity of science that is carried out in social surroundings and tries to clarify empirical and dynamic phenomena such as growth and decline, acceptance and rejection of specific sciences." Schumpeter's interest in sociology of science was related to his quest for a "universal social science."

Shionoya explores the tension in Schumpeter's writings between the preanalytic vision and scientific explanation on the one hand and the clustering of economists into schools of thought and related sociological groupings on the other. These explorations lead Shionoya to the perennial problem of Schumpeterian research—that is, why Schumpeter praised Walras and Marx at the same time. Shionoya reviews the relevant literature and offers his own original take on the relationship between statics and dynamics in Schumpeter's theoretical system.

Shionoya ends his chapter with suggestive remarks about the important differences between John Maynard Keynes and Schumpeter. It is generally agreed among scholars that the public perception was that (by 1950) Keynes had scooped Schumpeter in popular attention as the world's most celebrated economist. Keynes's scientific contribution has only in recent years lost some of its luster. Shionoya points out that Schumpeter was concerned with economic development and not the Keynesian problem of short-term stability of the economy. Schumpeter considered capitalism an essentially stable system that does not require activist fiscal and monetary policies. Furthermore, by upholding the importance of saving and the entrepreneurial process, Schumpeter provided the "severest critique" that Keynesian economics ever faced.

Perhaps Schumpeter died before he had time to include his own contributions to analysis in the *HEA*. If he had been able to do so, we would have a better understanding of what constituted genuine analytic progress for Schumpeter and what constituted retrogression or decline. We shall not be able to settle these issues completely, and the debates over the meaning and significance of Schumpeter's economics will continue well into the twenty-first century. The essays in this volume are evidence that Schumpeter's great historical account of economic analysis remains a benchmark from which historians of economics of all stripes and interests, from finance and fiscal policy to feminism and philosophy of science, can still draw inspiration.

NOTES

- 1 This book is part of a longstanding series published under the title *Perspectives on the History of Economic Thought*. The first eleven volumes in this series were published between 1987 and 1995 by Edward Elgar Publishing Limited, Grower House, Croft Road, Aldershot, Hants GU11 3HR, England, and are still in print. In 1995 Routledge agreed to take over the series; this book (volume 12) is the first to appear under the new publication arrangement.
- 2 Compare the Constitution of the History of Economics Society (rev. 19 June 1988), which was originally adopted at the first annual business meeting of the Society at Chapel Hill, North Carolina, on 29 May 1974. Requests for information concerning membership should be directed to the current secretary-treasurer, Professor John J. Bethune at Bellarmine College, 2001 Newburg Road, Louisville, KY 40205-0671.

REFERENCES

- Allen, Robert Loring (1991) *Opening Doors*, 2 vols., New Brunswick, NJ: Transactions.
- Cowen, Tyler and Kroszner, Randall (1994) *Explorations in the New Monetary Economics*, Cambridge: Blackwell.
- Essid, M. Yassine (1987) "Islamic Economic Thought," in T. Lowry (ed.) *Pre-Classical Economic Thought*, Boston: Kluwer, pp. 77-102.
- Foucault, Michel (1994) *The Order of Things: An Archeology of the Human Sciences*, New York: Vintage.
- Ghazanfar, S.M. (1991) "Scholastic Economics and Arab Scholars: The Great Gap Thesis Reconsidered," *Diogenes: International Review of Humane Sciences*, no. 154, April-June.
- Perlman, Mark (1994) "Introduction," in Joseph Schumpeter, *History of Economic Analysis*, London: Routledge, pp. xvii-xxxix.
- Schumpeter, Joseph (1939) *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, 2 vols., New York: McGraw-Hill.
- (1949) "Vilfredo Pareto: 1848-1923," *Quarterly Journal of Economics*, reprinted in *Ten Great Economists*, New York: Oxford, pp. 110-42.
- (1952) "Money and the Social Product," trans. A.W. Marget, *International Economic Papers*, vol 6., American Economic Association.
- (1970) *Das Wesen des Geldes*, Göttingen: Vandenhoeck & Ruprecht.
- (1993) [1912] *The Theory of Economic Development*, John E. Elliott (ed.), New Brunswick, NJ: Transaction.
- (1994) [1954] *History of Economic Analysis*, London: Routledge.
- Shah, Parth J. and Yeager, Leland B. (1994) [1991] "Schumpeter on Monetary Determinacy," *History of Political Economy* 26(Fall): 443-64.
- Smith, Adam (1982) [1978] *Lectures on Jurisprudence*, R.L. Meek, D.D. Raphael, and P.G. Stein (eds.), Indianapolis: Liberty Classics.
- Soofi, Abdol (1995) "Economics of Ibn Khaldun Revisited," *History of Political Economy* 27(Summer): 387-404.
- Viner, Jacob (1991) "Schumpeter's History of Economic Analysis," [1954], in D.A. Irwin (ed.), *Essays on the Intellectual History of Economics*, Princeton: Princeton University Press, pp. 327-45.





# Part I

## METHODS OF SCHOLARSHIP



ASSESSING THE REPRINTING  
OF SCHUMPETER'S  
*HISTORY OF ECONOMIC ANALYSIS*

*Mark Perlman*

This is the fortieth anniversary of the original publication of Schumpeter's *History of Economic Analysis*.<sup>1</sup> Routledge, which holds the distribution rights ex-North America, has brought out a new printing and asked me to prepare an introduction for it.<sup>2</sup> To dispose of my introduction quickly, let me say that it has five parts. The first two summarize Schumpeter's place in the history of economic thought, and the place of the history of economic thought in Schumpeter's own work. The third summarizes in moderate detail the contents of the book. The fourth surveys the critical reviews given the book, principally the opinions of George Stigler, Frank H. Knight, I.M.D. Little, Lionel Robbins, Mark Blaug, Ronald Meek, and Jacob Viner. And in the fifth section, I give my own assessment, an assessment which takes account of what others have thought, but which goes somewhat beyond their reactions.

In that fifth section I speculate on two points. Virtually all of the other reviewers comment on the breadth of the vision Schumpeter wanted the book to contain. I address myself to that point and raise some questions about that vision. And that is the first point I wish to discuss here.

My second point goes to some matters of judgment. As almost everyone in the field of the history of thought knows well, Schumpeter reserved his greatest praise for Léon Walras. Robbins thought this judgment a major error, since Robbins thought that it was David Ricardo who deserved the laurel wreath. In my printed essay I have tried to explain that difference in evaluation in terms of Schumpeter rejecting the Utilitarian Creed which underlay (and underlies) most of Anglo-American economics. But, I went on to suggest that it was probably Vilfredo Pareto, rather than Walras, who truly deserved the laurel which Schumpeter intentionally awarded to Walras. It is my judgment, one flying somewhat in the face of the explicit assessment Schumpeter made in one of his last essays, the one on Pareto, which I shall try to explain in the second part of this chapter. As my two views, one relating to the vision and the other to the place of Pareto, are related, let us turn first to the easier, the one about the vision.

## THE FLAW IN SCHUMPETER'S VISION

When I wrote that I thought that there was a flaw in Schumpeter's *History of Economic Analysis vision*, I certainly made it plain that the flaw was not fatal: the book remains as the outstanding achievement in the history of our field. Rather, Schumpeter, as Mark Blaug pointed out (Blaug 1962:51), was unable to deliver the goods that he had promised. What set Schumpeter's dream above the others was the multiplicity and complexity of its parts. But, assuming that Schumpeter sought to offer a vision, how can his vision be judged? Hayek, in some senses a product of the same Viennese *Gymnasium*-mold which produced Schumpeter, offers the beginnings of an interesting comparison and ultimate criticism. Hayek came to embrace the complex paradigm of individualism—utilitarianism. Accordingly, had he written of Schumpeter's vision, he probably would have said (no doubt politely) that Schumpeter had it wrong.

But Hayek's enthusiasm for the individualism-utilitarianism paradigm, emphasizing in his economics the centrality of Bernard Mandeville, Adam Smith, J.S. Mill and personal liberty, brings to my mind the question of various possible alternative" paradigms (Hayek 1978:249–66). I mention but three: the centrality of scarcity, the centrality of uncertainty, and the centrality of essential (i.e. stable) moral imperatives (i.e. values).

As we have seen, Schumpeter rejected the paradigm of individualism-utilitarianism (and personal liberty). He did not seriously consider the paradigm of uncertainty. But, in the absence of any other specification, it seems to me he was groping for some paradigm of fundamental social morality. He was easily sidetracked, and spent too much effort decrying ideology (although he never decried theology).

Meek noted in his Marxian interpretation that prior to the classical tradition, economics dealt with social (by which I suspect he might have meant stable imperatives) issues like the relationship between workers and their lords (Meek 1962:1ff). He went on to say that during the classical period that paradigmatic interest shifted away from an historically appropriate discussion about classes, people, and social organization to an historically inappropriate nexus between producers and goods. My suggestion is that the vision that Schumpeter really sought was one involving something akin to a theological paradigm—integrating fundamental, non-changing, ethical and social values and the dynamic workings of an evolutionary economy.

By fundamental human and social values I mean an absolute, true system which was exogenous to time and place. It was for this reason that so much of Schumpeter's interest focused on medieval writers and Natural Law, but his own remarriage after his divorce alienated him from the religion of his ancestors. Loran Allen asserts that while Schumpeter seemed to believe that *conventional* religious beliefs were for mortals lesser than he, he became increasingly mystical as he grew older—to the point of writing to and talking with his dead mother and his dead second wife (Allen 1991, 2:199–200). My own assessment differs

from Allen's, who like many modern scientists offer their discussions and judgments of concepts of religion and religiosity on narrow, somewhat formalistic and institutionalized planes.

When he was a younger man he had thought that science could furnish answers covering all topics. By the time he had gotten to this work, he had less faith in science (note his bow to Hayek's crusade against Scientism), replacing it with an interest in historical sociology (Hayek 1964). My point is simply that his sense of vision, great by comparative standards, was nonetheless admittedly incomplete. On the one hand, there was from his religiosity a sense of timeless all-encompassing truth, which included but transcended science, for science was the name given to marvelous sets of analytical tools, when perfected timeless in nature, but certainly never as grand as the basic vision itself. On the other, there was historical sociology which gave some limited system to the bodies of material, including methods of exposition, relating to ever-changing societies.

I think that there was genius in Schumpeter's linkage of science and greater truth, but he knew of a flaw as well. He was aware that scientific advance in one area not only could be translated to work in other areas, but that in the process more was occasionally transferred than merely scientific method. The original area had its own *Gestalt*, and the transference often brought along pieces of that original *Gestalt*, which could be essentially alien to the new area. Isaac Newton, one of the inventors of the calculus, was a physicist interested in mechanics and therefore concerned with equilibrium. Economists, appreciating the potential of the calculus, often were unaware that they were applying a physics-derived technique to a sociobiological type of discipline, where the one important truth was not movement towards an equilibrium but constant mutation.

Thus, I conclude that Schumpeter wanted a vision which embraced and bound together the permanent and exogenous with the sociological-transitory and indigenous, and he failed to find it. Had he chosen to build on the American Institutionalists writers such as John R. Commons and Wesley C. Mitchell as exemplars of the sociological-transitory with their inability to find the timeless truth, he could have shown the dilemma from the non-"theoretical" side. Unlike many of the theorists of his time, Schumpeter expressed some, if limited, respect for what they were trying to do; but he did not go on to say what should have been said:

- (a) that they did not see beyond the Hobbes—Locke individualist—utilitarian paradigm; and
- (b) that their ignorance of Pareto's work on nonrational systems made their work far more barren theoretically than it should have been.

### **WHY DID SCHUMPETER OVERLOOK PARETO'S SOCIOLOGY?**

Why he overlooked these Institutionalists is one thing, but why did he generally

overlook the relevance of Pareto's sociology in the discussion of his own vision? Here is another dilemma. What explains this neglect—particularly since Schumpeter was part of the Harvard seminar in the 1930s which focused somewhat productively on the English translation, *Mind and Society*, of the *Tratatto de Sociologia Generate*?<sup>3</sup> Possibly, this problem haunted him, and, in one of the last and best of his essays, printed in 1949, he set out to evaluate Pareto, the man, his economics, and his theory, for what were clearly defensive, nonetheless competent purposes (Schumpeter 1965:110–42).

Let me only note here that while Schumpeter chose to emphasize Walras and Pareto mostly as mathematical economists, each was also deeply steeped in historical, institutional, and even empirical detail. It is a tragedy that our students think of them as only abstractionists, but it is a tragedy easily prevented if they are told to look at the actual texts.

About Pareto the man, Schumpeter noted the obvious; how brilliant was Pareto's mind as well as how difficult was his personality. More than that, Schumpeter took great care to show how much Pareto suffered from being misunderstood by those who should have known better, and how poorly understood he was by those who while claiming him as their guru distorted what he meant to say. It comes across clearly that in Schumpeter's mind Pareto was a scientist *sans pareil*: unlike Walras, Pareto created a following, and unlike most leaders Pareto was ever conscious of his debt to Walras, whom apparently he disliked thoroughly.

The other point to make about Pareto, the man, was his passionate identification with Italy, a country whose political corruption then (like today) exasperated many who admired its creativity and cultural sophistication. Nonetheless, it is significant that Schumpeter, truly no more than a self-made quasi-aristocrat (some even allege something of a pseudo-aristocrat), judged Pareto to be a real aristocrat but one tarnished with a bourgeois reformist outlook. I wonder why Schumpeter included such *obiter dicta*.

As for Pareto, the economist, Schumpeter's assessment is mixed. On the one side Schumpeter lists many but far from all of Pareto's innumerable "firsts." Pareto's Law of Income Distribution was one of the first empirically discovered regularities known to economics, and although the interpretation of the Law varies, its existence involving a fascinating stability is clearly a Paretian first. In Schumpeter's words, "Pareto's 'Law' is pathbreaking in the literal sense even though in the end nothing whatever is left of its particular form" (Schumpeter 1965:121).

And, Pareto's ideas about pricing in a socialist economy presaged Barone's famous paper. Schumpeter further identifies Pareto as the one who first drew, albeit awkwardly, the distinction between a "dynamics that studies successive equilibria and seems to me to denote comparative statics; and another dynamics that studies the *mouvement du phénomène économique* and seems to merge genuine dynamics with the problems of evolution" (Schumpeter 1965:125).

Yet, for example, Schumpeter neglects Pareto's concept of *le sentier* ("the

path”), a construct more sophisticated than *tâtonnement*. *Le sentier* is a construct involving path-dependent solutions—solutions relating to explicit terminal prices as well as relative power within both economic markets and social bargains.

Schumpeter credits Pareto with being the architect of the now-accepted non-cardinal utility theory of value. Pareto’s contribution was “to replace utility postulates by postulates about observable behavior and thus to base economic theory on what seemed to Pareto to be more secure foundations” (Schumpeter 1965:129). But as an architect, Pareto was, in Schumpeter’s ideas, no more than the sketcher of the design, not the draftsman. Nonetheless, it is these sets of designs which gave rise to the “New Welfare Economics.”<sup>4</sup>

Schumpeter allows how Pareto’s theory of production was another of his monumental firsts. It contained a comprehensive structure *lignes du plus grand profit, lignes de transformations, complètes et incomplètes* (Schumpeter 1965:132). And although Pareto’s system was presented with fixed coefficients of production, Pareto was aware of the desirability of introducing variations. But, according to Schumpeter, by that time Pareto was elderly and ill, and he indicated that others could handle those refinements.

I, myself, have found in Pareto’s work on production many other insights, including as an example his empirical observation—what today General Motors Corporation may call “Lopes’s Law”—that a small number of input-type widgets account for most costs, and if costs are to be meaningfully reduced these are the prime candidates for concentrated attention.

On the other hand, Schumpeter felt that Pareto’s monetary theory was faulty, even more so than Walras’s. I would have thought that given Schumpeter’s own frustrations in this area this would have been more a point of personal identification than the point of criticism it seems to be.

It was with Pareto, the sociologist, that Schumpeter had his troubles. For one thing, Pareto introduced a set of constructs which Schumpeter found both alien and arcane. For another, Pareto himself believed that his economics led to his sociology and although Schumpeter may have taken a tour in that direction, he did not like the sights.

I suggest three reasons why Schumpeter, who obviously chose to give Pareto the highest marks in virtually all of his “papers”, nonetheless never gave him the “Exhibition for His Career.” First, Schumpeter had worked through all of the Walras available to him, including a great many commentaries; and, while Schumpeter was a member of the famous Harvard Seminar on Pareto, the quality of their criticisms, although high, did not match what was available on Walras. In short, in his own division of labor Schumpeter came on Pareto’s sociologist critics too late. Second, as I have indicated earlier, Schumpeter was something of a believer, that is a Deist, and whatever can be said of Pareto and his sociology there was no place for that sort of thing at all.

And, finally, to have yielded to Pareto’s domination went beyond the point where he was prepared to go. It is not for nothing that the most important part



of *History of Economic Analysis* is the first, in which he pleads for a general social science approach to the economics discipline. But, he was not prepared to make historical sociology the Queen.

There remain simply two points. Schumpeter's limited endorsement of Pareto was not, in my considered opinion, based on the uses that the Italian Fascists put his name to. Schumpeter's own personal history at Harvard in the late 1930s and particularly during World War II indicate that he was not afraid of damaging his own political reputation; that had already been accomplished (Allen 1991, 2:136–55).

Second, the real point of this essay is to suggest that the need is for seminars to do for Pareto's work what they had done for Walras's. It is a good thing to admit monumental achievement (and that we do with regard to the *History of Economic Analysis*), but it is a better thing to treat it as the cornerstone of a school. And that we haven't done. We should pick up the unfinished task.

### NOTES

- 1 The original edition was published in 1954 under the title *History of Economic Analysis* and was based on the numerous pieces and sections of the book that Schumpeter's widow, Elizabeth Boody Schumpeter, was able to locate after Schumpeter's sudden death. It was published by Oxford University Press in New York and went through numerous reprintings.
- 2 Oxford University Press, which holds the North American distribution rights, currently plans to include the essay when its present stock is exhausted and a new reprint is made.
- 3 Other members of that Harvard Seminar included J.L.Henderson, Pitirim Alexandrovich Sorokin, and Talcott Parsons.
- 4 I should add that Schumpeter would have liked to give that architectural gold medal to his old friend living Fisher, but still did not do so. In two of his essays Schumpeter expresses amazement that Pareto actually voiced to him an admiration for Fisher.

### REFERENCES

- Allen, Robert Loring (1991) *Opening Doors: The Life and Work of Joseph Schumpeter*, 2 vols., New Brunswick, NJ: Transaction Publishers.
- Blaug, Mark (1984) [1962] *Economic Theory in Retrospect*, New York: Cambridge University Press.
- Hayek, F. A (1964) *The Counter-Revolution of Science: Studies on the Abuse of Reason*, New York: Macmillan.
- (1978) *New Studies in Philosophy, Politics, Economics and the History of Ideas*, Chicago: University of Chicago.
- Meek, Ronald (1962) "Is Economics Biased? A Heretical View of a Leading Thesis in Schumpeter's History," *Scottish Journal of Political Economy* 4(1957): 1–17.
- Schumpeter, Joseph A. (1965) *Ten Great Economists*, New York: Oxford University Press.
- (1994) *A History of Economic Analysis*, New York: Routledge.

# VISION AND PROGRESS IN ECONOMIC THOUGHT

## Schumpeter after Kuhn

*Roger E. Backhouse*

### SCHUMPETER'S PERSPECTIVE

Schumpeter's *History of Economic Analysis* (1954) is written from a distinctive perspective, outlined in Book I.<sup>1</sup> There is great emphasis on economics being a science, where science involves going beyond everyday explanations of economic phenomena. Many of the phrases Schumpeter uses to describe science reflect the influence of logical positivism, then developing into the dominant approach to the philosophy of science. Thus Schumpeter writes that the rules of “‘modern’ or ‘empirical’ or ‘positive’ science...reduce the facts we are invited to accept on *scientific grounds* to the narrower category of ‘facts verifiable by observation or experiment’; and they reduce the range of admissible methods to ‘logical inference from verifiable facts’” (8). Such philosophy of science now seems somewhat dated. So too does Schumpeter's historiography. According to Schumpeter:

Economic analysis has not been shaped at any time by the philosophical opinions that economists happened to have...even those economists who held very definite philosophical views, such as Locke, Hume, Quesnay, and above all Marx, were *as a matter of fact* not influenced by them when doing their work of analysis.

(31–2)

It thus becomes possible for him to focus on the filiation of ideas. This perspective is given added significance when combined with Schumpeter's view that interdependence, seen in Walrasian terms, is the central economic problem.

[T]his all-pervading interdependence is the fundamental fact, the analysis of which is the chief source of the additions that the specifically scientific attitude has to make to the practical man's knowledge of economic phenomena; and that the most fundamental of all specifically scientific questions is the question whether analysis of that interdependence will

yield relations sufficient to determine...all the prices and quantities of products and productive services that constitute the economic “system”.... The discovery [of this fundamental problem] was not fully made until Walras, whose system of equations, defining (static) equilibrium in a system of interdependent quantities, is the Magna Carta of economic theory.... The history of economic analysis or, at any rate, of its ‘pure’ kernel, from Child to Walras might be written in terms of this conceptions gradual emergence into the light of consciousness.

(242)

Today such a perspective seems naive, both as philosophy of science and as historiography: we have learned much in the past forty years.

The main reason why Schumpeter’s perspective seems dated today is the influence of Kuhn’s *Structure of Scientific Revolutions* (1962). In the 1960s economists began to interpret the history of economic thought in terms of Kuhn’s categories of paradigms, normal science and scientific revolutions.<sup>2</sup> Progress was defined only within paradigms, not across them, which meant that unless one argued that the whole of economic thought from Child to Walras constituted a single paradigm, Schumpeter’s account must be flawed. Science could, after Kuhn, be understood only with reference to its sociology and its history. Though it is arguable exactly how far Kuhn himself went in this direction, the “rules” of scientific procedure were to be found not in philosophy but in scientists’ practices. Also important has been the influence of the Popperian school, notably Popper, Feyerabend, and Lakatos. Popper’s falsificationism makes it impossible to see scientific method as “logical inference from verifiable facts.”<sup>3</sup> Feyerabend’s methodological anarchism has made fun of the notion that there are absolute standards in science, dispelling the air of confidence that pervades histories such as Schumpeter’s. Lakatos’s methodology of scientific research programs provided a framework, seemingly more rigorous than Kuhn’s, through which the history of economics could be interpreted, whilst his methodology of historical research programs, involving the idea that philosophy and history could inform each other through the method of rational reconstructions, provided a way to write philosophically informed history.

But how much have we learned? There is now considerable skepticism about the relevance of falsificationism to economics. It is hard to identify the components of Lakatosian research programs, and his method of rational reconstructions is seen by many as distorting history.<sup>4</sup> Though it may nonetheless be important in altering our perspective (see Hausman 1994), Kuhn’s framework of paradigms and normal science does not take us very far in analyzing history.<sup>5</sup> Insofar as it is possible to speak of a trend in methodological and historiographical thinking in the 1990s, it is probably an emphasis on what has been called “recovering practice”—away from some of the questions that dominated the subject in the 1970s and 1980s, the answers to which made Schumpeter’s position unacceptable.<sup>6</sup>

Given this trend, Schumpeter’s *History of Economic Analysis* needs to be

reconsidered, for the methodological statements it contains are those of one of the leading economists of his generation. As is argued in the rest of this chapter, Schumpeter's view of the history of science is in some respects very similar to Kuhn's, but there are crucial differences. These differences should be seen not as reflecting positivist influences on Schumpeter, but as being closely linked to the nature of economics as the subject has developed in the nineteenth and twentieth centuries.

### SCIENTIFIC STANDARDS AND THE EMERGENCE OF SCIENCE

Science, for Kuhn, is an activity carried out by an identifiable body of professionals who share both problems and methods of inquiry. The precondition for the emergence of science, therefore, is the emergence of a universally accepted framework or paradigm. Prior to the emergence of any such framework, professionalization is impossible. Instead, one finds a variety of approaches—by competing schools, each based on a different metaphysics. The absence of common belief, Kuhn argued, meant that there could be no progress, for each writer was compelled to build the subject from foundations, there being no agreed knowledge on which to build. Fact-gathering, therefore, was a random activity, and there was no clear demarcation between scientist and nonscientist. This period was the “prehistory” of a science. Transition from prehistory to “science proper,” though not sudden, took place during an identifiable time period—in electricity, for example, it was some time between 1740 and 1780.<sup>7</sup>

Much of this can be found in Schumpeter's *History of Economic Analysis*. Standards and the possibility of progress are associated with professionalization. Schumpeter wrote:

Now our ability to speak of progress... is obviously due to the fact that there is a widely accepted standard, confined, of course, to a group of professionals, that enables us to array different theories... in a series, each member of which can be unambiguously labelled superior to the preceding one.

(39–40)

Professional standards were, he claimed, absent before the end of the eighteenth century (155).

Schumpeter recognized, as clearly as Kuhn or Feyerabend, that there are no absolute standards. “The exclusion of any kind of tooled knowledge,” he wrote, “would amount to declaring our own standards to be absolutely valid for all times and places. But this we cannot do” (8). Even the magic practiced in a primitive tribe should be considered science, provided that “it uses techniques that are not generally accessible and are being developed and handed on within a circle of professional magicians” (7). However, where Feyerabend (1988) argued that the values of modern, Western science should be dethroned from

their privileged position in relation to other forms of knowledge, Schumpeter adopted the position that knowledge has to be interpreted “in the light of our standards, since we have no others” (8). Thus when Schumpeter deferred to the values of modern science (as seen by the philosophy of science of his day) this was the result of a deliberate choice—he did not deny that there were other perspectives. The success of this attempt to reconcile absolute standards with a recognition of the historical contingency of ideas is debatable. Perlman (1994:xxxv), for example, contends that it was a failure.

The most substantial difference between Schumpeter’s treatment of the prehistory of science and Kuhn’s lies in the former’s emphasis on *analysis* as the distinguishing mark of science. Though he later defines science to include not only analysis but also specialist techniques of fact-finding (7), the emphasis is overwhelmingly on analysis as the characteristic of science. In the opening sentence of the *History of Economic Analysis* he goes so far as to equate the “analytic” with the “scientific” aspects of economic thought. More significantly, however, in his account of the period from Ancient Greece and Rome to the late eighteenth century he is continually looking for signs of analysis—the instances are too numerous to cite. Schumpeter emphasizes that a science must be the result of “conscious efforts to improve it” (7). For example, in his account of “Dearness and Plenty versus Cheapness and Plenty” he concludes that “In important respects, the victory of the Cheapness-and-Plenty advocates spelled analytic advance” (286). The Cheapness-and-Plenty school saw that it was relative prices that mattered; that cheapness should be measured in terms of effort, not money; and that falling money prices were a natural way, in a growing economy, “giving effect to the increasing cheapness of things in terms of effort.”

Schumpeter claimed that science had to be the result of conscious intention: “a science is any kind of knowledge that has been the object of conscious efforts to improve it” (7). Where arguments were based on analytic principles, but in the context of specific industrial or commercial policy programs, without the analytic principles necessarily being explicit, he referred to “quasi-systems” (194–9). These had some features of science but were not science. Schumpeter argues, for example, that the work of Justi was prescientific because, in addition to not using tools not at the layman’s command, “[he] was not alive to the necessity of proving propositions” (173). In contrast, Schumpeter did see Cantillon as engaged in scientific analysis: “Cantillon no doubt felt the scientific need for some such tool [Quesnay’s *Tableau*], had the idea of how to construct one, and actually pointed the way toward doing so” (240).

This emphasis on analysis as what distinguishes science from pre-science is significantly different from what we find in Kuhn. Though Kuhn’s treatment of pre-science is, as he himself admits, “much too schematic” (Kuhn 1962:ix), it is fair to say that he places much greater stress on facts. In the absence of a common body of belief, people were free to choose what to observe and what experiments to perform, and fact-gathering was “a far more random activity than the one that subsequent scientific activity makes familiar,” the pool of

facts often containing “those accessible to casual observation and experiment together with some of the more esoteric data retrievable from established crafts like medicine, calendar making, and metallurgy” (Kuhn 1962:15).

### **VISION, PARADIGMS, AND THE STRUCTURE OF SCIENCE**

The most important aspect of Kuhn’s *Structure of Scientific Revolutions* is his claim that science is characterized by periods of normal science separated by scientific revolutions. His account of the way science developed was explosive because it suggested that shared presuppositions and practices, previously thought peripheral, might in fact be central to the whole process. To quote Hausman:

Before the publication of Kuhn’s *Structure of Scientific Revolutions*, philosophers paid little attention to the web of commitments that bind together co-workers in a common research enterprise.... [T]heir ambition was to use formal logic and conceptual analysis to provide abstract characterizations of central features of science, such as confirmation or explanation. They were inclined to regard the context-sensitive shared presuppositions that constitute distinct subdisciplines as obstacles in the way of appreciating the uniform underlying ‘logic’ of explanation, confirmation, theory structure and so forth.... Kuhn’s *Structure of Scientific Revolutions* was published against this intellectual background, and its effect was explosive. Not only did it throw a spotlight on fascinating features of science that had been ignored by previous philosophy, but it offered a way of avoiding the dead-end to which logical empiricism apparently had led.  
(Hausman 1994:195–6)

Kuhn, in other words, turned philosophers’ attention to the structure of science.

Though some commentators have focused on scientific revolutions, the central concept in Kuhn’s account of the structure of science is “normal science.” According to Kuhn:

“normal science” means research firmly based upon one or more past scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice.

(Kuhn 1962:10)

Though he uses the phrase “one *or more*” the examples he cites are instances of single achievements laying the foundations for subsequent work. These achievements provide what he later called a “disciplinary matrix” that is unquestioned within the subsequent period of normal science. Normal science research involves filling in the gaps, extending and applying the theory, and sorting

out anomalies—dealing with pieces of empirical evidence that do not fit and polishing the theory. During any period of normal science, however, there will arise anomalies which cannot satisfactorily be explained. If these become too serious, confidence in the ruling disciplinary matrix will be shaken, and the science will enter a state of crisis. During a crisis, the rules constraining research break down and scientists try almost anything—Kuhn calls this “extraordinary research.” Many attempts will be made to resolve anomalies, but out of them one will eventually dominate, becoming recognized as resolving the anomaly and providing the basis for future research. Scientists switch their allegiance to the new paradigm or simply die. A new period of normal science emerges.

A period of crisis has much in common with the prehistory of science, discussed in the second section of this chapter. There is no agreement on the framework within which scientific inquiry is to be carried out, with the result that the choice of methods and the facts that are sought are in a sense random. Thus Kuhn associates the beginnings of science with the emergence of a scientific achievement that has the characteristics needed to form the basis for a period of normal science. The emergence of science is thus simultaneous with the emergence of normal science.

If we focus on Schumpeter’s emphasis on the emergence of the analytical tools of general equilibrium analysis, and on what he termed the filiation of economic ideas, his perspective appears to be clearly pre-Kuhnian. The *History of Economic Analysis*, however, also contains, in its discussion of “classical situations,” a picture of the structure of economics which has much in common with Kuhn’s picture of the structure of science. Schumpeter never completed the section in which he was to define the concept of a classical situation<sup>8</sup> but his use of the term makes clear its similarity with Kuhn’s concept of normal science. Consider his description of the “second” classical situation, which emerged from the two decades of struggle following the innovations of Jevons, Menger, Walras, and the historical school. Schumpeter wrote:

And from these again emerged, in the nineties, a typical classical situation in our sense, the leading works of which exhibited a large expanse of common ground and suggest a feeling of repose, both of which created, in the superficial observer, an impression of finality—the finality of a Greek temple that spreads its perfect lines against a cloudless sky.

(754)

Referring to the monetary theory of the “first” classical situation, he wrote:

Adam Smith substantially ratified it. And for more than a century to come it was almost universally accepted...so much so, in fact, that the majority of economists came to suspect not only unsoundness of reasoning but something very like obliquity of purpose behind every expression of antimetallist views.

(290)

Classical situations are characterized by consensus over fundamental issues and by a refusal to question basic assumptions—to regard dissenters as illogical or prejudiced.

Like Kuhn’s paradigms or disciplinary matrices, Schumpeter’s classical situations may eventually enter a period of decay. Indeed, his description of the “first” classical situation as it existed after J.S. Mill comes close to equating decay with the settling down of the subject. According to Schumpeter:

Then followed stagnation—a state that was universally felt to be one of maturity of the science, if not one of decay; a state in which “those who knew” were substantially in agreement; a state in which, “the great work having being done,” most people thought that, barring minor points, only elaboration and application remained to be done.

(380)

Out of decay comes revolution, in this instance associated with Jevons, Menger, and Walras (825).

Schumpeter provides a detailed account of how new ideas might emerge if, as we hardly ever do, we had to start from scratch. Three stages are involved. The first stage is “vision”—“to visualise a distinct set of coherent phenomena as a worth-while object of our analytic efforts” (41). This is a “preanalytic” act, inseparable from ideology (43). He makes the point, however, that such a preanalytic act comes in not only at the beginning of analysis, but every time the subject is transformed.

It is interesting to note that vision of this kind not only must precede historically the emergence of analytic effort in any field but also may re-enter the history of every established science each time somebody teaches us to *see* things in a light of which the source is not to be found in the facts, methods, and results of the pre-existing state of the science.

(41)

We have a clear parallel here with Kuhn’s notion that new metaphysical presuppositions are the basis for every new paradigm—switching from one paradigm or classical situation to another involves seeing things in a new light. The second stage is to “verbalize” or “conceptualize” the vision. The elements of a vision are given names that “facilitate recognition and manipulation, in a more or less orderly schema or picture” (42). Conceptualizing the vision will lead “almost automatically” to further fact-gathering and to the addition and deletion of concepts. The final stage is the emergence of “scientific models.” Schumpeter stated:

Factual work and “theoretical” work, in an endless relation of give and take, naturally testing one another and setting new tasks for each other,



will eventually produce *scientific models*, the provisional joint products of their interaction with the surviving elements of the original vision, to which increasingly more rigorous standards of consistency and adequacy will be applied.

(42)

Three comments are worth making here.

- 1 Though the nature of the testing is left unanalyzed in a way that would nowadays be difficult, the emergence of a scientific model involves interaction between theoretical and empirical work. Empirical testing of theories appears almost to be unproblematic.
- 2 Schumpeter sees the elements of the original vision as being modified, possibly substantially, during the process whereby a vision is transformed into a scientific model, a perspective similar to that of Cohen (1977). It may, therefore, be impossible to define an invariant Lakatosian “hard core” that describes the emerging science.<sup>9</sup>
- 3 An important aspect of the process appears to be increasing rigor.

Most, if not all, of this is compatible with Kuhn’s account of the emergence of paradigms. They differ in that Schumpeter focuses on the processes of discovery and analytical refinement, whereas Kuhn focuses on the way in which new ideas emerge from the crisis in the previous period of normal science. Kuhn thus tells us more about the structure of science in that he provides a much fuller account of how one paradigm succeeds another. There is, however, an even more important difference. For Kuhn, a new paradigm is a path-breaking work which sets an agenda for future research. Revolutionary science is characterized by a proliferation of theories and methods, one of which eventually emerges triumphant. This becomes the paradigm in the sense of the “exemplar” defining the way research is to be undertaken. Schumpeter, however, sees the emergence of classical situations rather differently. For him the works that define classical situations are ones that consolidate previous knowledge.

But every classical situation summarizes or consolidates the work—the really original work—that leads up to it, and cannot be understood by itself.

(52)

Schumpeter’s “classic achievements”<sup>10</sup> are not Kuhnian exemplars but works of synthesis, such as J.S.Mills *Principles of Political Economy* (1848) or Marshall’s *Principles of Economics* (1890). According to Schumpeter again:

The breaks with tradition around 1870 were meant to be breaks by the men whose names are associated with them.... Upon these “revolutions”

followed two decades of struggle and more or less heated discussions. And from these again emerged, in the nineties, a typical classical situation in our sense.

(753–4)

Revolutionary works, based on new visions, shatter existing consensus, initiating periods of struggle, or revolutionary science. For Schumpeter, however, classical situations are based not on these revolutionary works but on the subsequent works of consolidation and synthesis. Such “classic achievements” are frequently textbooks (Mill’s *Principles of Political Economy* and Marshall’s *Principles of Economics* are obvious examples) but they are nonetheless important creative acts, going beyond the textbooks of Kuhnian normal science.

### REASSESSING THE *HISTORY OF ECONOMIC ANALYSIS*

It is tempting to argue that Kuhnian, and later Lakatosian, ideas about the evolution of science caught on so rapidly in economics because Schumpeter had paved the way. Indeed, Coats, in one of the earliest essays on the relevance of Kuhn to the history of economic thought, noted that Kuhn’s model “adds precision to Schumpeter’s conception of the ‘classical situation’” (Coats 1969:61). There is certainly much in favor of such an interpretation. There are strong similarities between Kuhn and Schumpeter, as follows:

- 1 Kuhn’s normal science is very similar to Schumpeter’s classical situation.
- 2 Science progresses through alternating periods of revolution and stability.
- 3 The transition from pre-science to science involves the emergence of a dominant framework.
- 4 Metaphysical presuppositions do matter.
- 5 Science makes sense only as a professional activity.

In addition, Kuhn does, in crucial respects, go much further than Schumpeter—he “adds precision.” More specifically:

- 1 He provides an explanation of why paradigms break down.
- 2 He analyzes the very different roles played by empirical evidence in periods of normal and revolutionary science.
- 3 He shows how normal science may be (indeed, normally is) established on the basis of an exemplar.

To this extent Coats is correct.

There are, however, significant differences between the two. The obvious ones are that, in talking about science, Schumpeter retained more of the language of logical positivism than did Kuhn,<sup>11</sup> and that he held a clear (Walrasian) view of the nature of the fundamental economic problem. These differences explain

why he was able to write his history in a way that is very different from what one might expect of someone whose perspective was close to Kuhn's. They explain, as was pointed out earlier in this chapter, why Schumpeter's *History of Economic Analysis* now appears somewhat dated. There is, however, a much more fundamental difference between Kuhn and Schumpeter.

Though one of his basic insights was the observation that much of science is uncritical, taking the disciplinary matrix as fixed, Kuhn never doubted that it was the interaction of theories with empirical evidence that provided the fundamental explanation of the growth of scientific knowledge. Much of normal science involves fact-gathering and the application of the ruling paradigm to new areas. Arguably the main reason why crises develop is empirical failures of the paradigm— anomalies that need to be resolved. Though the process is far removed from Popper's falsificationism, Kuhn is concerned with the way in which theories are tested against empirical evidence.

In contrast, though Schumpeter would never have denied the importance of testing theories, the process is unanalyzed. The reason is that (at least in the *History of Economic Analysis*) he sees economics as primarily analytical—as akin to mathematics. Analytic progress is associated with increased rigor. He criticizes economists for inadequate logic and for not seeing the need for proofs of important propositions, and he does not question basic assumptions (knowledge of the meanings of economic actions, and interdependence as the central economic problem). What drives the *History of Economic Analysis* is the development of the economists "box of tools," not the results that can be achieved with those tools. Using McCloskey's phrase, Schumpeter, unlike Kuhn, appears to have "adopted the intellectual values of the Math Department" (McCloskey 1991:8). This accounts for, among other things, why Schumpeter emphasizes consolidation as the key to a classical situation, where Kuhn sees a pioneering contribution as critical. In the sciences with which Kuhn is concerned, the resolution of anomalous empirical evidence provides a criterion that causes scientists to choose one theory and to abandon others. Because economic theory is more like mathematics, the nature of the consolidation process is different, with the result that the nature of paradigms, both as exemplars and as disciplinary matrices, is different.

Writers on economic methodology have, in recent years, expressed interest in "recovering practice"—in seeking to understand what it is that economists are actually doing. For many this has followed from a realization that the history of economic thought exhibits many features that models taken from the philosophy of natural science cannot explain. For example, Hausman (1991) has sought to do this by going back to, and developing, J.S. Mills notion of an inexact science, whereas Rosenberg (1992) has argued that economics should be seen either as mathematics or as a branch of contractarian political philosophy. What these have in common is that they emphasize the importance of mathematical, logical progress in the development of economic theory, while minimizing the role of empirical testing (they are both critical of this, but that

is a different matter). One of Schumpeter's merits *as a historian of economic thought* is that he shares this emphasis on logic and mathematics, for the result is that when viewing the history of economic thought he focuses on analytical progress. This means that his account of the history of economic thought reflects the centrality of theory that philosophers such as Hausman and Rosenberg have sought to understand. Schumpeter's vision of how economics develops offers more than merely a vague anticipation of Kuhn's *Structure of Scientific Revolutions*: it offers a perspective on the history of economic thought that reflects the nature of the subject as seen by many leading economists and philosophers in a way that Kuhn's does not.

## NOTES

- 1 I shall simply cite the page number whenever I present a quotation from Schumpeter's *History of Economic Analysis*.
- 2 See, for example, Backhouse (1994a).
- 3 Popper's work, of course, is not the only reason for this, but his work has, for good or ill, dominated economists' discussions of such issues.
- 4 See de Marchi and Blaug (1991); Backhouse (1992); Backhouse (1994b).
- 5 The main reason for this is that it is hard to identify paradigms unambiguously. At one level, the whole of economics since Adam Smith can be seen as a single paradigm, but this fails to tell us much about the many fundamental changes that have taken place in economics since Smith's time. Alternatively we can plausibly identify competing paradigms on a much smaller scale (classical economics, Keynesianism, monetarism, neoclassical microeconomics, game theory), but there are problems with this approach too: it fails to take into account the immense amount that such paradigms have in common with each other; and it is inconsistent with Kuhn's view that at any time there is normally one ruling paradigm, not a range of competing ones.
- 6 This is the subtitle of de Marchi (1993). Though there were earlier discussions of Kuhn's relevance to economics, a particularly important contribution was Latsis (1976). From this point the emphasis shifted away from Kuhn towards Lakatos's methodology of scientific research programs, perceived (whether correctly or not) by many economists as similar to Kuhn's methodology. See Backhouse (1994a).
- 7 Kuhn (1970: chapter II).
- 8 Schumpeter (1954:51, n. 1).
- 9 The difficulties involved in finding such "hard cores" have been one of the major problems found with applying Lakatos's methodology of scientific research programs to economics.
- 10 The phrase "again, in our sense of the term" (380) suggests that this is being used as a technical term alongside "classical situation."
- 11 Kuhn's break with contemporary philosophy of science must not be exaggerated. *The Structure of Scientific Revolutions* was, after all, published as a volume of the *International Encyclopaedia of Unified Science*, edited by Otto Neurath.

## REFERENCES

- Backhouse, Roger E. (1992) "Lakatos and Economics," in Todd Lowry (ed.), *Perspectives on the History of Economic Thought*, vol. VIII, Aldershot: Edward Elgar.
- (1994a) "Introduction: New Directions in Economic Methodology," in Roger E. Backhouse (ed.), *New Directions in Economic Methodology*, London: Routledge.

- (1994b) “The Lakatosian Legacy in Economic Methodology,” in Roger E.Backhouse (ed.), *New Directions in Economic Methodology*, London: Routledge.
- (ed.) (1994c) *New Directions in Economic Methodology*, London: Routledge.
- Coats, A.W. (1969) “Is there a ‘structure of scientific revolutions’ in economics,” *Kyklos* 22: 289–95; reprinted as Chapter 4 of A.W.Coats (1994) *The Sociology and Professionalization of Economics: British and American Economic Essays*, vol. II, London: Routledge.
- Cohen, I.Bernard (1977) “History and the philosophy of science,” in F.Suppe (ed.), *The Structure of Scientific Theories*, 2nd edition, Urbana: University of Illinois Press.
- De Marchi, Neil (ed.) (1993) *Post-Popperian Methodology of Economics: Recovering Practice*, Boston, Dordrecht, and London: Kluwer.
- De Marchi, Neil, and Blaug, Mark (eds.) (1991) *Appraising Economic Theories: Studies in the Methodology of Research Programmes*, Aldershot and Brookfield, VT: Edward Elgar.
- Feyerabend, Paul K. (1988) *Against Method*, revised edition, London and New York: Verso.
- Hausman, Daniel M. (1991) *The Inexact and Separate Science of Economics*, Cambridge and New York: Cambridge University Press.
- (1994) “Kuhn, Lakatos and the Character of Economics,” in Roger E.Backhouse (ed.), *New Directions in Economic Methodology*, London: Routledge, pp. 195–215.
- Kuhn, Thomas S. (1962/1970) *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.
- Latsis, Spiro J. (ed.) (1976) *Method and Appraisal in Economics*, Cambridge: Cambridge University Press.
- McCloskey, Donald N. (1991) “Economic science: a search through the Hyperspace of Assumptions?” *Methodus* 3(1): 6–16.
- Perlman, Mark (1994) “Introduction” in reprint of Joseph A.Schumpeter, *History of Economic Analysis*, London: Routledge.
- Rosenberg, Alex (1992) *Economics—Mathematical Politics or Science of Diminishing Returns*, Chicago: University of Chicago Press.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis*, New York: Oxford University Press.

# SCHUMPETER'S TREATMENT OF NONMAINSTREAM AMERICAN ECONOMICS

*William Barber*

American economists appear in only bit parts in Schumpeter's *History of Economic Analysis*. There is little mystery about why this should be so: Their nation's experience is but an eyelash flicker in the sweep of the recorded history with which Schumpeter dealt. But he might reasonably have slighted Americans for another reason. The conventional wisdom—as articulated, for example, by Harvard's Charles F. Dunbar at the time of the 1876 centennial—held that the United States had produced no contributors to the world's stock of fundamental economic ideas (Barber 1993:11).

What Schumpeter had to say about American economics nonetheless merits inspection. His observations—even at their most idiosyncratic—are provocative and worthy of consideration on their individual terms. But there is a broader rationale for this exercise. An examination of his choices for inclusion (or exclusion) and his appraisals of the American economists he elected to treat may also enrich our understanding of his intellectual style.

To set the stage, a distinction needs to be drawn between the history of economic analysis, on the one hand, and the history of economic thought, on the other. Schumpeter himself promoted this distinction (Schumpeter 1954:12–24). If one were to judge solely by the title of his treatise, it would readily follow that its contents should concentrate exclusively on economists who had shaped the discipline's analytic apparatus. A work drawn to such specifications would presumably focus on those who augmented its theoretical core. Within these terms of reference, thinkers who had stirred waves in their lifetimes, but who had left no lingering legacy, should properly be ignored.

In fact, however, the *History of Economic Analysis* is a methodological and organizational hybrid. At times, he writes as a historian of analysis. For simplicity, that posture will be characterized hereafter as Schumpeter wearing "Hat I." But at other times, he writes as a historian of thought, as is the case when he appraises the works of challengers to mainstream doctrine who would have no claim on space in a pure history of analysis. Schumpeter in that mode will henceforth be characterized as wearing "Hat II."

To add force to this distinction, it is useful to reflect on the American economist to whom Schumpeter accorded “Hat I” treatment without reservation. Irving Fisher, in his view, deserved to be lionized for his path-breaking theoretical innovations, which placed him almost on par with Léon Walras. Though Fisher did not live to see the publication of the *History of Economic Analysis*, he was certainly aware of Schumpeter’s assessment. As Schumpeter wrote to Fisher in early 1946:

I consider you one of the dozen or so finest economists of all times and countries, and, if I did [not] know that, my work in the history of economic analysis which I hope to complete in the current year would have brought that fact home to me.

(Schumpeter 1946)

This judgment referred exclusively to Fisher’s analytic work. It did not imply that Schumpeter endorsed Fisher’s positions on economic policy. Schumpeter had made that point clear in 1934 when Fisher was lobbying for monetary “reflation” as a recovery panacea. Schumpeter then wrote:

Ever since the 2nd ed. of your Rate of Interest, the theory of interest came out [in 1930], and still more since I read your article in *Econometrica* [“The Debt-Deflation Theory of Great Depressions,” 1933], I have a strong impression to the effect that we fundamentally agree on most of the facts and principles basic to the explanation of Booms and Depressions. It intrigues me to know how it is possible for us to arrive, from premisses so similar to conclusions so different.

(Schumpeter 1934)

Schumpeter’s “Hat I” reading of Fisher had another noteworthy feature. It was not just a matter of attending exclusively to analysis, without contamination from policy implications. It also followed that Fisher’s zeal for causes, though mentioned in passing, could be dismissed as irrelevant to his analytic *persona* (1954:871). From the perspective of the history of thought, the appropriateness of this dismissal would not be self-evident. After all, Fisher’s thinking on the gains in labor efficiency associated with prohibition were of a piece with his confident analysis of the permanence of “new era” prosperity. So also was the structure of his thinking about rules for “scientific” hygiene and diet and rules for “scientific” management of the money supply.

Let us now consider a case of an unambiguous “Hat II” interpretation of an American economic writer. Schumpeter’s assessment of Henry C. Carey is pertinent in this connection. Carey’s vigorous championing of protection as the hallmark of an American “national system” and his polemics against Thomas R. Malthus and David Ricardo are sufficient to qualify him for inclusion in a history of thought, but not in a history of analysis. He was, of course, the first

American to attract any substantial notice abroad—and much of it was unflattering. John Stuart Mill had been moved to denounce his muddles in his *Principles* (Mill 1848: vol. 2, 919), and Marx had attacked him as a naive “harmonizer” in *Das Kapital* (Marx 1932). His protectionist doctrines, however, struck responsive chords in Germany, and he rallied a loyal cadre of disciples on home turf at the University of Pennsylvania. Even so, the bulk of the American academic establishment treated him as a national embarrassment.

Schumpeter was certainly swimming against the tide when hailing Carey as a man of “great vision.” And he was explicitly taking exception to the Charles Franklin Dunbar position with respect to the intellectual barrenness of American economics in its first century. What merit then did Schumpeter discern in Carey’s performance? It was certainly not the strength of his analytic contribution—indeed, he maintained that Carey “had made negative contributions to analysis” (Schumpeter 1954:517). Nonetheless, the “vision” was worth taking seriously—and for Schumpeter an understanding of the role of the preanalytic vision in setting the analytic agenda was something that mattered. Much of his interpretation of Keynes’s work—of which he was a sometimes bitter critic—rested on the view that the Keynesian analytic system had been tailored around a “vision” of England’s “aging capitalism” and “arteriosclerotic economy” (1954:42). Carey, on the other hand, deserved to be complimented for projecting a vision of an American reality from which the “Old World’s” population pressures and land scarcities were banished and where technological progress promised “increasing returns” through time. The analytic implementation, however, had been “deplorable,” though—Schumpeter insisted—the vision was “*capable of being implemented more satisfactorily*” (italics in the original) (1954:42). Indeed he sketched the way in which that task could have been performed.

Why, then, had mainstream American economists failed to appreciate the potential in Carey’s economics? Schumpeter maintained that their judgment had been blinded by their antipathy to the protectionist component of his message. This was an unfortunate error: Neither the analysis nor the preanalytic vision should be prejudged on the basis of one’s assessment of the author’s recommendations on economic policy. In this connection, Schumpeter observed: “I beg leave to remark that professors are not exempt from bias and that I sense some in the attitude of many excellent men to the nationalist school: surely, another interpretation may be put on the protectionist views of American economists of that and later times than subservience to either pecuniary interests or prejudice” (1954:515n).

An arresting parallelism is noteworthy between Schumpeter on Carey and Schumpeter on Simon Patten, who sustained the protectionist tradition at the University of Pennsylvania from 1888 to 1917. Patten’s teaching, moreover, perpetuated Careyite themes when attacking Ricardian doctrine and projecting the image of an “economy of plenty” based on “increasing returns.” With respect to Patten, Schumpeter observed that “if vision were everything, [he]...would, historically, have to be put down as one who had few equals, if any. If technique



were everything, he would be nowhere. As it is he is somewhere between, standing apart on ground largely his own” (1954:876). Few of Patten’s non-Pennsylvania contemporaries would have assessed him so charitably.

There was a touch of heresy as well in the manner in which Schumpeter dealt with another nineteenth-century American—Henry George. Obviously George had high public visibility: His *Progress and Poverty* was the most widely read piece of economic literature in its day. He was an anathema, however, to the American economists who were then establishing a professional identity in the academy. The first President of the American Economic Association, Francis Amasa Walker, for example, regarded this untutored amateur as a fraud—a view that was shared by most of the emerging professionals. With “Hat II” firmly in place, Schumpeter came to George’s defense, insisting that he displayed “competence as an economist.” He further declared that “professional economists who focused attention on the single-tax proposal and condemned Henry George’s teaching, root and branch, were hardly just to him” (1954:865).

In his treatments of Carey, Patten, and George, Schumpeter thus found some kind things to say about figures who made no lasting analytic contributions but who had fueled debate in their own times. Moreover, he was generally kinder to them than were the professionals among their contemporaries. But there is an apparent asymmetry in the *History of Economic Analysis*. A number of Americans who had enjoyed high prominence—and for whom “Hat II” treatment could be justified—are dealt with dismissively, if not ignored altogether. Schumpeter obviously had no taste for the style of the German-educated “New Schoolers” who were instrumental in the founding of the American Economic Association. Richard T. Ely, for example, is characterized as “that excellent German professor in an American skin” (1954:874n). The absence of any substantive discussion of the work of John R. Commons is also noteworthy. The editor’s notes indicate that Schumpeter intended to include some material on American Institutionalism, but that the manuscript on this subject matter was not completed (1954:873n).

Would Schumpeter have given a sympathetic “Hat II” treatment to non-mainstream American economists of an Institutionalist persuasion? In the absence of a manuscript that was promised but not delivered, a definitive answer to that question is not possible. The fact that this material was not prepared would seem to indicate, however, that he attached low priority to this approach to the discipline. Even though he did not address Institutionalism head on, it may still be reasonable to draw some inferences from peripheral comments scattered throughout the existing text.

With respect to the Ely-Commons brand of Institutionalism, the indirect evidence suggests that Schumpeter would have given it a very chilly reception in a full-dress treatment. He seems to have perceived the “New School” component of the American *Methodenstreit* of the late nineteenth century as contributing to an unhelpful “Tower of Babel.” Schumpeter was wearing “Hat I” when asking his reader

to remember that the point of view appropriate to our purpose excludes or pushes into the background men whose services were invaluable to the profession and to their students if they did not do the kind of work that matters here, which means chiefly, if they neither contributed to the development of our apparatus nor proved themselves masters in its use.  
(1954:873)

Measured against these criteria, the more activist of the “New Schoolers” clearly did not qualify. Indeed they could be ruled out for another reason: not only did they fail to produce theoretical innovation, they were militantly antitheoretical. That posture was unquestionably beyond the pale. Some could be forgiven Institutionalist propensities, so long as they were not opposed to theorizing. Wesley C. Mitchell was a case in point. In Schumpeter’s appraisal, Mitchell’s early “Veblenite tendencies” made him appear to be an antitheorist when “actually, in intention as well as in fact, he was laying the foundations for a “theory.”” It was also to Mitchell’s credit that he “displayed no active hostility to the many ‘theories’ of the business cycle which he listed in his book of 1927 with perfect detachment” (1954:1166).

How then might Veblen have fared as a candidate for “Hat II” treatment? Conceivably, he could offer some promising credentials. After all, a case could be made for Veblen on the basis of the “vision” he projected of America in the “robber baronial” era. But it is doubtful that Schumpeter would have been moved by that consideration. His side comments on Veblen’s work describe it as “practically all in economic sociology” and characterize his views as “indicative of hostility to the capitalist order” (1954:795n, 802). But Schumpeter and Veblen were on a collision course for another reason. Throughout his entire professional career, Schumpeter conceived of the entrepreneur as the dynamic carrier of progress who performed an invaluable function in propelling an economy’s forward momentum. Veblen’s conception was totally at odds with this. As Schumpeter read it, it came close to a “depredation theory of entrepreneurial gain” in which the entrepreneur was viewed as a functionless parasite. Though Schumpeter failed to offer a thoroughgoing appraisal of Veblen, the available evidence strongly suggests that he would not have been prepared in this case to follow the Carey-Patten-George precedent by extending “Hat II” to this brand of nonmainstream doctrine.

Yet another set of considerations lends support to this conclusion. In the United States in the 1930s, Veblen disciples walked in the corridors of power. Indeed the architecture of the planning apparatus put in place in the “First New Deal” owed much to a Veblenian style of thinking about the need for “visible hands” to counteract the antisocial consequences of unbridled business behavior. A number of economists wrote at some length in an effort to provide those policies with a theoretical underpinning. Though Schumpeter must certainly have known the literature produced by such figures as Rexford Guy Tugwell and Gardiner C. Means, it is unmentioned. Nor are they mentioned specifically

in *Capitalism, Socialism, and Democracy*. Though this work was published in 1942, its contents very much bear the marks of the 1930s and reflect Schumpeter's antipathies toward the Roosevelt administration's economic policies and toward "New Deal" intellectuals.

There is indeed an asymmetry in Schumpeter's treatment of nonmainstream American economists. He was rather generous in his "Hat II" appraisals of such figures as Carey, Patten, and George. Similar generosity was not extended to Institutionalist challengers to the mainstream, whether they be of the Wisconsin or the Veblenian variety. Even if he had lived to complete the work, it seems reasonable to infer that this asymmetry would have remained. One can also hazard the guess that that result would have been influenced—at least in part—by his hostility to the policy prescriptions inspired by Institutionalist economists. Perhaps Schumpeter was not totally innocent of a fault he found in others: namely, a failure to suppress one's views on policy when appraising an economists doctrinal contribution.

### REFERENCES

- Barber, William J. (1993) "Political Economy and the Academic Setting before 1900: An Introduction," in William J. Barber (ed.), *Economics and Higher Learning in the Nineteenth Century*, New Brunswick: Transactions Press, pp. 3–14.
- Marx, Karl (1932) [1867] *Capital: A Critique of Political Economy*, 3 vols., Chicago: Charles H. Kerr.
- Mill, John Stuart (1965) [1848] *Principles of Political Economy with Some of Their Applications to Social Philosophy*, in *Collected Works of John Stuart Mill*, 38 vols., Toronto: University of Toronto Press.
- Schumpeter, Joseph A. (1934) "Unpublished letter to Irving Fisher," 15 March 1934, Yale University Archives.
- (1946) "Unpublished letter to Irving Fisher," 18 February 1946, Yale University Archives.
- (1954) *A History of Economic Analysis*, New York: Oxford University Press.
- (1976) [1942] *Capitalism, Socialism, and Democracy*, New York: Harper & Row.

# POPULARIZERS AS CONTRIBUTORS TO ECONOMICS

The unappreciated tribe

*Bette Polkinghorn*

Schumpeter lists approximately 1,250 authors in the index of the *History of Economic Analysis*, ranging from one Philippus Caesar, who damned the sect of usurers (106n),<sup>1</sup> to Sigmund Freud (798), whose ideas he thought might apply in the future to the formation of economic policies. He refers not at all to the very successful Harriet Martineau, nor the less well-known Millicent Fawcett. He has a few favorable remarks for Archbishop Richard Whately (*Easy Lessons on Money Matters*) and Jane Marcet (*Conversations on Political Economy*). He deems the latter's work "economics for what we should call high-school girls" (477n). Yet, these authors sold thousands and thousands of educational books. How could Schumpeter, who valued the verdict of the market so highly, fail to recognize the success and influence of these popular writers?

One reason may be that he erred as to the true audience for this literature. The popularizing books of Marcet, Whately, and Fawcett—and to a lesser extent Martineau—were read by a surprising number of adults. These readers found them valuable as quick introductions to political economy—a way to avoid the "toil and trouble" necessary to work through the originals.

Contemporary economists did not make Schumpeter's mistake; they recognized fully the adult readership. Marcet's *Conversations on Political Economy* was praised by Macaulay, McCulloch, and Say. Macaulay claimed that a student who read Marcet's "Dialogues on Political Economy" could teach Montague or Walpole many lessons in finance (Macaulay 1851:3). McCulloch praised it saying, "this is, on the whole, the best introduction to the science that has yet appeared" (1845:18). Say praised Marcet as "the only woman who had written on political economy and shown herself superior even to men" (Lee 1893: vol. 36, 122–3). Ricardo agreed that the simplified texts could be useful and wrote: "the most intricate parts of Political Economy might be made familiar to the people's understanding... and a subject which appears at first view so difficult is within the grasp of a moderate share of talents" (Ricardo 1952: VII, 240–1).

Well-known laypeople also commented favorably. Lady Ann (Sir Samuel Romilly wrote:

Haven't you been delighted by Mme. Marcet's book? What an extraordinary work for a woman! Everyone who knows the subject is astonished, and people like me who understand nothing about it, or next to nothing, are delighted by the knowledge they have gained from it. One of our former judges who at 83 voraciously reads everything that comes out was impressed and truly regrets that he didn't know everything this book taught him when he was still presiding on the bench. How fortunate it would be for the country if our judges, not to mention our statesmen, knew half of what this work contains. You may say that this is a rather bold statement, but I assure you this is not merely my opinion.

(La Rive 1959:13)

Another possible reason why Schumpeter underestimated the impact of the popular authors is that he may have been unaware of the size of the sales of their books. The *Conversations on Political Economy* was translated into Dutch, French, German, and Spanish and was the *only* attempt—other than Martineau's *Illustrations*—to popularize orthodox economics that was successful as a publishing venture (Carpenter 1975:3). It went to *eleven* editions in England and America. Each edition was a minimum of 2,000 copies, and some of the cheaper editions were larger. All in all, this book may have sold 50,000 copies. Could Schumpeter have believed that all of these were purchased for high school girls with an intense interest in learning political economy?

Harriet Martineau's work was much better known than Jane Marcet's, but Schumpeter failed even to mention it. Of course, she was not at the frontier of economic theory; she neither discovered nor invented the theories she illustrated. Her intellectual gift was the ability to bring the ideas of the masters within the reach of the common reader.

Martineau's *Illustrations of Political Economy* consisted of twenty-four stories totaling more than 3,000 pages. The public response to their publication was so great that her mail had to be collected from the post office in a wheelbarrow (Martineau 1877:136)!

Many economists reacted favorably to her stories. After initial opposition, James Mill concluded that it was most desirable to have political economy disseminated so widely. J.R. McCulloch also had doubts about her original proposal, but was advised by Macvey Napier that “[the tales] are of extraordinary merit” (Blaug 1958:130). To the surprise of many, John Stuart Mill gave the “Tales” a favorable review, although he differed with the presentation of the economic doctrine on some points (Blaug 1958:130). In Mill's view, Martineau did not advance the science of political economy herself, but he thought her stories had merit because they increased the understanding of economic principles in an audience much different than his own.

Many individuals and much of the periodical press also praised her stories. Readers such as Princess Victoria and Coleridge anticipated the arrival of the next number. Richard Cobden was a supporter and Peel *sent* a letter of congratulations. Louis Philippe ordered his educational minister to introduce the French version into the national schools and the Emperor of Russia did the same (Blaug 1958:129–30).

What was Martineau's actual readership? Estimates differ. The first volume sold 10,000 copies and the publisher believed that to mean approximately 144,000 immediate readers (Fletcher 1974:369–70). This might be compared to Mills "Principles," which sold 3,000 copies in four years and Dickens's novels, many of which had immediate sales of 2,000–3,000 copies (Blaug 1958:129). Using the same ratio between pages and readership as did Martineau's publisher, the result is an admittedly excessive estimate of three million readers at the time of publication. Such an accomplishment was truly extraordinary, and Schumpeter could not have overlooked this record by accident—if he was aware of how large her sales and readership actually were.

Millicent Fawcett, wife of Cambridge Professor Henry Fawcett, wrote two books on political economy—*Political Economy for Beginners* and *Tales in Political Economy*. It was the first of these which was the most successful. It reflected the ideas of John Stuart Mill and was written in a simple style. Fawcett hoped that the book "would be useful to beginners, and would perhaps be of assistance to those who are desirous of introducing the study of political economy into schools" (Fawcett 1870: preface). She stated that the book was an introductory text, suitable for students and the general reader. She was particularly interested in the applications of the principles of political economy and their relation to the problems of everyday life.

The book was favorably received by competent critics. One of these was J.E.Cairnes, who wrote, "I have just finished my study of your useful little book and send you by this post my notes upon it." He did not hesitate to note that, "You will find I have some serious controversies with you" (Cairnes 1871:1, 4). These differences pertained to the topics of production and profits, but he recognized that Fawcett and Mill were in agreement on these points and that he was the one who was at variance with the profession.

Prior to the writing of the book, Fawcett wrote that "Mr. Macmillan's business experience convinced him that there was a demand for an elementary book on Political Economy" (Strachey 1931:54). Most certainly Macmillan was right. Editions appeared frequently and were revised and enlarged each time. A complete listing includes:

First edition, 1870  
 Second edition, 1872  
 Third edition, 1874  
 Fourth edition, 1876  
 Fifth edition, 1880

Sixth edition, 1884  
Seventh edition, 1889  
Eighth edition, 1896  
Ninth edition, 1904  
Tenth edition, 1911

About her success with the book, Fawcett wrote, “My little book passed through many editions. It is now in its tenth, and is still in some demand” (Fawcett 1924:86).

The number of books printed for each edition is open to some question. Much earlier in the century, Jane Marcet’s popularizing books were published in editions of 2000 each and were revised when each edition sold out. If that very conservative estimate is used here, sales of *Political Economy for Beginners* would have been a minimum of 20,000 books. Of these a substantial number were for adult reading. Furthermore, as some were used as school texts, these books were read by several pupils. Assuming that half were sold to schools, and that four or more students read each one, it is possible that 50,000 persons were exposed to political economy by this one publication.

Did Schumpeter overlook the contributions of the popularizers because he thought they contained no original analytic material? The popularizers did not advance the frontier of economics theory, but their work was not a simple recitation of economic platitudes either. Their writing sometimes differed in emphasis and view from the masters. This was particularly true for Marcet and Whately on the subject of value; both emphasized the subjective value theory that was to come later to the profession. Marcet wrote:

Labour, you will observe is valuable only if it gives utility to an object. Were a man to construct or fabricate commodities which had neither utility, curiosity, or beauty, the labour he bestowed upon them would give no value, and if he exposed them for sale, he would find no purchasers.  
(Marcet 1824:202)

Shortly after its publication Malthus wrote to Marcet praising her *Conversations on Political Economy*, but added that, “I think you have given too much sanction to Mr. Say’s opinion reflecting utility” (Malthus 1817). Whately concurred with Marcet and wrote the now famous sentence relating cost to price, “It is not that pearls fetch a high price *because* men have dived for them; but on the contrary, men dive for them because they fetch such a high price” (1832:253)

## CONCLUSION

How could Schumpeter ignore this market success? These writers were *innovators* in the field of economic education. How could he fail to mention two of these writers and pass the third off as an author of “economics for...high-school girls”? How could he fail to recognize the fact that a very large number

of individuals learned all they were to know of political economy through the writings of these popularizers?

In part, the answer to this question is that he echoed the judgment of the rest of the profession. Only a much more thorough investigation would have revealed the extent of the adult readership. This, Schumpeter—and others—did not do.

This raises the larger question of *why* the bulk of the profession—including Schumpeter—failed to take the work of the popularizers seriously. No one answer can be given with certainty, but some reasons have been suggested here. To these might be added one more.

It may have been possible that the popularizers contributed to their own neglect through false modesty. All four of the writers included in this chapter—Marcet, Whately, Fawcett, and Martineau—introduced their books as *primers* primarily intended for the *instruction of young people*. Yet all knew quite well the extent of their own adult readership. If later economists examined their work only superficially, they would be unaware of their real influence. Could they then be faulted for taking these authors strictly at their word—as providers of simple texts for children?

### NOTE

- 1 References to Joseph A. Schumpeter (1954), *A History of Economic Analysis*, New York: Oxford University Press, appear simply as page numbers within parentheses.

### REFERENCES

- Blaug, Mark (1958) *Ricardian Economics*, New Haven: Yale University Press.
- Cairnes, J.E. (1871) "Letter to Mrs. Henry Fawcett, 31st May, 1871," Fawcett Library, City of London Polytechnic, Archive Letter Collection.
- Carpenter, Kenneth (1975) *The Economic Bestsellers Before 1850*, Cambridge, MA: Kress Library of Business and Economics, Harvard Business School, Bulletin 11.
- Fawcett, Millicent (1870) *Political Economy for Beginners*, London: Macmillan & Co.
- (1924) *What I Remember*, London: Unwin.
- Fletcher, Max E. (1974) "Harriet Martineau and Ayn Rand: Economics in the guise of fiction," *American Journal of Economics and Sociology* 33 (October): 369–70.
- La Rive, August de (1859) "Madame Marcet," *Bibliothèque Universelle de Genève* (March): 3, 13.
- Lee, Sydney (ed.) (1893) *Dictionary of National Biography*, London: Smith, Elder and Co.
- Macaulay, T.B. (1851) *Critical and Historical Essays*, London: Longman, Brown, Green, and Longmans.
- Malthus, T.R., (1817) "Letter to Jane Marcet, circa 1817," Archive Guy de Pourtalès, Etoy, Switzerland.
- Marcet, Jane (1824) *Conversations on Political Economy*, 5th ed., London: Longmans.
- Martineau, Harriet (1834) *Illustrations of Political Economy*, 9 volumes, London: Charles Fox.
- (1893 [1877]) *Autobiography*, London: Virago.
- McCulloch, J.R. (1938) [1845] *The Literature of Political Economy*, reprint, London: London School of Economics.
- Ricardo, David (1952) [June 6, 1818] "Letter to James Mill," in P. Sraffa (ed.) *The Works and Correspondence of David Ricardo*, 11 vols., Cambridge: Cambridge University Press.
- Strachey, Ray (1931) *Millicent Garret Fawcett*, London: Murray.
- Whately, Richard (1832) *Introductory Lectures on Political Economy*, London: B. Fellowes.



# THE HISTORIOGRAPHY OF ECONOMICS

## A methodological approach

*Annie L. Cot and Jérôme Lallement*

By History of Economic Analysis I mean the history of the intellectual efforts that men have made in order to *understand* economic phenomena or, which comes to the same thing, the history of the analytic or scientific aspects of economic thought.

(Schumpeter 1954:3)

By providing this focus, Joseph A. Schumpeter restated his lifelong belief in the existence of certain objective “facts” that were out there to be studied. According to Schumpeter, economic phenomena—the so called “economic facts” (1954:5, 6 *et passim*)—were the evidence used to support economic theories and could be perceived directly by the scientist with his senses. Of course, Schumpeter admitted that economic facts do change as institutions change and that “the subject matter of Economics is itself a unique historical process...so that, to a large extent, the Economics of different epochs deal with different sets of facts and problems” (1954:5). Immediately after these remarks, Schumpeter repeated his view that economic phenomena constitute scientific data to the extent they correspond “to the narrower category of ‘facts verifiable by observation or experiment’” (1954:8).

Unfortunately, Schumpeter never did clarify what he meant by “economic phenomena.” He recognized, moreover, the difficulty and renounced any explanation of what an economic fact or phenomenon might be. Schumpeter wrote: “Our closest approach to doing so will consist in the enumeration presented below of the main ‘fields’ now recognized in teaching practice. But even this epideiktic definition must be understood to carry no claim to completeness” (1954:10).

The history of economic thought is a history of knowledge and this knowledge is necessarily concerned with some type of object of one sort or another. We must determine what this object is. This is an indispensable preliminary to any reflection on the history of economic thought or on the history of economic

analysis. The question is then to specify the object of this knowledge—the knowledge which might alternatively be designated as “economics,” “economic thought,” “political economy,” or “economic analysis.”

In this chapter, we consider the historiography of economics. Our goal is to analyze what results economists have come up with when economists have tried to put their finger on exactly what the “object” of economic research should be. In the first section, we analyze several canonical definitions of economics in order to sketch the solutions suggested by authors who were aware of the limits of their own definitions of what constituted the field of study. In the second section, we shall then suggest a definition of economics in terms of its outer frontiers. Finally, we discuss the consequences that can be drawn from these considerations for the history of economic thought.

### **DISAGREEMENT OVER THE DOMAIN OF ECONOMICS**

The first thing to do, at the beginning of a course or a treatise on political economy, is to define the science itself, its object, its divisions, its character, its limits. I have no intention of escaping this obligation; but I must warn that it is more difficult and longer to fulfill than one might suppose. A definition of political economy is lacking.

(Walras 1874–7:25)

Walras’s statement is both cruel and lucid, because the definitions of economics were in his day and remain in ours numerous, varied and largely divergent. Without pretending to be exhaustive, I shall now take a look at the canonical distinction between two families of definitions of economics: The first emphasizes the formal characteristics of economic arguments, while the second looks to the substance or object of what the economist pretends to study. We shall examine both approaches to defining economics in order to learn from the improvements that have been proposed.<sup>1</sup>

The archetypal formal definition was offered by Lionel Robbins in 1932 and remains widely acknowledged by economists today. According to Robbins, “Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses” (Robbins 1932:16).<sup>2</sup> Economics is thus defined as the rational form of behavior. The difficulties that stem from this definition include its expansive applicability to virtually any human endeavor whatsoever. Human behavior involves a choice between different means to attain specific ends where the means are scarce. The field of economics is therefore infinite in scope. It encompasses everything, from the art of war, to cooking, chess, or even household repairs. Economics, then, seems to be confronted with an absence of limiting determination: economic problems are encountered everywhere. The discipline of economics can no longer be treated as a specific entity. This formal definition of economics is too broad.

Substance-oriented definitions propose to define economics by its content.

These definitions point to specific objects to which Robbinsian rational behavior might apply. This is, among others, the definition of Jean-Baptiste Say:

It [political economy] instructs us how wealth is produced, distributed, and consumed in society.

(Say 1815:35)<sup>3</sup>

A second family of definitions, a second series of elusive terms: production, distribution, and consumption are introduced, thereby defeating any attempt to limit the domain of economics. Other activities imply a similar articulation without necessarily coming under the heading of economics. As Jean-Baptiste Say hastened to make clear, the subject matter of economics concerns the production, the distribution and the consumption of *wealth*. The difficulty is thereby automatically transferred to the definition of wealth. Is wealth, then, a matter of population, as according to the aphorism in Jean Bodin's *République*: "There is no wealth nor strength but man"? Or is wealth an accumulation of precious metals as Bodin, once more, asserted in his *Answer to the Paradoxes of Mr. de Malestroit*:

The abundance of gold and silver which is the wealth of a country must, in part, justify its high cost of living.

(Bodin 1932)

Or rather, according to Adam Smith, is wealth composed of the collection of "the necessities, conveniences, and amusements of the human life"? (Smith 1776:47, 10). Which definition of wealth will it be?

The definition of wealth as a collection of use values calls to mind numerous economists such as François Quesnay, Adam Smith, David Ricardo, Karl Marx, Léon Walras, and Alfred Marshall. Understood in this manner, this definition of wealth is inadequate and fails to delimit economics to established and easily recognized boundaries. Clearly, all that is useful to humans does not always come under the scope of economics. This criticism is obvious once we attempt to pursue the analysis and compare the concept of wealth with that of exchange value and prices.

Say raises this difficulty. If the first "question" of his *Cathéchisme d'économie politique* dealt with the definition of economics ("What does political economy teach us?"), the second concerns wealth, "What is understood by the word Wealth?" (Say 1815:35). Wealth is composed of things that are useful, Say argued, but not all things that are useful compose wealth. Say lists the characteristics of wealth that must be present before wealth can be considered a subject for political economy. First the wealth must have market value. Second, the object must be appropriated.<sup>4</sup> Economics can define its domain only if preceded by a definition of value and an analysis of property. Moreover, Say does not avoid the tautology that consists, on the one hand, of defining wealth

as “all useful things that are appropriated” and, on the other hand, of defining value as the utility of things.<sup>5</sup>

We can only mention here the multiplicity of other attempts to define economics, that have yielded a multiplicity of definitions. Furthermore, authors combining both the formal and substance definitions do not escape the difficulties characteristic of each.<sup>6</sup> This is the case, if one wants to avoid the “sociological attitude” Jacob Viner used to mock, which consists in defining economics as that which economists do. Viner’s definition does not resolve the more fundamental question of “Who are the economists?” The obvious answer is “Those that practice economics are the economists.” Clearly, a different definition of economics needs to be found. Such a definition must be able to specify an object of human knowledge that is capable of accommodating the different definitions of economics. The definition that we seek is one that would be able to distinguish economics from other areas of knowledge.

The criticisms and limitations imposed by economists on their proposed definitions may offer a way out of the difficulties of defining economics either in a formal or in a substance-oriented way. Two examples are worth considering here. Augustin Cournot proposed to develop a theory of wealth. He began by remarking that “the Tudescan root *rik* or *reich* that was used in all the Roman languages, expressed vaguely a relation of superiority, of force, of power” (Cournot 1838:7). He immediately added, though, that the “idea that we have made of wealth, and which is relative to our state of civilization, could not have been known by the people of the Germanic race, neither during the epoch of conquest, nor even during far later periods in which feudality subsisted in all its vigor” (1838:7). For Cournot, in effect, wealth is synonymous with exchangeable values and this identification of wealth with exchangeable values is the fruit of historical narrative: “The idea of wealth, such as advanced civilization gives us, only formed slowly subsequently to the progress of commercial relations, and by the reaction that commercial relations exert [ed] on civil institutions over the long run” (1838:8).

Léon Walras redeveloped some of Say’s ideas and attempted to correct their inadequacies. Walras proposed to define economics by its object, “social wealth,” and thereafter undertook to infer from this definition the domain of economics as well as its methods. “I call *social wealth* the whole of material or immaterial things...that are *scarce*, that is to say, on the one hand, that to us are *useful*, and that, on the other, are only at our disposal in *limited quantities*” (Walras 1874–7:45). From this definition Walras drew two sorts of consequences, some a priori, some a posteriori.

A priori he deduced from his definition that the elements of social wealth are, first, appropriable, second, valuable and exchangeable, and third, industrially producible. It is a question here of the consequences that follow logically from the definition of social wealth. Walras also took care to specify the potential character of these consequences; for example, he did not say that all scarce things are appropriated, but only that they are *susceptible* to being appropriated. The

difficulties appear when Walras intends to clarify the a posteriori consequences of his definition of the object of economics. In effect, the fact of being susceptible to being appropriated or exchanged or reproduced is not sufficient to transform the goods (or services) into goods (or services) in the economic sense.

Furthermore, Walras added, one must a posteriori examine exchange, property, and production to give an effective content to these general and potential categories which do not pertain to anything specifically economic. In fact, the analysis of appropriability could quickly exhaust itself in a judicial analysis, and production could appear as a purely technical question. It is therefore by means of the phenomenology of effective exchange—effective and no longer potential—of effective production and of effective property, that Walras undertook to specify these categories, from which he constituted the basis for political economy.

One only has to open one's eyes to establish *a posteriori*, among the general facts, the facts of exchange. All of us, we daily accomplish, as a series of special acts, exchanges, i.e., buys and sells.... The exchanges are made on the market.... One says the European market, the French market, the market or marketplace of Paris. Le Havre is a market for cotton, and Bordeaux is a market for wine; the Halles are a market for fruits and vegetables, for wheat and cereals; the stock market is a market for industrial shares.

(Walras 1874–7:49)

Walras avoided the difficulties of Say's definition which lead one to believe that economics is a "natural" science, a science in whose domain man does not intervene, where "wealth is *produced, distributed and consumed*, if not all by itself, at least in a manner that is somehow independent of human will, and that the whole of political economy consists of the simple demonstration of this manner" (1874–7:30).

On the contrary, to specify the idea of exchange, Walras uses historically dated and localized examples. Likewise, to specify appropriability, Walras evokes different regimes of property, and he insists on the variability of the modes of distributing wealth, from one society to the next. "But, in matters of property as well as in matters of government, humanity has always patiently evolved from the initial disorder of facts toward the final order of principles" (Walras 1874–7, 62).

Henceforth, political economy becomes entirely dependent on its historical context of reference. But Walras does not draw all the possible consequences of this historical specification and he does not restrict the validity of political economy to one type of *historically* determined society rather than any other.

Here we find ourselves at the heart of the problem. The initial formulations of the different definitions of economics, from Jean-Baptiste Say to that of Lionel Robbins, both have a common denominator in that they implicitly postulate

universal and eternal economic categories that are transhistorical and valid for all times and all places. Rationality, scarcity, exchange, value, property, and market are supposed to be natural categories that constitute the object of economic investigations. And, in this case, as Walras remarked, economics is supposed to be a “natural” science, like physics or astronomy. Is economics a science concerned with external objects that appear as natural givens to the scientists? Many have argued—Cournot and Walras and, of course, Marx—each in his own manner that economic phenomena have a decidedly *historical* dimension.

These authors all deny that economic categories are natural and propose that they are relative. In so doing, they remind us that an essential characteristic of all human societies is their historicity. One of the great lessons of modern anthropology is precisely to have shown that the identification of phenomena as “economic” is a quite recent development.<sup>7</sup>

Certainly all societies produce, distribute, and consume. Certainly all societies have norms of rationality. However, all societies do not isolate, among the whole of social phenomena, a particular sphere of activities and phenomena to be identified nowadays as “economic activities.” Economics is thus entangled and embedded in the entirety of social relations, be it politics, religion or family, without appearing as a specific, autonomous or distinct entity. The emergence of political economy, as a specific body of knowledge concerned with a collection of relatively autonomous social relations and phenomena, is thus a recent event that we can date to the eighteenth century and not much earlier.

According to Louis Dumont, “It should be evident that there doesn’t exist anything in the outside reality that resembles an economy, until the moment we construct such an object” (Dumont 1977:33). In other words, economics is an artificial construction that isolates, in the whole of society, a particular sphere of activity and a particular set of social relationships.<sup>8</sup> Apart from the historical character of economic phenomena, their aspect as representation is at least as important. Economics is not a natural or immediate given but the result of an artifact; economics is “instituted.” It constitutes a “modern” way of thinking, *the* “modern” way of thinking.

### **TRACING THE FRONTIERS OF ECONOMICS TO THREE LOUD RUPTURES WITH THE PAST**

The preceding considerations suggest, as it were, that prior to a history of the analytical developments of economic theory it is necessary to investigate the conditions under which economics developed into an autonomous discipline, especially in the eighteenth century.

This history involves that of the determination of the frontiers that political economy established vis-à-vis its neighboring disciplines: A slow, experimental, progressive, oft-reversed, and staggered determination<sup>9</sup> which resulted, by the end of the eighteenth century, in an autonomous configuration of the economic domain. This domain was itself separated from three disciplines which until

then determined the representation of the activities of the production and the circulation of wealth. Those disciplines were morals, political philosophy—to which, as we recall, mercantilistic thought subordinated economics—and the natural law theories developed from the beginning of the seventeenth century by the *Ecole du Droit de la Nature et des Gens*.

The steps of this development are well known, linked to three major texts. The first of these texts was Bernard Mandeville’s *Fable of the Bees*, which delimited the frontier between ethics and economics. The second development was John Locke’s *Second Treatise on Civil Government*, where the separation was established between the economic and political domains. Finally, there were the several texts of Jeremy Bentham, which facilitated a clean break between the theoretical foundations of political economy and those of natural law.

### Mandeville’s *Fable of the Bees*

The subtitle of Bernard de Mandeville’s book states it all: private vices and public benefits. A society that lives beyond moral virtue, in “vice”—egoism, passions, and the necessity to assuage unquenchable needs—knows corruption, luxury, cupidity, waste, but also paradoxically prosperity and material welfare. “Thus every Part is full of Vice, Yet the Whole Mass a Paradise” (Mandeville 1714:24). For it is these vices, be they mutually divergent and contrary to the moral order, which lead, by a “mechanical effect,”<sup>10</sup> to general welfare. *A contrario*, the return of society to a moral attitude, true to the desires of the gods, marks the end of “public benefits” by instituting the reign of inactivity and poverty.

Arrogance and a taste for luxury have, thus, a social function which subsumes their character of individual vices: that of assuring economic activity, henceforth defined as the reason for which individuals live in society.<sup>11</sup> This is the surprising moral that Mandeville draws from his *Fable*:

Nay, where the People would be great,  
As necessary to the State,  
As Hunger is to make ’em eat.  
Bare virtue can’t make nations live  
In Splendor; that would revive  
A golden Age, must, be as free  
For Acorns, as for Honesty.

(Mandeville 1714, I: 37)

There are two lessons here for a history of the frontiers of economics:

- 1 The affirmation of an ethics specific to the economic sphere—the ethics of personal interest, represented here by egoism, arrogance and a taste for luxury; and
- 2 The promotion of material opulence as the legitimate goal of any society.

The first has for effect the emancipation of the economic discourse from the ethical considerations to which it had been associated since the time of Aristotle and Thomas Aquinas. The second leads to a definition of economic ethics as an ethics of social welfare and, thus, submits the social order to the imperative of creating opulence or material wealth.

### The second rupture

The *Second Treatise of Government* is a groundbreaking text. Locke's book clearly rejected the ontological hierarchy among individuals, a hierarchy that characterized the whole of political thought, with the very notable exception of Hobbes.<sup>12</sup> The order of the world conceived by Locke, as we well know, is three-tiered: God, men, and inferior creatures, essentially the creatures and objects appropriable by men (Locke 1690:18–19). This relation of appropriation, on which the entire construction rests, is itself founded on two central hypotheses: First, the equality between individuals which constitute the second third of the world order—that of man. This state of nature, writes Locke, is

a *state* also of *equality* there being nothing more evident, than that creatures of the same species and rank, promiscuously born to the same advantages of nature, and the use of the same faculties, should also be equal one amongst another without subordination or subjection.

(1690:8)

Second, the legitimation of the property of things—the “inferior creatures”—by means of labor:

He that is nourished by the acorns he picked up under an oak, or the apples he gathered from the trees in the wood, has certainly appropriated them to himself. No body can deny but the nourishment is his. I ask then, when did they begin to be his? When he digested? When he eats? When he boiled? or when he brought them home? or when he picked them up? or it is plain, if the first gathering made them not his, nothing else could. That *labor* put a distinction between them and common: that added something to them more than nature, the common mother of all had done; and so they became his private things.

(1690:19)

The first hypothesis confirms the figure of the autonomous individual, relieved—at least in its social definition—of any bonds of subordination, as it had been gradually established and was generally affirmed by the texts of Hugo Grotius, Samuel von Pufendorf, and Thomas Hobbes. The second leads to the constitution of property as the foundation on which any political society must be constructed.

The inversion here is essential: Admittedly, the upheaval of the logical order



which subordinated, until then, the material considerations to the political imperative was not accompanied, in the case of Locke, by a separation of economics and ethics. But it signified, for the first time, not only a real break between the range of property and production and that of politics, but also an affirmation of an economic foundation—be it in an initial formulation, *in statu nascendi*,<sup>13</sup> of any political order.

### The substitution of utilitarianism for natural law

The third rupture consisted of a substitution of utilitarianism for the older theories of modern natural law. The founding texts, in this case, are those of Jeremy Bentham. We mention *Anarchical Fallacies* on one hand, and the *Institute of Political Economy* on the other. The first, a pamphlet addressed to the French Constituants of 1795 against the *Déclaration des Droits de l'Homme et du Citoyen*, aimed to reject any foundation of a social science—defined by Bentham as a science of utility—that was rooted in the “fiction” of a presocial state of nature or one of its two corollaries. Bentham denied the existence of an inherent social contract and the affirmation of a superior legitimacy of inalienable natural rights of citizens vis-à-vis positive law.<sup>14</sup>

The manuscript of the *Institute of political economy prolonged* the reasoning, as Bentham distinguished three economic domains of different nature: the domain in which the market assures, without *artefact*, i.e., without external intervention, the harmony of individual interests which make up society; the domain in which the State could intervene but should not because the disadvantages resulting from this intervention would outweigh the advantages the citizens are liable to obtain; and the domain in which the State should intervene to assure, artificially, the harmony of the interests of the citizens.<sup>15</sup> *Sponte acta, non agenda et agenda*, says Bentham in awkward Latin, thus restating one of the major oppositions of the Enlightenment, between what Elie Halévy would later call the “natural harmony of interests” and the “artificial harmony of interests” (Halévy 1901:15–24).

As noted previously, Bentham’s rupture concerned both a novel representation of the individual and a novel representation of society. In the eyes of Bentham, who liked to define himself as the “Newton of morals,” the science of utility must devote itself to being simultaneously the science of the individual—of his pleasures and his pains—and the science of the association between divergent individual interests, whether this association is natural—as in the case of reciprocal contracts on the market between two equal parties—or artificially assured by the State in the name of the principle of “the greatest happiness of the greatest number,” in the case of what modern language would call “public goods.”

This is the last lesson to be drawn for this initial tracing of the frontiers of the economic domain: The new science will be organized around a utilitarian conception of society—thus any reference to an exterior “natural order” is to be banished from economics for good.

The only natural laws are those of an autoregulated market and where the positive laws ordered by the State—under the strict control of public opinion—are charged with assuring “the greatest happiness of the greatest number” in the domains which, still pertaining to political economy, are not covered by the market. This is what led John Stuart Mill—Bentham’s worthy predecessor opponent—to divide the economic domain into two sub-domains: the first, that of the Laws of Production—given by “technical conditions,” “physical truths”; the second, that of the Laws of Distribution—determined by the laws and customs of society, that is by “human institutions” (Mill 1848:126–7). This implies a prior definition of social justice and thus an inaugural reference to both law and ethics, which will find, only at a later stage, their expression in economics.

These three ruptures have had the effect of tracing the contours of modern economics in affirming its autonomous character: “disenchanted” economics, to borrow Max Weber’s illuminating expression; autonomous from religion—which is, as we know, the common trait of all post-Renaissance learnings—but autonomous as well from the political and legal foundations, which until the eighteenth century had subordinated these preoccupations, which one did not yet call “economic,” to other fields of knowledge.

It is necessary, however, to add another condition to these three ruptures: That economics could be thought of as *stricto sensu* self-centered, that could be defined within its own field a principle of coherence that would be self-specific and that could be found within its own territory the totality of its determinations. Here we have arrived at the final step of this tracing of the initial frontiers of the economic domain: the demonstration from François Quesnay’s *Tableau Economique* in 1758 of the possibility of a unified, coherent and complete representation of economic phenomena, by furnishing an analysis of the production and circulation of wealth whose mechanisms are found in the exclusive field of economics.

And now a specific economic domain had emerged which contains within itself its own foundations, its own justifications and its own criteria of legitimacy. To be more precise, this “completeness,” which led the classical school to attribute a central place to the figure of the individual and to center its theoretical interrogation on the question of the value and the price of commodities, does not signify in the least that there are no more ties between political economy and the neighboring disciplines. It only signifies that, for the first time in the history of societies, at the end of the eighteenth century, an economic “point of view” was constituted: an autonomous territory from which questions concerning law, political philosophy, and social justice were posed differently from their original domains, subordinating them to general economic preoccupations.

## NEW DIRECTIONS FOR RESEARCH

A few directions of future research can be sketched out:

1 The history of economic thought encompasses a history of economic frontiers, for two reasons. First, so long as political economy remained unwritten, there could only be a “prehistory” of political economy, in the literal sense, that is a history of the period prior to a written record of economics. As Schumpeter wrote about the scholastic doctors of the Renaissance,

We find small beginnings only—little of sociology, still less of economics.<sup>16</sup>  
(Schumpeter 1954)

One can certainly identify sparse elements of that which would later constitute an autonomous and coherent theory. It is only by a retrospective illusion that one can mistake these bits of political philosophy, chip-ethics, or fully fledged theology for full-blown political economy. Hence there can only be a prehistory before a history of economic thought, that is, an analysis of the genealogy of this discipline, which should not be described as a continuous path toward modern economic theory, but rather as a series of intellectual movements and debates, undoubtedly mostly heterogeneous, where minuscule fissures and grand evolutions were at work, harbingers of what remained to be done.<sup>17</sup>

In this manner, such a history would be charged with describing the constitution of an economic viewpoint on society, which crystallized in the eighteenth century, by means of a radical dissociation in social representations that led to a particular sphere of activity, an autonomy and a completeness without equivalent until then.

Second, a history of frontiers is also, necessarily, a history of the evolutions and displacements of the milestones which had initially marked the passage from the prehistory of economics to its history. Here is the second facet, still unwritten, of this history of the frontiers of economics. Such a history would permit, on the one hand a return to the history of economic analysis, for which these displacements correspond to some internal conditions; and, on the other hand, it would introduce an epistemological perspective reflecting on the evolution of the scientific status which economic theory has wanted to adopt at different times for two centuries.

2 Therein lies the second direction of research: the history of economic thought cannot be separated from reflection about the epistemological status of post-eighteenth-century economic theory, that is to say on the scientific criteria, or the “regimes of truth” to which it has submitted itself over the course of its history.

The classical example, in this matter, is that of Walras, for whom only the distinction between science, arts, and morals allows us to define the exact level of abstraction of the *Eléments d’Economie Politique Pure*, and thus to understand its own criteria of “truth,” purely mathematical and rational, without any link with the “reality” of the market.

3 The third, and final, consequence that can be drawn from our previous discussion concerns the manner in which to carry out a history of economic

thought. Following what Richard Rorty wrote about the history of philosophy,<sup>18</sup> we shall distinguish four manners—four “genres”—toward the history of economic thought.

- (a) *Historical reconstruction* consists of restituting the authors’ theoretical systems “in their own terms,” starting from their own postulates, according to their own theoretical and epistemological criteria. The constraint here was formulated by Quentin Skinner: “No agent can eventually be said to have meant or done something which he could never be brought to accept as a correct description of what he had meant or done” (Skinner 1969:28; Rorty 1984:50).
- (b) Conversely, the second genre, *rational reconstruction*, treats past authors as if their theories were contemporary and discusses these in a modern language, undertaking to detect errors and, thus, to underscore the scientific progress which, in this context, gives a clear sense to any history of thought. Consequently, “there will be as many rational reconstructions which purport to find significant truths...in the work of a great dead philosopher, as there are importantly different contexts in which his works can be placed” (Rorty 1984:55). The contrast between historical reconstruction and rational reconstruction is a classical one: the first reconstruction belongs to a contextualist account, the second one to this “Whiggish” account that Samuelson demands for the “history of economic science” (Samuelson 1987:51).
- (c) *Geistesgeschichte*—the intellectual history, “typically describes the philosopher in terms of his entire work rather than in terms of his most celebrated arguments” (Rorty 1984:57). Therefore, “canon formation” history is in charge of deciding which questions are the ones which tie modern theories to past theories—and which questions are simple matters of “contingent arrangements” (1984:60).
- (d) Finally, *doxography*, “the most familiar and most dubious” of the four genres (Rorty 1984:61), attempts to demonstrate the durability of certain theoretical questions over time so as to impose the problematic of modern orthodoxy on a canon drawn up without any reference to this problematic—an operation which, according to Rorty, “inspires boredom and despair” (1984:61). Thus, the link between doxography and reconstruction can be resumed as follows: “It is this calamity [doxography] to which proponents of historical reconstruction respond by insisting on the need for spelling out the contexts in which the texts were written, and to which proponents of rational reconstruction respond by insisting that we look at the great dead philosophers in the light of ‘the best work now being done on the problems they discussed’” (1984:62).

A history of the moving frontiers of economics is thus here clearly lodged between the “historical reconstruction” and the *Geistesgeschichte*. In this manner, the result of the narrow, yet necessary, articulation of the history of concepts and the history of the “regimes of truth” is that the very definition of economics, the institution of a rift between that which comes under the heading of economics and that which does not, has evolved over time. Furthermore, the

very words “economy,” “interest,” “prices” have entirely different meanings for Aquinas, Quesnay, Smith, Irving Fisher, John R.Hicks, or Friedrich Hayek. The argument is an old one. It is in line with a certain French tradition in the history of science which, since Bachelard, Canguilhem, and Michel Foucault, has challenged the very notion of “precursor.” It overtly pleads here in favor of the relativistic approach and against retrospective history in either of the forms identified by Rorty, that of rational reconstructions and that of doxography. Today these same two forms are enjoying a resurgence in our discipline and the relativistic approach may not be well represented.

## NOTES

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- 1 This is the distinction proposed by Karl Polanyi in his article “L’économie en tant que procès institutionnalisé.” “We first have to note that, concerning human activities, the term ‘economic’ carries two meanings with distinctive roots, which we shall call substantive sense and formal sense” (Polanyi and Arensberg 1957:239).
- 2 This is the canonical formulation. But Robbins also cites numerous authors—for the most part Austrians—who, long before him, had already expressed a similar conception of political economy.
- 3 The same definition is used in his “preliminary Discourse” (1826) and added to the fifth edition of the *Traité d’économie politique* (1826): “Political Economy... instructs us how the wealth which satisfies society’s needs is formed, distributed and consumed” (Say 1826:7).
- 4 “Man uses certain goods that nature accords freely, such as air, water, sunlight; but it is not these goods which he calls *wealth*, in the common sense. He reserves this term for those goods which have value, and which are the exclusive property of their possessors, such as land, metals, money, grains, fabrics and commodities of all types” (Say 1826:49).
- 5 “How does one give value to an object?—in giving it a utility that it did not already have” (Say 1826:37).
- 6 For example in his *Economics*, Paul Samuelson combines the substantial and the formal definitions of economics. “Any society...must somehow confront *three* fundamental and interdependent economic problems,” that is to know what goods to produce, how to produce them and for whom to distribute them (Samuelson 1980:15–16). But he also states that: “Economics is the study of how people and society end up *choosing*...to employ *scarce* productive resources that could have alternative uses to *produce various* commodities and *distribute* them for consumption, now or in the future, among various persons and groups in society” (1980:2). The same combination stands for Edmond Malinvaud: “Economics is the science which studies how rare resources are employed for the satisfaction of men living in society; it is interested, in one respect, in the essential operations which are production, distribution and consumption of goods, and in another respect, in the institutions and activities which aim to facilitate these operations” (Malinvaud 1975:1). It still remains in both cases to define what these goods or commodities are.
- 7 We will only mention here the works of Karl Polanyi: *The Great Transformation* (1944) and *Trade and Market in the Early Empires* (1957); and also those of Louis Dumont, *Homo aequalis* (1977) or *Essays on Individualism* (1983).

- 8 Production, for instance, is not a “natural” economic reality. There are, in all activities producing goods useful for the satisfaction of the needs of any society, multiple, technical, religious, legal, social and other aspects. All societies produce their conditions of material existence, but to be able to distinguish an economic dimension in the social activity of production is neither obvious nor universal. This results from an artificial division, which separates the production of value from other dimensions of the activity of production. One could say the same for all other objects of economics.
- 9 As demonstrated by the article, “Economic politique,” written by Jean-Jacques Rousseau in 1755 for the *Encyclopédie*, where the juxtaposition of the two terms had no significance other than extending the domain of the *oikos nomos* to that of the political, i.e., to the sphere in which the sovereign’s power was exercised (Rousseau 1755).
- 10 The word is from Jean-Claude Perrot, in the section on “Bernard Mandeville’s Innkeeper” (1992:344).
- 11 See here Jérôme Lallement (1993).
- 12 We will here recall the magnificent hypothesis of Hobbes regarding the equality of men, defined not as a recognized empirical phenomenon, but as a fundamental, logical postulate.
- 13 The word is from Louis Dumont (1977:75).
- 14 This philippic, written in 1795, was initially entitled *Pestulance Unmasked!* The initial text would later be adapted to French by Etienne Dumont, under the name of *Sophismes anarchiques* and later published in English, after the death of Bentham, by John Bowring, under the title of *Anarchical Fallacies* and finally retranslated in French in 1840 as *Sophismes parlementaires*. On this point see Annie L.Cot (1992, 1993).
- 15 See Jeremy Bentham (1801–4).
- 16 According to Schumpeter, “St. Thomas, in particular, was interested in political sociology but all the economic questions put together mattered less to him than the smallest point of theological or philosophical doctrine, and it is only where economic phenomena raise questions of moral theology that he touches upon them all” (Schumpeter 1954:90).
- 17 Among the first steps in that direction, see Michel Foucault (1966), Jean-Claude Perrot (1992), or Catherine Larrère (1992).
- 18 Applied by Mark Blaug to the history of economic thought: see Richard Rorty (1984) and Mark Blaug (1990, 1991).

## REFERENCES

- Bentham, Jeremy (1816) [1795] *Nonsense Upon Stilts, or Pandora’s Box Opened*, manuscript published by Dumont after J.Bentham, *Tactique des assemblées législatives, suivie d’un Traité des sophismes politiques*, Geneva: J.Paschoud.
- (1838–43) [1795] “Anarchical Falacies; being an Examination of the Declarations of Rights Issued During the French Revolution,” in J.Bentham, *The Works of Jeremy Bentham, published under the Superintendence of his Executer, John Bowring* (11 volumes), Edinburgh: Tait, 8:489–534.
- (1840) *Sophismes parlementaires*, French trans. by Elias Regnault, Paris: Pagnerre.
- (1952) [1801–4] “Method and Leading Features of an Institute of political economy (including finance) Considered not only as a Science but as an Art,” reprint in Jeremy Bentham’s *Economic Writings. Critical edition based on his printed works and unpublished manuscripts by Werner Stark*, London: George Allen & Unwin for the Royal Economic Society, 3:305–80.
- Blaug, Mark (1990) “On the Historiography of Economics,” *Journal of the History of Economic Thought* 12:27–37.
- (ed.) (1991) *The Historiography of Economics*, Aldershot: Edward Elgar.
- Bodin, Jean (1932) [1568] *Réponse aux paradoxes de M.de Malestroit, touchant l’enrichissement de toutes choses*, Paris: A.Colin.

- Cournot, Augustin (1980) [1838] *Recherches sur les principes mathématiques de la théorie des richesses*, Paris: Vrin.
- Cot, Annie L. (1992) "Jeremy Bentham between Liberalism and Authoritarianism: the French Mirror," in S.Todd Lowry (ed.) *Perspectives on the History of Economic Thought*, Aldershot: Edward Elgar.
- (1993a) "Utilitarisme, libéralisme économique et libéralisme politique: Jeremy Bentham et la boîte de Pandore des droits naturels," *Oeconomia (Economies et Société, série PE)* 18 (December): 86–108.
- (1993b) "Les lectures de Bentham: Introduction," *Oeconomia (Economies et Société, série PE)* 18 (December): 4–10.
- Cot, Annie L. and Lallement, J. (1994) "Histoire de frontières," Conference on "Faire l'histoire de la pensée économique," University of Paris, 27–9 January.
- Dumont, Louis (1977) *Homo aequalis. Genèse et épanouissement de l'idéologie économique*, Paris: Gallimard; English translation, *From Mandeville to Marx. The Genesis and Triumph of Economic Ideology*, Chicago: University of Chicago Press.
- (1983) *Essais sur l'individualisme. Une perspective anthropologique sur l'idéologie moderne*, Paris: Seuil; English translation, *Essays on Individualism: Modern Ideology in Anthropological Perspective*, Chicago, University of Chicago Press, 1986.
- Foucault, Michel (1966) *Les mots et les choses. Une archéologie des sciences humaines*, Paris: Gallimard.
- Halévy, Elie (1901) *La formation du radicalisme philosophique; tome I: La jeunesse de Bentham*, Paris, Félix Alcan; *The growth of Philosophical Radicalism*, partial translation by Mary Morris, preface by John Plamenatz, London: Faber and Faber, 1972.
- Lallement, Jérôme (1984) "Histoire de la pensée économique ou archéologie du savoir?," *Oeconomia (Economies et Sociétés, série PE)* 2 (October): 61–93.
- (1993) "Economic politique et morale: l'héritage de Mandeville," *Oeconomia (Economies et Sociétés série PE)* 18 (December): 10–30.
- Larrère, Catherine (1992) *L'invention de l'économie au XVIIIe siècle. Du droit naturel à la physiocratie*, Paris: Presses Universitaires de France.
- Locke, John (1980) [1690] *Second Treatise of Government*, ed. by C.B.Macpherson, Cambridge: Hackett.
- Malinvaud, Edmond (1975) *Leçons de théorie microéconomique*, Paris: Dunod.
- Mandeville, Bernard (1924) [1714] *The Fable of the Bees or Private Vices, Publick Benefits*, Oxford: Clarendon Press.
- Mill, John Stuart (1965) [1848] "Principles of political economy. With Some of Their Applications to Social Philosophy," in J.M.Robson (ed.) *Collected Works of John Stuart Mill*, Toronto: University of Toronto Press, II and III.
- Perrot, Jean-Claude (1992) *Une histoire intellectuelle de l'économie politique (XVIIe-XVIIIe siècle)*, Paris: E.H.E.S.S.
- Polanyi, Karl (1944) *The Great Transformation*, New York: Rinehart and Company; French translation *La grande transformation. Aux origines politiques et économiques de notre temps*, Paris: Gallimard, 1983.
- Polanyi, Karl and Arensberg, Conrad (1957) *Trade and Market in the Early Empires. Economies in History and Theory*, New York: The Free Press; French translation: *Les systèmes économiques dans l'histoire et dans la théorie*, Paris: Larousse, 1975.
- Quesnay, François (1991) [1758] "Tableau économique," in F.Quesnay, *Physiocratie. Droit naturel, Tableau économique et autres textes*, Paris: Garnier-Flammarion, pp. 87–139.
- Robbins, Lionel (1935) [1932] *An Essay on the Nature and Significance of Economic Science*, 2nd edn., London.
- Rorty, Richard (1984) "The historiography of philosophy: four genres," in R.Rorty, J. B.Schneewind, and W.Skinner (eds.) *Philosophy in History*, Cambridge: Cambridge University Press, pp. 49–75.

ON THE HISTORIOGRAPHY OF ECONOMICS

- Rousseau, Jean-Jacques (1986) [1755] "Economic politique," reprint in Yves Vargas (ed.), *Rousseau. Economie politique 1755*, Paris: PUF.
- Samuelson, Paul A. (1980) *Economics*, 11th edn., Auckland: McGraw-Hill.
- (1987) "Out of the Closet: A Program for the Whig History of Economic Science," *History of Economics Society Bulletin* 9:51–60.
- Say, Jean-Baptiste (1972a) [1826] *Traité d'économie politique*, 4th edn., Paris: Calmann-Lévy.
- (1972b) [1815] *Catéchisme d'économie politique*, Paris: Mame.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis*, London: George Allen & Unwin.
- Skinner, Quentin (1969) "Meaning and Understanding in the History of Ideas," *History and Theory* 8:3–53.
- Smith, Adam (1981) [1776] *An Inquiry into the Nature and Causes of the Wealth of Nations*, Indianapolis: Liberty Classics.
- Walras, Léon (1988) [1874–7] *Elements d'économie politique pure*, Paris: Economica.





Part II

THE “GREAT GAP”  
THESIS REVISITED



# THE INACCURACY OF THE SCHUMPETERIAN GREAT GAP THESIS

Economic thought in medieval Iran (Persia)

*Hamid Hosseini*

Never in any age was any science discovered, but from the beginning of the world wisdom has increased gradually, and it has not been completed as regards this life.

(Roger Bacon)

No historical student of culture of western Europe can ever reconstruct for himself the intellectual values of the later Middle Ages unless he possesses a vivid awareness of Islam looming in the background.

(Pierce Butler)

## INTRODUCTION

In his classic *History of Economic Analysis* (1954), Joseph A. Schumpeter proposed that economic analysis begins only with the Greeks and was not re-established until the rise of European scholasticism in the hands of St. Thomas Aquinas (1225–74). This “Great Gap” in economic thought, then, coincides with the Islamic golden age, when various Muslim writers made substantial contributions in various fields of inquiry, including economic matters. The Schumpeterian “Great Gap” thesis has been deeply entrenched as part of the accepted tradition in economics and is reflected in almost all relevant literature in our discipline (Mirakhor 1988; Ghazanfar 1991:117–18.) As a result of this thesis, whose prevalence in economics literature dates long before 1954, Western historians of economic thought have ignored the contributions of medieval Islamic scholars, or at least have reduced them to footnotes (Hosseini 1995). It is no wonder that Islamic contributions to the history of economic thought are ignored in Eric Roll’s *A History of Economic Thought* (1963), Henry W. Spiegel’s *The Growth of Economic Thought* (1983), Ingrid Rima’s *Development of Economic Analysis* (1991), Barry Gordon’s *Economic Analysis Before Adam*

*Smith* (1975), Robert Lekachman's *A History of Economic Ideas* (1959), Jacob Oser and W.C. Blanchfield's *Evolution of Economic Thought* (1975), and Harry Landreth and David C. Colander's *History of Economic Theory* (1989). These writers, "usually quick to find a deceased precursor for every theorist," have remained silent about the contributions of medieval Muslim writers.

During the last several years, however, various authors inclined to do justice to the contributions that have been neglected by historians of economic thought—among them Yassine Essid (1988), S.M. Ghazanfar (1991), Ghazanfar and Azim Islahi (1990), Hamid Hosseini (1988; 1995), Abbas Mirakhor (1988), Louis Baeck (1993) and Joseph Spengler (1980)—and have taken issue with the Great Gap thesis. As these authors have demonstrated, medieval Islamic writers who were influenced by Islamic ethos and Greek and Persian (Iranian) thought did write about economic matters (Mirakhor 1988; Hosseini 1995). Given their contributions and their links to the Greeks, pre-Islamic Persians, and to Christian scholasticism, medieval Muslim writers are too important to be ignored. The contributions of medieval Muslim writers and this impact on Christian scholasticism should be regarded as a refutation of the Schumpeterian Great Gap thesis.

Among those writers who do acknowledge the contributions of medieval Muslim writers, some assume that medieval Islamic civilization was, essentially, an Arabic civilization. Therefore, they also erroneously view non-Arab medieval Muslim writers (who published part or all of their works in Arabic) as Arabs. Interestingly enough, even non-Arab Muslims, such as Professors Ghazanfar and Islahi, in a manner similar to various Western writers or those adhering to Arab nationalism, have in their writings viewed all medieval Muslim thinkers as Arabs. But Islamic civilization has always consisted of various cultural zones (Arab, Persian, Turkish, and so on). The Arabic cultural zone, which is defined linguistically, is only one (and the first) of these. After all, Islam is a universal religion and as such has always included Arabs and non-Arabs. Thus, in this chapter, the diversity of Islamic civilization (including its intellectuals) will be both assumed and emphasized.

It is worth mentioning that the Arabic language—the language of the Prophet and the Qur'án—became the language of theological debates among Muslims, as well as the language of religious instruction. This is true even today in almost all Muslim countries. After Islam expanded to the Iranian (Persian), Spanish, Berber, and Turkish territories, it also became the Islamic official language and the inter-national language among Muslims. And, after the age of great translations from Greek, Persian, and other languages to Arabic, it also became the language of scientific and philosophic discourse among Muslims (and non-Muslims living in Muslim lands).

Persian-speaking Iranians made great contributions in the formation of Islamic intellectual history. A great portion (and most of the best) of medieval Muslim philosophers, physicians, ethicists, scientists, Islamic jurists, historians, and geographers were Persian-speaking Iranians who, for obvious reasons,

chose to write in Arabic. (Of course, one must also mention men such as Rumi, Hafez, Saadi, Ferdousi, Nezami, and Khayyam, who chose to produce classical Persian poetry and prose and became models for literature in Islamic lands from Anatolia to Indonesia.)

A great many medieval Islamic contributions to economic analysis, I will argue, were made by Persian-speaking Iranian writers: philosophers, ethicists, scientists, theologians, and the writers of “mirrors for princes.” This is a point neglected by most of the above-mentioned writers, or at least it is not sufficiently emphasized by them. To demonstrate the contributions of medieval Persian writers to economic thought, I will discuss a variety of literature written by Persians. My list includes two eleventh-century mirrors (written in Persian) by Kai Kavus, *Qabus Nameh* (1951), and Nezam-al-Mulk, *Siasat Nameh* (1960), respectively; a book on India by Biruni (973–1048), who was a famous Persian scientist and geographer and wrote in Persian; Farabi (873–950), who prepared the *Good City* (1982, written in Arabic); Ibn Sina (980–1037), also known as Avicenna, who wrote *Household Management* (1940: *Tadbir Manzel*); Ghazali (1057–1111), the author of both the *Ihya-al-Ulum-al-Deen* (n.d., written in Arabic) and *Kimya-e-Saadat* (1940, written in Persian); and three separate books on ethics by Ibn Miskaway (b. 1030; written in Arabic), Nasir Tusi (1201–74; written in Persian) and Asaad Davani (b. 1444; written in Persian), entitled *Tahdhib al-Akhlaq*, *The Nasirean Ethics*, and *The Akhlaq-e-Jalali*, respectively.

I shall demonstrate that these Persian writers, influenced by the Islamic ethos, some measure of Greek rationalism, and Iranian ethico-realism, were able to understand and to a remarkable degree analyze the economic realities of their age. The contributions of these writers were substantial, and in many ways their discussions and economic assumptions sound quite modern. Of course, because economics had not yet become an independent discipline (although there existed a few pamphlets devoted solely to the discussions of economic issues), the medieval economic discussions are typically mixed with ethical, theological, and philosophical arguments.

Medieval Persian scholars (as well as Arab scholars) produced two distinct views of wealth and economic activity. The first view holds that wealth accumulation and economic activity are for their own sake—a secular point of view. The second view holds that wealth accumulation and economic activity are to be regarded as only a means for human salvation and a necessity for the preservation of Islam (Hosseini 1995). However, both views must be distinguished from those of (Persian) Sufi (mystic) Muslims, which did not favor wealth accumulation and economic activity at all. The Persian writers discussed here understood the economic process well, as demonstrated by their views on the evolution and efficiency of division of labor, the evolution and functioning of the market, the evolution and functions of money, productive activity and its efficiency, and the “Malthusian” theory of population.

## ISLAM, ECONOMIC ACTIVITY, AND THE HISTORY OF ECONOMIC ANALYSIS

Economic science, as we know it today, began to take shape in western Europe during the eighteenth century. The dawning of the Renaissance in Europe unleashed various forces that were ultimately to provide the climate and the necessary instruments for the development of economics as a separate and independent discipline. Secularism, a new religious skepticism, the attempt to de-emphasize God in worldly affairs, and the new emphasis on the scientific method paved the way for the rise of economics as an independent and secular science in a new and rather materialistic world. Economics emerged as a separate discipline in the eighteenth century. However, economic analysis had a much longer lineage. Many cultures and civilizations produced, prior to the eighteenth century, at least some works on economic activity: the Greeks in their classical age, the Muslims of the medieval period, medieval Christian scholastics, the mercantilists of the sixteenth and seventeenth centuries, and to some extent ancient Chinese and Indian scholars as well (Ohrenstein and Gordon 1992: preface).

As stated before, medieval Muslim scholars, in particular, made important contributions to the field of political economy. Muslim thinkers of that age, in the “mirrors for princes” and other practical pamphlets, and in their philosophic, ethical, theological, and even literary writings, demonstrated a substantial knowledge of economic analysis. These writers often demonstrated an awareness of the ways economic agents (such as producers, consumers, etc.) and institutions (that is, markets and governments) behaved. To the surprise of those who adhere to the Schumpeterian Great Gap thesis, these writers discussed the evolution and the efficiency of division of labor, the evolution and functions of markets and the roles of demand and supply, the roles and origin of money, the portfolio management theory, the function of the state, and a population theory similar to the one adhered to by Thomas Malthus.

Given the mercantile roots of Islamic religion, the rationalism Islamic civilization inherited from the Greeks, the degree of intellectual sophistication of Muslim scholars, and the complexity of the economic situation of the Islamic society, the extent of economic understanding should not be surprising at all.

It can be argued that an appreciation of economic activity has never been something that Muslims shy away from (perhaps with the exception of Sufis). The Qur’án and Hadith (the reported words and deeds of the Prophet for all Muslims, and those of the Imams also for the Shiites) are antiascetic: these writings advocated moderation in worldly affairs and emphasized that human salvation does not imply withdrawal from worldly activities (Hosseini 1988). In fact, Islam sprang from a mercantile society, Prophet Muhammad engaged in commercial exchange up until the age of forty (when he claimed revelation), production and trade are pictured in the Qur’án and Hadith as noble practices, and merchants are favorably portrayed (Essid 1988:78). In the words of Sami

Zubaida, “It is not difficult to show that the Qur’án and Hadith contain many passages which sanction and encourage trade. The Meccan milieu of Mohammad and his followers was a business milieu. Before the call to Islam, Mohammad and his companion engaged in trade extensively, Mohammad was a relatively small merchant, but also acted as agent for other merchants in trade with Syria. The early Muslims of Mecca and Medina also continued in trade” (Zubaida 1972:321). For several centuries the status of trade and the merchant was raised further as the Islamic society became more prosperous. It was during these centuries that the “Islamic bourgeoisie” was on the rise. S.G.Goiten writes: “This class developed slowly during the first hundred and fifty years of the Muslim era, emerged into the full light of history at the end of the second, became socially admitted during the third and asserted itself as a most powerful socio-economic factor during the fourth” (Goiten 1957:585). It never became an organized body, however, and never obtained political power, although many of its members occupied positions as high (and the highest) executives of the state (Goiten: 585).

The simple Islamic society of the early days became much more complex as Islam embraced Iranian (Persian) and Hellenic lands and cultures after the Prophet’s death. Economic historians such as Subhi Labib (1969:79–96), Elias Tuma (1965:1–23) and Udovitch (1967a:200–64) have demonstrated the economic complexity and sophistication of that society. The complex economic and social system that emerged soon required theoretical (political, economic, and theological) debates, as well as the opinions of Islamic jurists on practical and day-to-day actions. The availability of Greek and Persian texts in Islamized lands, and their rapid translations to Arabic, made these debates more sophisticated and lively. These debates produced great works in philosophy, theology, ethics, geography, history, the sciences, and practical manuals as guides to leaders and merchants.

It was in the commentaries on these debates and the religious opinions and decrees of Islamic jurists that Muslim writers dealt with economic issues and concepts. Muslim scholars of this age demonstrated a thorough understanding of the economy and its agents and institutions. Because the Islamic society of the medieval period possessed some of the institutions and intellectual tools of modern times, medieval Muslim scholars were able to anticipate some of the economic issues that were discussed much later in western Europe.

### **PERSIAN-SPEAKING IRANIANS AND MEDIEVAL ISLAMIC INTELLECTUAL HISTORY**

Some of the recent literature dealing with the contributions of medieval Muslim writers to the history of economics assumes, perhaps unintentionally, that Islamic civilization was monolithic and that only Arabs contributed to the development of Islamic intellectual history (see for example, Ghazanfar and Islahi 1990; Ghazanfar 1991). This is not true at all. Islamic civilization has always been



diverse, and particularly after the Prophet's death in 632, both Arab and non-Arab Muslims have left their marks on Islamic intellectual history and its culture. In fact, even Prophet Muhammad had two very close non-Arab associates: Salman the Persian and Balal of Ethiopia. It is for this reason that if one were to understand Islam and its civilization, "It is necessary to understand the diverse ethnic and cultural worlds into which the Islamic revelation descended and which Islam transformed and made its own.... One can speak of one Islamic culture and many different colors, zones and variations or of several cultures within Islamic civilizations" (Nasr 1981:39). The various cultural zones of the Islamic world are Arabic, Persian (Iranian), Turkish, Malay, and black African, each one of these also being rather heterogeneous.

Persians (Iranians), who came under Islamic rule during the reign of Omar, the Second Caliph, brought into the Islamic community a strong ethico-religious devotion, a strong political culture, and a love of knowledge. It should be remembered that prior to the rise of Islam, Persians had produced the religions of Zoroastrianism, Manichaeism, and Mithraism, as well as the communistic religion of Mazdakism (and Babism and Bahaim in recent centuries). Iranian culture has always emphasized pursuit of education. Fariba Shahnazari cites a daily prayer (to Ahura Mazda, the ancient Zoroastrian god of pre-Islamic Persians) which is indicative of the value placed on learning. "Oh, Ahuramazda, endow me with an educated child, a child who will participate in his community; a child who will fulfill his duty in society; a child who will strive for happiness of his family, his city, and his country; an honorable child who will contribute to others' needs" (1992:30).

In addition to their own sources, Iranians also sought knowledge from their neighbors: the Greeks, Romans, and Indians. This was particularly true under Sassani Persian kings, who were impressed with the new knowledge of their neighbors and who established a center of learning in order to combine Iranian knowledge with that of others. This center, the Jundi Shapur University, founded during the fourth century AD, was at its height during the reign of Anoshiravan the Just, who ruled the Persian Empire from 531 until his death in 579 (nine years after the birth of Prophet Muhammad). Jundi Shapur was modeled after the Hellenized universities at Alexandria and Antioch, particularly in the teaching of mathematics, astronomy, medicine, and logic. The university also taught Iranian (Persian) and Indian sciences. Jundi Shapur was strengthened after AD 489, when the school of Edessa was closed by the order of the Byzantine emperor, and again in AD 529, when the Emperor Justinian ordered the school in Athens to be closed. Thus, by the time that Islam emerged, Jundi Shapur University, in southern Iran had become an effectively cosmopolitan center synthesizing Persian, Greek, Indian, and Roman sciences. It flourished for some four centuries in post-Islamic Persia, and it was revived as a modern university in the twentieth century.

Under the Sassani kings, Persia was a socially rigid society whose Indian-like caste system did not allow the mass participation of its citizens in various

intellectual activities. Islamization of the Iranian society, destroying the caste system and substituting the degree of faith and spirituality for predetermined class ranks as the criterion of social distinction, brought about more egalitarianism and mass participation in various aspects of life, including educational and intellectual activities. This change energized the Iranian society and brought many more people into the arena of intellectual activity. The translation into Arabic of Greek, Persian, Indian, and other scientific, philosophic, and literary works, and the fact that Islam, in both the Qur'án and Hadith, encouraged learning, caused a tremendous upsurge of intellectual activity among Muslims, in particular the Iranians, who had inherited a great wealth of intellectual activity from their pre-Islamic past, and became very active in various areas of intellectual activity, producing the greatest minds during the Islamic golden age (particularly during the tenth and eleventh centuries). During this period, intellectual activity took place at Jundi Shapur, in less formal centers of learning, and in several new universities (called *Nezamihs*) established by the enlightened vizier of Iranian Seljuk kings, *Nezam-ul-Mulk*, in various Persian cities, as well as in Baghdad (Sedigh 1960:141). Persian-speaking Iranians developed a great love for Arabic, the language of the Qur'án. It is no wonder that *Sibewaih* the Persian was regarded the master of Arabic grammar (Mottahedeh 1994:20). But love of Arabic did not prevent Iranians from also reviving the Persian language and creating a new literature and a new form of poetry.

It was during this phase of Persian history that great masters of classical Persian poetry—*Ferdousi*, *Rumi*, *Saadi*, *Nezami*, *Hafez*, *Khayyam*, and many more—emerged. Intellectual activity among Iranian Muslims also flourished in mathematics, philosophy, medical science, religious sciences, history, geography, and Arabic language. The greatest Muslim philosophers (*Ibn Sina*, *Razi*, *Suhrawardi*, *Qutb-al-Din Shirazi*, *Mulla Sadra Shirazi*, and many more), the greatest ethicist-philosophers (*Ibn Miskaway*, *Nasir Tusi*, and *Davani*), the greatest Muslim chemist (*Razi*), the greatest Muslim mathematician (*Mussa Kharazmi*, the author of the first treatise on algebra), the greatest theologians (*Ghazali* and others) were Persian-speaking Iranians. Because of the importance of the Arabic language in theology, philosophy, and the sciences, most Persian writers wrote most of their works in Arabic. Still, some of the major works of these writers were written in Persian (Nasr 1975:67).

Although Arabic philosophic activity declined first after the Sunni attack on philosophy during the eleventh century and later after the fall of Baghdad during the Mongol invasion of 1258, Iranian Shiites, building upon the works of *Farabi*, *Ibn Sina*, *Suhrawardi*, and others, continued their philosophic writings up until modern times. Explaining the role of intellectuals after 1258, Nasr writes:

Henceforth Persia, which provided most of the Islamic philosophy.... In the thirteenth century, the philosophy of *Avicenna* (*Ibn Sina*) was revived by *Khajah Nasir Tusi*, an intellectual figure of the first magnitude who

also revived the study of mathematics and astronomy. In fact, it was he and his student Qutb-al-Din Shirazi who proposed the first new medieval model of planetary motion, which was later to be employed by Copernicus...it was also Tusi who established the first complete astronomical observatory in history, which through the observatories of Samara and Istanbul, became the model for the earliest modern European observatories such as those of Tycho Brahe and Kepler.

(Nasr 1981:78)

Explaining the intellectual activities of Iranian Muslims after 1258, Nasr continues:

Gradually, the teachings of Avicenna, Suhrawardi (both Persian) and Ibn Arabi, as well as those of theologians, became synthesized in vast metaphysical systems which reached their peak during the 17th century with Mir Damad and Sadr-al-Din (Mulla Sadra Shirazi). These metaphysicians, who are the contemporaries of Descartes and Leibniz, developed a metaphysics which was no less logical and demonstrative than those of European contemporaries. Quite justly, Corbin has called Sadr-al-Din Shirazi, whom many Persians consider the greatest Islamic philosopher (rivaling another Persian—Avicenna), a combination of St. Thomas and Jacob Bohme which the context of Islamic in its Persian manifestation alone could make possible.

(Nasr 1981:78)

While Ghazanfar and Islahi insist on calling all Muslims “Arabs,” Muslims throughout the ages have been conscious of their diversity. This is obvious in the following statement of Nasir Tusi (a Persian), written some eight centuries ago.

Among the classes of nations, the Arabs are distinguished for their speech, their eloquence and their ingenuity, but they are also noted for harsh nature and powerful appetite. The Persians, on the other hand, are distinguished by intelligence, quickness, cleanliness and sagacity, albeit noted for cunning and greed. The Byzantines are distinguished for loyalty, trustworthiness, affection and competence, but noted for stinginess and meanness. Indians are distinguished for strength of feeling, and intuition and understanding, but noted for conceit, malevolence, guile and a tendency for fabrication. The Turks are distinguished by courage, worthy service and fine appearance, but noted for treachery, hardness of heart and indelicacy.

(Tusi 1964:184)

In fact, many Persian historians and philosophers were highly conscious of their ethnicity. As a result, they devoted a great deal of time and effort to the study of pre-Islamic Persian history and philosophy. The works of Biruni, Ibn Sina, Ibn

Miskaway, and Suhrawardi are indicative of this fact. The attempts of poets and writers of prose to revive the Persian language indicates their awareness of their ethnic origin. The great epic poet Ferdousi (b. 940), who spent thirty years writing the Book of Kings (*Shah Nameh*), made this explicit: "I toiled so much in these thirty years, reviving Iran through my Persian."

### **MEDIEVAL PERSIAN SCHOLARS AND THEIR RESPECTIVE UNDERSTANDINGS OF THE ECONOMIC PROBLEM**

Economic realities of the medieval Islamic society—exemplified by the importance of markets, the merchant class, productive activity, trade and the use of credit and partnership in trade—required a theoretical explanation on the part of thinkers. This complexity also necessitated the opinions of Islamic jurists on the permissibility (or the prohibition) of economic activities. The intellectual sophistication and curiosity of Islamic thinkers (particularly Persian thinkers), the realism of the writers of the "mirrors for the princes" (of Persian origins) and that of Islamic jurists who dealt with peoples everyday problems, and the rationalism of Muslim philosophers, itself influenced by the rationalism of Aristotle and that of the neo-Pythagorean Bryson, provided the needed instrument for these explanations and legal (Islamic) opinions. It is due to these influences that medieval Muslims, particularly Persians, produced much economic analysis. Once again, it should be emphasized that these writers, like others, did not treat economics as an independent discipline; they emphasized unity of knowledge and introduced economic analysis in the midst of their philosophic, legal, ethical, political, scientific, and even literary discussions.

Medieval Persia was among the most economically developed parts of the Islamic world. Persia produced some of the best minds in medieval Islam and it is therefore not surprising that medieval Persian writers had a great deal to say about economic matters. The works of many medieval Iranian writers reflect their awareness of economic matters. These include Farabi's *Good City* (chapters 26–37), Ibn Sina's *Household Management*, Biruni's book on India, many of Ghazali's works, particularly his *Ihya-al-Ulum-al-Din* (in Arabic) and *Kimiya-e-Saadat* (in Persian), Nezam-al-Mulk's *Siasat Nameh* (in Persian), Kai Kavus's *Qabus Nameh* (in Persian), Ibn Miskaway's book on ethics, Nasir Tusi's book on ethics (in Persian), and Asaad Davani's book on ethics (in Persian). These writers viewed economic matters in two different and distinct ways. In contrast to Sufi teachings, both of these groups regarded economic activity as praiseworthy, but while some praised wealth and economic activity for their own sake, other writers, assuming that this world is a preparation for the next, believed that the pursuit of economic activity is good because it is a means toward salvation. The first view, which has its base in the economic realities of medieval Islamic society, was influenced by the realism of the Persian "mirrors" tradition and by Greek rationalism (of Aristotle and of Bryson). The second

view, which also had its base in medieval Islamic society, was influenced by traditional Islamic ethos (and perhaps by pre-Islamic Iranian ethics) and by Sufism (Hosseini 1995). Kai Kavus's economic discussion in *Qabus Nameh*, which are devoid of the theological arguments and are objective and positivistic, praised wealth for its own sake—an example of the first view. Ghazali's economic discussions in both *Ihya* and *Kimiya* provide an example of the second view. Ghazali, and other proponents of this view for that matter, while advocating economic activity, regards the development of the economy as part of divinely ordained, socially obligatory duties whose fulfillment is necessary for the perpetuation of humanity (*Ihya* 2: 32). Ghazali's Sufi tendency, rather obvious in his writings, is well known. It is a fact that Ghazali tried to synthesize traditional Islam and Islamic Sufism.

Medieval Persian scholars provide a surprisingly detailed discussion of economic matters. Obviously, they analyze and discuss the economic realities of their own times. In some cases, they seem to be explaining various socio-economic arrangements that can, potentially, exist. Cases in point are various nonideal societies that are discussed in Farabi's *Good City* and in Nasir Tusi's *Nasirean Ethics*. Some of the economic discussion of these writers resembles what were discussed by medieval Christian scholastics later on; others seem closer to contemporary economic texts, as the following summary of their views demonstrates.

### **Wealth, poverty, and acquisitiveness**

Both groups of medieval Persian writers praise economic activity and the accumulation of wealth, both groups scorn poverty, and both groups view individuals as acquisitive. Kai Kavus writes: "My son, do not be indifferent to the acquisition of wealth. Assure yourself that everything you acquire shall be the best quality and is likely to give you pleasure. Once you have acquired it, not letting go for anything; indeed, preserving is more difficult than acquiring" (Kai Kavus 1951:91). According to Nasir Tusi, "the intelligent man should not neglect to store up provisions and property" (1964:159). According to Asaad Davani, "Experience teaches me this wholesome truth: men work by knowledge, knowledge works by wealth" (1946:92). In the words of Ghazali, "man loves to accumulate wealth and possessions of all kinds of property. If he has two valleys of gold, he wants to have a third" (*Ihya* 2:280; see Ghazanfar and Islahi 1990). Against poverty, Kai Kavus writes, "you must realize that the common run of men have an affection for the rich, without regard to their personal concern, and that they dislike poor men, even when their own interests are at stake. The reason is that poverty is man's worst evil and any quality which is to the credit of the wealthy is itself a derogation of the poor" (1951:92). According to ethicist Davani, "For the wisest, if destitute of money, can be no benefactor of the people; and even in himself, by reason of his attention to require expedients, is withheld from perfection" (Davani 1946:91–2). For Ghazali, the

theologian, “If people stay confined to subsistence level and become very feeble, deaths will increase, and work and industry will come to a halt and society will perish. Further, religion will be destroyed, as the worldly life is a preparation for the next” (*Ihya* 2:108; see Ghazanfar and Islahi 1990:384). The views of these medieval Persian writers concerning self-interest are not all that different from those of modern economists. For example, Kai Kavus, in advising his son, argues, “And never, in anything you do, lose sight of your own interest—to do so is superfluous folly” (1951:109). According to Ibn Miskaway, “The creditor desires the well-being of the debtor in order to get his money back rather than because of his love for him.... The debtor, on the other hand, does not take great interest in the creditor” (1968:137).

### **The emergence of the division of labor, the evolution of markets, and voluntary exchange**

Medieval Persian writers provide a great deal of discussion about the need for division of labor in human society, the evolution of markets, and voluntary exchange. For example, Farabi, in chapter 26 of his *Good City*, discusses the various material needs of individuals, the impossibility of their satisfaction by mere individual efforts, and the possibility of their satisfaction through cooperation and division of labor (and thus exchange). Ibn Sina (1940:10) discusses these needs and their satisfaction through division of labor and the family. Division of labor is also discussed in Ghazali’s *Ihya* (3:227), Kai Kavus’s *Qabus Nameh* (1951:156), Nasir Tusi’s *The Nasirean Ethics* (1964:153–4), Ibn Miskaway’s *Tahdhib al-Akhlaq* (1968:123), and in Davani’s works. After discussing the impossibility of satisfying all of one’s material needs by one’s own effort alone, Davani argues that: “Nay, if he devoted his time entirely to one of these crafts, the whole would be insufficient for its attainment. But when men congregate together, and cooperate with each other, and each for other perseveres in one employment, and threads the way of justice in reciprocal co-operation and interchange, the necessities of life are amassed, the situation of individuals secured, and the perpetuity of the species provided for. Philosophers have a saying, that there are a thousand things to be done before anyone can put a morsel of bread into his mouth” (1946:318–20). This is similar to Adam Smith’s line of reasoning in the *Wealth of Nations*. It is interesting that these writers even understood the importance of division of labor in the international arena. This is obvious in Farabi’s *Good City* (chapter 26) and in *Qabus Nameh*, when Kai Kavus discusses the benefits of international trade. As we read, “To benefit the inhabitants of the west they import the wealth of the east and for those of the east the wealth of the west and by so doing become the instruments of world’s civilization. None of this can be brought about except by commerce” (Kavus 1951:156).

Medieval Persian writers understood that the need for division of labor gives rise to the exchange process and the institution of markets. Ghazali seems to have understood this evolution rather well. As he stated:

So the farmer needs blacksmiths and carpenters, and they in turn need farmers. Naturally, each will want to satisfy his needs by giving up in exchange a portion of what he possesses. But, it is also possible that when the carpenter wants food in exchange for tools, the farmer does not need the tools. Or, when the farmer needs tools, the carpenter does not need food. So such situations create problems. Therefore, pressures emerge leading to the creation of trading places where various tools can be kept for exchange and also warehouses where farmers' produce can be sorted. Then, customers bring produce to the markets and if they cannot readily sell or exchange what they possess, they sell them at a lower rate to the traders who in turn store the produce and sell to the buyers at a profit. This is true for all kinds of goods. Then, such practices extend to various cities and countries.

(*Ihya* 3:227; see Ghazanfar and Islahi 1990)

Medieval Persian writers seem to have understood the laws of demand and supply. For example, Ghazali seems to have recognized the law of supply when he stated: "If the farmer does not get a buyer for produce, then he sells at a very low price" (*Ihya* 3:227; see Ghazanfar and Islahi 1990). Or, in *Ihya* (2:80; see Ghazanfar and Islahi 1990), he seems to have understood price elasticity of demand when he suggested that a cut in profit margin by price reduction will cause an increase in sales and thus in profits. Kai Kavus recognized both demand and supply when he provided advice to his son concerning the purchase and sale of houses: "Further, you must buy when the market is slack and sell when the market is brisk" (Kavus 1951:109). In the following, Kai Kavus recognized demand, supply, competition, and even marketing:

If you are a craftsman in the bazaar, whatever your craft, let your work be quick and worthy of praise, so that you may acquire many patrons; and whatever the work you do, let it be better than that of your fellow-craftsmen. Be content with modest profit, for while you sell at eleven a single article which costs you ten, you may sell two at ten-and-a-half a piece. Do not drive customers away by importuning and over-insistence; thus you will gain a livelihood from the practice of your craft and more people transact business with you. In the course of selling an article, exert yourself to say "my friend," my "dear sir" or "my brother," and to make a show of humanity, and with all your strength...contain yourself from harsh and foul language. By your gentleness the customer will be shamed from bargaining and you gain your object.

(Kavus 1951:237-8)

Some of the Persian writers have argued that prices are determined by market forces. This is particularly obvious in *Qabus Nameh*, Ghazali's works, and Ibn Miskaway's book on ethics. The following statement by Ibn Miskaway

demonstrates his understanding of price and equilibrium (as well as money). “Thus, money is the equalizer of things that differ, adding to some and taking away from others until equilibrium is established between them so that business may be carried on fairly, as between, for example, the farmer and the carpenter” (Ibn Miskaway 1968:103–4). The equilibrium price Ibn Miskaway discusses is what Ghazali calls “prevailing price” (Ghazanfar and Islahi 1990); it is what other writers (both Muslim and Christian) have called “just price” and is presently called “equilibrium price.”

### **Production, its stages and its efficiency**

The above-mentioned Persian writers took production very seriously and devoted considerable attention to describing it, its hierarchy and various stages, its nature and its efficiency. They view productive activity, particularly production of necessities, as a social responsibility. For Ghazali such activities are part of one’s worship (*Ihya* 2:61; see Ghazanfar and Islahi 1990).

For both groups of Persian writers, production has stages and is hierarchical; they classify production activities in terms of their social importance. For example, according to Nasir Tusi,

Crafts are of three kinds, noble, base and intermediate. Noble crafts are those coming within the range of the soul, not that of the body; and they are called the crafts of liberal men and of the polite. The greater part of them.... Base crafts are also of three classes: that which is repugnant to the best interest of the generality of mankind, such as practicing monopoly.... The intermediate crafts comprise other classes of livelihoods and kinds of trades. Some of them are necessary like agriculture, and some are unnecessary, such as dyeing. Again, some are simple, like carpentry and the work of blacksmith, while others are compound, such as scale-making and the cutler’s trade.

(Tusi 1964:158)

According to Davani, “Professions are either necessary, as agriculture, or unnecessary (as gold working) and may all be reduced to three heads—noble, mean, and indifferent. The noble are those which have to do with intellectual power; the mean professions are likewise of three sorts: 1. Those which are repugnant to human interest; as magic, witchcraft, engrossing 2. Those which are incompatible with mental excellence; as wine selling, done-playing, dice-playing” (Davani 1946:254–5). Classification of productive activity takes place among other writers as well: Ibn Sina, Farabi, and Ghazali. According to Ghazanfar and Islahi, Ghazali suggests a classification of productive activities quite similar to contemporary discussions: primary (agriculture), secondary (manufacturing), and tertiary (services) (Ghazanfar and Islahi 1990:389).

Persian writers also emphasized efficiency in the productive process. For Nasir



Tusi, “Now, all who are characterized by a trade should make advance and seek perfection therein” (1964:158–9). Davani wrote that “when settled in any profession, we ought to aim at its distinctions and perfections, and not rest content with laboring for any trivial purpose” (1946:256). In the words of Ibn Miskaway, “consequently, our unquestionable duty is to seek the good which represents our perfection and for which we are created” (1968:13). Farabi discusses efficiency in detail, and Kai Kavus provides very practical advice to achieve efficiency in production. He seems to be aware that producers (suppliers) must be cost-effective, that large-scale commerce is more efficient, and that agricultural efficiency requires constant improvement of land and implements (Kai Kavus 1951:237).

Like modern economists, these Iranian writers were also aware of the linkages that exist in the production chain. According to Ghazali, “the farmer produces grain, the miller converts it into flour, the baker prepares bread from the flour. Further, the blacksmith makes tools for farmers cultivation, and the carpenter manufactures tools needed by the blacksmith. The same goes for all those who engage in the production of tools and implements needed for the production of foodstuff” (*Ihya* 4:128; see Ghazanfar and Islahi 1990). In the words of Davani, “there are a thousand things to be done before anyone can put a morsel of bread into his mouth” (1946:320).

### **The economics of the state**

Almost all of the above-mentioned medieval Persian (Iranian) writers had something to say about the role of the state in society and economy. This is particularly true of the two mirrors in our study—*Qabus Nameh* and *Siasat Nemeh*. These two mirrors, authored by a Persian prince (Kai Kavus) and a grand vizier of Persian Seljuk kings (Nezam-al-Mulk), necessarily provide two extremely wise and practical accounts of government, the economy, and society, including detailed discussions of public finance: revenues, their sources, and expenditures. Nezam-al-Mulk, in particular, draws heavily from the experiences of pre-Islamic Persian kings (Anushiravan the Just, Bahram Gur, etc.). In the chapter dealing with government treasuries (chapter 48), he writes:

Kings have always had two treasuries, the capital treasury and the expenses treasury. As revenue was acquired it was usually taken to the capital treasury, and seldom to the expenses treasury, and unless there was urgent necessity they did not allow disbursement from the capital treasury. When they did take anything out, they took it by way of a loan, and put an equivalent sum back later. If care is not taken in this way, the whole income of the state will be dissipated on expenses, and if there comes some unexpected need for money, it will give rise to anxiety and there will be shortcoming and delay in meeting the commitment. It was always the practice that any money paid into the treasury such as revenue from provinces, should not be changed or encashed. Thus expenses were met

at their due time, there was no failure or delay in the payment of awards, salaries and presents, and the treasuries were always replenished.  
(Nezam-al-Mulk 1960:246)

Most of these writers, in general, provide detailed commentary and advice on the conduct of affairs of the state. They demonstrate a high degree of sophistication in understanding the function of the state and view it as a necessary institution. For Ghazali, the theologian, the state and religion are inseparable pillars of an orderly society; while religion is the foundation, the state is the promulgator and protector (*Ihya* 1:17; see Ghazanfar and Islahi 1990). To these writers, peoples inability to fulfill all their needs alone persuade them to live in cooperation with others. However, the realities of jealousy, competition, and selfishness would make cooperation difficult. The state is needed to check these tendencies.

Like classical economists, these Persian writers saw the need for the state to provide peace, security, and justice. This point is particularly emphasized by Nezam-al-Mulk. The medieval Persian writers also held the state responsible for establishing the proper conditions for promoting economic prosperity. For example, Davani discussed the support that merchants need from the state if they were to play useful roles (1946:455). Nasir Tusi, explaining the categories of the bases of the “*Virtuous City*”, sees an economic function for the state (1964:216). Both functions are also obvious from the following statement by Kai Kavus:

The King’s continuance is dependent on his forces, and the prosperity of the country on the peasantry. Make it your constant endeavor to improve cultivation and to govern well; for, understand this truth: good government is secured by armed troops, armed troops are maintained with gold, gold is acquired through cultivation, and cultivation sustained through payment of what is due to the peasantry.  
(1951:123)

Since the publication of *The Wealth of Nations*, nonsocialist economists, assuming that economic agents are self-interested and that the interaction of these self-interested individuals (the butcher, the brewer, the baker, and so on) gives rise to economic efficiency, have believed in the notion of the invisible hand. Asaad Davani, as if responding to Smith a few centuries in advance, opposed the notion of the invisible hand and saw the need for the state to restrain the negative consequences of individual selfishness. In his own words,

men must not be left to their own natures...for each, in pursuing his own advantage, would be injuring the rest; this must lead to dissension, till they fell to hurting and destroying one another. Some provision, therefore, must evidently be made for rendering each content with his rightful

portion, and restraining the hands of violence from reciprocal injury. Now this provision is termed supreme government.

(1946:322)

### **Understanding barter, barter's problems, and the evolution of money**

Medieval Persian scholars understood the difficulties of the barter system and recognized the problems that we label today as the lack of a common denominator, indivisibility of goods, and double coincidence of goods. They knew that while barter can lead to exchange, differences in the characteristics of goods can make the exchange process inefficient, and they understood the evolution and importance of money and its various functions (Ghazanfar and Islahi 1990:390–1). They also understood the harmful effects of counterfeiting and currency debasement. Of course, as Muslims, they had to emphasize that money is not (or should not be) desired for its own sake—money carries value only in exchange. Again, as Muslims, they had to oppose the giving or taking of interest (particularly Ghazali, the theologian, who went to great pains to prove the inefficiency of interest taking). Discussing lending and borrowing for interest, Ghazali stated, “When someone is trading in dirhams and dinárs themselves [Persian and Roman currency of the time], he is making them as his goal, which is contrary to their functions. Money is not created to earn money, and doing so is transgression. The two kinds of money are means to acquire other things; they are not meant for themselves” (*Ihya* 4:192; see Ghazanfar and Islahi 1990).

Some of these Persian writers, interestingly enough, also understood the modern notion of portfolio management of investment and that diversification is a hedge against losing. According to Davani, “It is advisable to have part of our property in money and species, and part in land, establishments, and stocks in order that if anything occur to unsettle one kind, it may be made up in another” (1946:236). In his discussions of the need for savings, Nasir Tusi argues that “It has been said that it is preferable to have part of one’s property in cash and the proceeds of merchandise, part in commodities, furnishings, provisions and (general) goods, and part in landed holding, estates and livestocks. In this way, if a breach be made on one side it is possible to repair it from the other two sides” (1964:159).

### **Medieval Persian writers as precursors of Malthus and Darwin**

Winczynski (1959:459–66) and Joseph Spengler (1980) have brought to our attention that Biruni, who lived some nine centuries before Malthus and Darwin, can be regarded as their precursor. Biruni recognized that “since the growth of man’s numbers is limited by the capacity of the environment to provide support, the earth could become overpopulated and in need of a thinning of its numbers” (Spengler 1980:96). According to Biruni, the growth of anything is limited by

the environment accessible to it. He also recognized that since the capability for the growth of a species in number is unlimited, its actual growth is restrained by limiting and (apparently) almost exclusively external agents (Biruni's *India*: 382–3). Biruni observed, much as did Charles Darwin upon reading Malthus, that the pressure of increasing numbers will give rise to natural selection.

Biruni should not be regarded as the only medieval Persian scholar with a “Malthusian” population theory, however. In fact, all three Persian ethicists in our study—Ibn Miskaway, Nasir Tusi, and Davani—held similar views. They even used mathematical calculations to discuss their population theories. Assuming no deaths, Nasir Tusi calculated the impossibility of the surface of the earth to maintain all human beings from the time of Ali (the fourth Caliph and the first cousin and the son-in-law of Muhammad and the first Shiite Imam). After these calculations he wrote,

Thus if all this mass of people attempted to stand straight, with their arms held aloof, in the closest proximity to each other, there would not be room for them on the face of the earth—much less when it is a question of lying or sitting down, or moving about and going their different ways. No place would remain free for building or cultivation or the disposal of waste matter. Such a situation, moreover, would come about in only a short period: how then, if with the prolongation of time, and by numberless multiplications in the same reference, they were reduced to sitting on one another's heads.

(Tusi 1964:140–1)

The same type of discussion is presented by Ibn Miskaway and Davani. It is interesting that these three philosopher-ethicists, as Shiites, give the example of Ali, the founder of Shiism, and his descendants.

## CONCLUSION

This chapter attempts to establish that medieval Muslim writers (Persians, Arabs, Spanish, and so on) were inspired by Islamic ethos and influenced by Greek and Iranian thought in ways that allowed them to explain the economic realities of their age rather well. These writers made substantial contributions to the history of our discipline. Medieval Muslim thinkers, one can argue, influenced medieval Christian scholasticism tremendously. According to Karl Pribram (1983:21), the scholastics derived their intellectual armory from the works of medieval Muslims, and according to Will Durant (1950, 4:954–8), the writing of Aquinas's *Summa Theologica* was inspired by the Islamic theologian Ghazali (see Ghazanfar and Islahi 1990). Muslim scholars also influenced Christian scholastics in their economic thinking (see Mirakhor 1988; Hosseini 1995).

In fact, there existed about six ways by which “Islamic” knowledge was transmitted to medieval Europe. First, numerous Christian scholars traveled to

Muslim lands to learn “Islamic” sciences during the eleventh and twelfth centuries. Examples were Constantine the African, Adelard of Bath, and Leonardo Fibonacci (see Durant 1950). Second, from the eleventh until the fourteenth centuries, numerous European students attended Islamic universities to study mathematics, philosophy, medicine, cosmography, and other subjects. These students became candidates for professorships in the first Western universities to be established after the pattern of the Muslim seminaries (see Sharif 1966; Makdisi 1970). Third, there were many translations of Arabic writings to Latin during this period. Although these translations were made in various European cities, most of them took shape in Spain (Toledo and Burgos) and Italy (Sicily and Naples). Other forms of transmission included: oral transmission, transmission of economic knowledge through commerce, and the diffusion of economic institutions and processes (Hosseini 1995).

In contrast to the writers mentioned in the introduction, I have emphasized the diversity of Islamic civilization and the fact that contributions to Islamic thought were made by a variety of Muslim scholars. Many non-Arab Muslims (and even non-Muslims in Muslim lands) made substantial contributions to the intellectual climate of medieval Islam.

To demonstrate this diversity among Muslims, I have argued that at least Persian-speaking Iranians were aware of their Persian culture and that for this reason many medieval Persian intellectuals (particularly philosophers and historians) tried to revive Persian thought, albeit in an Islamic framework. This was also the case as Iranians resisted Arabization, particularly among those who helped to revive the Persian language, its poetry, and its prose.

I also argued that Persian-speaking Iranians (even though most often wrote in Arabic rather than in Persian) were among the best of medieval Muslim thinkers. These thinker-philosophers, ethicists, theologians, geographers, or writers of “mirrors for princes” also demonstrated a sophisticated understanding of the economic process and anticipated many economic concepts that would appear much later in Europe. They understood “new” economic concepts: the market mechanism and demand and supply, division of labor, efficiency, the Malthusian theory of population, the economic functions of money, utility, the social welfare function, and the notion of conspicuous consumption.

## REFERENCES

- Baeck, Louis (1993) *The Economic Thought of Classical Islam and Its Revival*, Katholieke Universiteit, Centrum Voor Economische Studiens, April.
- Biruni, Abu Raihan (1971) *Kitab-Fi-Tahqiq Malil Hind* (in Arabic), edited and trans. Edward C. Sachau, *Al-Beruni's India*, New York: Norton.
- Davani, Asaad (1946) *The Akhlaq-e-Jalali*, translated from the Persian, London: W.F. Thomas.
- Durant, Will (1950) *The Age of Faith*, vol. 4, New York: Simon and Schuster.
- Essid, Yassine (1988) “Islamic Economic Thought,” in Todd Lowry (ed.), *Pre-classical Economic Thought*, Boston: Kluwer.
- Farabi, Abu Nasr (1982) *Good City*, Persian translation by Sajadi, Tehran: Zuhuri Publishers.

- Ghazali, Abu Hamed (1940) *Kimiya-e-Saadat* [in Persian], 2 volumes, Aram edition, Tehran: Ganjineh Publishers.
- Ghazali, Abu Hamed (n.d.) *Ihya-al-Ulum-al-Deen*, 4 volumes, Beirut: Dar-al-Nadwah.
- Ghazanfar, S.M. (1991) "Scholastic Economics and Arab Scholars: The Great Gap Thesis Reconsidered," *Diogenes: International Review of Humane Sciences* 154 (April–June).
- Ghazanfar, S.M., and Islahi, A. Azim (1990) "Economic Thought of an Arab Scholastic: Abu Hamed Ghazali," *History of Political Economy* 22:2.
- Goiten, S.G. (1957) "The Rise of the Near-Eastern Bourgeoisie in Early Islamic Times," *Journal of World History* 3:583–604.
- Gordon, Barry (1975) *Economic Analysis Before Adam Smith*, New York: Macmillan.
- Hosseini, Hamid (1988) "Notions of Private Property in the Literature of Islamic Economics in Iran," *International Journal of Social Economy* 15:15–61.
- (1995) "Understanding the Market Mechanism before Adam Smith: Economic Thought in Medieval Islam," *History of Political Economy* 27 (Fall): 539–61.
- Hourani, George (1985) *Reason and Tradition in Islamic Ethics*, Cambridge: Cambridge University Press.
- Ibn Miskaway (1968) *Tahdhib al-Akhlaq*, translated by C.Zurayk, Beirut.
- Ibn Sina (Avicenna) (1940) *Tadbir Manzel*, Tehran: Ibn Sina Publishers.
- Kai Kavus (1951) *Qabus Nameh* (A mirror for princes), translated from the Persian by R.Levy, New York: Dutton.
- Labib, Subhi (1969) "Capitalism in Medieval Islam," *Journal of Economic History* 29: 79–96.
- Landreth, Harry and Colander, David C. (1989) *History of Economic Theory*, Boston: Houghton Mifflin.
- Lekachman, Robert (1959) *A History of Economic Ideas*, New York: Harper & Row.
- Makdisi, George (1970) "Madresa and University in the Middle Ages," *Studia Islamica* 32.
- Mirakhor, Abbas (1988) "Muslim Scholars and the History of Economics: A Need for Consideration," paper presented at the Annual Meeting of Southwestern Economics Association, later published by the Central Bank of Iran.
- Mottahedeh, Roy (1994) "Some Islamic Views of the Pre-Islamic Past," *Harvard Review of Middle Eastern and Islamic Studies* 1:17–26.
- Nasr, Seyyed Hossein (1975) "The Significance of Persian Philosophical Works," in G.Hourani (ed.), *Essays on Islamic Philosophy and Science*, Albany: State University of New York Press.
- (1981) *Islamic Life and Thought*, Albany: State University of New York Press.
- Nezam-al-Mulk (1960) *Siasat Nameh*, translated from the Persian by Hubert Darke, London: Routledge & Kegan Paul.
- Ohrenstein, Roman, and Gordon, Barry (1992) *Economic Analysis in Talmudic Literature*, New York: E.J.Brill.
- Oser, Jacob and Blanchfield, W.C. (1975) *The Evolution of Economic Thought*, New York: Harcourt Brace Jovanovich.
- Pribram, Karl (1983) *A History of Economic Reasoning*, Baltimore: Johns Hopkins University Press.
- Richards, D.S. (ed.) (1970) *Islam and Trade of Asia*, Philadelphia: University of Pennsylvania Press.
- Rima, Ingrid (1991) *Development of Economic Analysis*, Homewood, IL: Irwin.
- Roll, Eric (1963) *A History of Economic Thought*, Englewood Cliffs, NJ: Prentice Hall.
- Schumpeter, Joseph (1954) *History of Economic Analysis*, New York: Oxford University Press.
- Sedigh, Isa (1960) *Tarikh-e-Iran*, Tehran: University of Tehran Press.
- Shahnazari, Fariba (1992) "Modernization and Education: A Comparison of Japan and Iran," *IMES* 30 (November).

- Sharif, M.M. (ed.) (1966) *A History of Islamic Philosophy*, vol. 2, Wiesbaden.
- Spengler, J. (1980) *Origins of Economic Thought and Justice*, London: Feffer & Symons.
- Spiegel, H.W. (1983) *The Growth of Economic Thought*, Durham: Duke University Press.
- Tuma, Elias H. (1965) "Early Arab Economic Policies," *Islamic Studies* 6:11.
- Tusi, Nasir (1964) *The Nasirean Ethics*, translated from the Persian by G.M. Wickens, London: Allen & Unwin.
- Udovitch, Abraham (1967a) "Credit as a Means of Investment in Medieval Islam," *Journal of American Oriental Studies* 87.
- (1967b) "Labor Partnership in Early Islamic Law," *Journal of the Economic and Social History of the Orient* 10:64–80.
- (1970) "Commercial Techniques in Early Medieval Islamic History," in D.S. Richards (ed.), *Islam and the Early Track of Asia*, Oxford: The New Eastern History Group.
- Winczynski, Jan (1959) "The Presumed Darwinism of Biruni," *Isis* 50:459–66.
- Zubaida, Sami (1972) "Economic and Political Activism in Islam," *Economy and Society*, pp. 308–37.

# IBN KHALDUN'S POLITICAL AND ECONOMIC REALISM

*Louis Baeck*

## HIS LATE RISE TO FAME

Since the 1950s, academia has rightly hailed Ibn Khaldun (1332–1406) as the greatest social scientist of medieval Islam. Moreover, in his survey on *Muslim Economic Thinking*, Mohammad Siddiqi praises him as their greatest economist (Siddiqi 1981:70). Being a native of the Maghreb, at a time when the lands of western Islam were torn apart by a series of dynastic struggles between rival Arab and Berber tribes, Ibn Khaldun proved to be a mettlesome and ambitious political activist. After a series of reversals and failures in his role as teacher and counselor to various local emirs, he quit the political scene with a pang of disappointment. For about three years he retreated into the desert castle, *Qalat Ibn Salama*. There, disentangled from the hurly-burly of city and court, he decided on a new course: a literary career. His new ambition was to become a detached scholar with a long-term view on the sociopolitical and economic determinants that have had an impact on history.

Ibn Khaldun's major achievement was the writing of the *Muqaddimah*, or the long introduction serving as an analytical and synoptical framework of his lengthy treatise on history, the *Kitab al-ibar*. During his lifetime this monument of medieval scholarship was not received as an outstanding classic text destined to lift its author to the pantheon of universally acclaimed intellectual celebrities. The bulk of the *Kitab al-ibar* does not significantly depart from the mainstream historiographic tradition of his predecessors. But in the *Muqaddimah* Ibn Khaldun ventured into untrodden paths. The characteristic in-depth analysis, the socioeconomic realism, and the masterful comprehensiveness of his essay came as a shock and startled most of his contemporaries. On several issues, the methodological innovation of the *Muqaddimah* broke away from the cherished canons of mainstream Islamic thinking.

Erwin Rosenthal, who published one of the first sociopolitical analyses of the *Muqaddimah*, made the following important remark: "To my knowledge Ibn Khaldun was the first medieval thinker to see the importance of economics for politics and for the whole life of any society organised in a state" (Rosenthal 1962:90). In Ibn Khaldun's mindset, sociopolitical and economic development



go hand in hand. His untraditional method and his prima donna-like ego disabled him to build up an audience or even a school of followers. In his lifetime he was more reviled than praised. The Andalusian epigone, Ibn al-Azraq (1428–91), was a remarkable exception. His near-contemporary, the Egyptian historian Al-Maqrízi (1364–1442), admired the *Muqaddimah*. He also engaged in social and economic history writing but went his own way for his methodology. On some important matters, like the practice of money debasement, the thirteenth-century Hanbalite jurist, Ibn Taymiyyah (1263–1328), and also Al-Maqrízi offer more penetrating analyses. Notwithstanding the floppiness of some factual details, Ibn Khaldun surpassed them all with his analytical sharpness and the realism of his global vision. His originality consisted precisely in the patient insight with which he described the social web (*asabiyya*) as the principal determinant in human history. This emphasis on the social dimension in the cyclical development of civilizations implied a more deterministic attitude than any to which his contemporaries were accustomed.

After a relatively long eclipse from the intellectual scene in the Arab world, our fourteenth-century author was rediscovered by the European orientalists of the nineteenth century. In the wake of this rediscovery, the *Muqaddimah* was translated into several languages. In 1863 Marquis de Slane translated the *Prolegomena* into French. The English-speaking world had to wait for almost another century. In 1958, Frank Rosenthal published an English translation; this was reprinted in 1967 and prefaced with text-critic comments. The translations in other languages are the following: Turkish (1859), Urdu (1924), Persian (1957), Portuguese (1958), Hindi (1961), and Hebrew (1967). In the course of the last decades the secondary literature has been growing steadily. The bibliography published by al-Azmeh in 1981 registers more than 650 titles. In 1983 Ahmed Abdesselam published a sort of intellectual portrait gallery of the Maghrebi scholar. This study touches on the different historical and cultural contexts as well as the viewpoints of the readers of Ibn Khaldun about the *Muqaddimah* and the different ways in which they profiled the author. With the Western commentators, the comparison to Machiavelli is the most frequent. But a number of readers compare him also to Vico, Montesquieu, Rousseau, Marx, Hegel, Nietzsche, and Weber.

The intellectual status of Ibn Khaldun got a significant lift during and after the political decolonization of the Maghreb countries. In a series of symposia and congresses (Cairo 1962, Algiers 1978, Rabat 1979, and Tunis 1980) he became celebrated as the founder of sociology and the discoverer of a great number of analytical insights and theories in political science, economics, public finance, philosophy of history, demography, and social geography—a long time before their official births. In the 1960s and 1970s the development theorists, following the lead of the Latin American *dependencia-school*, and also other authors of Third World theory, frequently invoked Ibn Khaldun as the prestigious and cosmopolitan forefather of the Maghrebi social sciences. Against the penetration and domination of Western social sciences in their academic milieu,

which were berated as a new form of colonization, or worse, as a drive toward intellectual “bedouinization” of local scholarship, Ibn Khaldun was posited as a historical model rooted into the Arab historical tradition. In the effort of the Arab social scientists toward cultural indigenoussness and in the endeavor to construct their own conceptual framework in reference to the Arab social and cultural context, Ibn Khaldun figured as a prestigious precursor; this is as the indigenous originator, classifier, analyst, and systematizer (Irabi 1982; Sabagh and Ghazalla 1986).

From the second half of the 1970s, the revival of Islam's historical, cultural, and religious tradition stimulated an intensive wave of scholarly interest in the Muslim social sciences, particularly in sociology and economics. However, with the movement in the tradition-bound intellectual milieu of the Middle East toward the *Islamization* of the social sciences, the exegetic references to Ibn Khaldun became less frequent, while the references to orthodox—some would say, fundamentalist—sources from eastern Islam, especially al-Ghazali and Ibn Taymiyyah, became favored. This Islamic paradigm shift is also noticeable in the contemporary economic literature of Muslim origin, Sunnite as well as Shiite (Taleghani 1982; Kepel and Richard 1990; Baeck 1994).

### THE CONTOURS OF IBN KHALDUN'S WORLD-VIEW

Ibn Khaldun was born in Tunis in 1332 to an aristocratic family that had recently emigrated from Andalusia to the Maghreb. All his life he viewed himself as an emigrant, more so as an odd man out, frequently changing jobs, masters, and towns. For the Islamic lands, the fourteenth century was a time of dynastic and political strife, social disruption, and foreign invasion. In the East, Persia had been invaded by the Seldjuks, followed by the advance of the Mongols who burst out of the Asian steppes. During one of his diplomatic missions Ibn Khaldun accompanied the Mamluk sultan of Egypt for the negotiation of a peace treaty with the famous Mongol conqueror, Tamerlane.

In the lands of western Islam, the confederation of Arab and Berber states, which had been ruled by the Almohad dynasty since the twelfth century, fell apart into several rival emirates. The Spanish princes had conquered Cordoba in 1236 and Seville in 1242. The king of Sicily occupied Djerba in 1284. From the fourteenth century on, the Portuguese gradually took over the control of the African coast. The merchant oligarchies of the Maghreb and Andalusia, which for centuries had been the intermediaries in the trade over land between Europe and Africa south of the Sahara, lost their trade monopoly. The caravan trade, and with it the merchant class of the Maghreb, entered into a crisis from which it has never recovered.

Being a talented and ambitious scion of a wealthy and respected family, Ibn Khaldun received a first-class education from a series of well-known teachers in the most important areas of study, namely the religious canons (the Qur'án and the prophetic tradition), the legal focuses of the different schools and the

practices of law, the methods of speculative theology (*kalam*), the Greek tradition of Arab philosophy (*falsafa*), and last but not least, the Persian political wisdom literature, a didactic genre also called “mirror of the prince” literature.

After his graduation in this classical curriculum, the young man engaged in political activity with remarkable zest, a notorious versatility, and a rarely seen bent for nonconformity. Frequently changing sides, he first served the emir of Tunis, followed by a post at the rival court of Fes, then by a stay at Tlemcen, and finally with the sultan of Granada. His audacious initiatives for radical reform and his undiplomatic language landed him in jail. Disgusted with court life and its intrigues, he “emigrated” to Egypt, where the Mamluk sultan offered him protection and where he became supreme judge for litigation in the Malikite tradition.

The Malikite tradition (founded by Malik Ibn Anas [712–96] in Medina) was one of the four major schools of law. From the beginning, the majority of the Maghrebi law doctors, as well as the judges, had opted for the Malikite tradition. One of the reasons was that the North African tribal organization and its social and economic structure were more like the small-town situation of Medina (in the heartland of Arabia) than the big-town context of the Persian and Syrian lands, from which the other law schools stemmed. The Malikite tradition kept to the letter of the divine law (*shari'a*) revealed by the Prophet. It did not permit a too-frequent use of analogical reasoning or a laxist adaptation of the law to different circumstances of time and place. During his career as *qadi* in Egypt, Ibn Khaldun was known to be averse to the sterile casuistry and hermeneutics, or the disputation techniques (*munazara*), of the other law schools. His principled stance led him more than once into trouble with his fellow *qadi*, who adhered to other jurisprudential rites. Another important characteristic of the Malikite tradition is that it stresses, more than some other schools, the idea of social utility (*maslaha*). The divine law or *shari'a* prescribes in great detail how believers should conduct their lives; how to submit to God and deal with their neighbor; how they ought to sell and buy at the marketplace; how they should eat, sleep, and procreate, etc. In all this the Malikite rites emphasized the importance of the common good.

The emphasis on social utility of this jurisprudential tradition not only influenced Ibn Khaldun at the law court, where he showed a great interest for the social context of the cases, but also in his scholarly work. His sense of social justice compelled him to become a sharp observer of events, with a thirst for knowledge concerning the concrete circumstances and the specific context of cases and causes. In this valuable attempt to sift the basic argument from the details, he matured into an able social scientist, wary of dogmatism.

Philosophy had reached eastern Islam by the translation of Greek treatises in Arabic by Chaldean Christians, who were followers of the Neoplatonic synthesis realized by authors of Late Antiquity, like Plotinus, Porphyry, Proclus, and others. The Islamization of the Neoplatonic *falsafa* through Muslim hellenizers, like al-Farabi (887–950) and Ibn Sina (980–1073), led to a Neoplatonism with

pronounced spiritual and mystical exaltations, as well as stoic self-discipline. However, the lands of western Islam leaned more heavily on the Aristotelian tradition. The works of its most famous figure, namely the Andalusian Ibn Rushd (1126–98), were hotly debated by the Latin scholars of the Paris university. The penetration of Greek or pagan *falsafa* aroused the outrage of the majority of the *ulema* and the devout Muslim scholars adhering to orthodox tradition. With al-Ghazali's (1058–1111) hermeneutic attack against the Muslim brand of philosophy, the post-Ghazalian scholarly world purified *falsafa* from its metaphysical and rationalist overtones and reduced it to bare logic. The Muslim scholastics, with a mindset to reconcile faith and reason, tried to work out a new synthesis. This ambitious scheme, however, led to an impasse.

In the post-Ghazalian fideist climate, *kalam* was reduced to formal disputations. The scholastic discourse degenerated into dry logic and to hairsplitting casuistry based on pure analogical reasoning. By the time that Ibn Khaldun graduated from school he had become utterly disgusted with it. He decided to embark upon a political career in which he was confronted with the concrete problems of the world. But his analytical mind continued to show a keen interest in the underlying causes and determinants of the political turbulence of his time. This led him to the works on political philosophy written by Muslim authors.

In that vein, al-Farabi's treatise on the Virtuous City (*al-madina al-fadila*), an Islamic version of Plato's *Republic*, caught his eye. But Ibn Rushd's famous commentaries on Aristotle's *Nicomachean Ethics*, as well as on Plato's *Republic*, interested him to a higher degree. Indeed, the Andalusian philosopher, more than the eastern Utopian al-Farabi of eastern Islam, referred to the historico-concrete developments of southern Spain and of the Maghreb. Besides being an influential *qadi*, Ibn Rushd had sided actively with the regime, as a counselor at the court of the Almohad empire. His profound humanism, with an underpinning of ethical norms by reason, inspired for a while the Almohadan ideology of revival. This novelty, however, was of short duration.

In Ibn Khaldun's time the politico-religious reform movement of the Almohads had spent its spell. And in eastern Islam, conquerors like Hulalu and Tamerlane could hardly be identified with al-Farabi's philosopher-king. Being a realist with an analytical mind, Ibn Khaldun drifted away from al-Farabi's political idealism. This was based on Plato's premise that refined ethics and politics derive from theoretical knowledge. The author of the *Muqaddimah*, who in his early career avidly read the Socratic philosophers and the Muslim hellenists, became in his mature age highly critical of their metaphysical stance in ethics and politics (Mahdi 1957; Lambton 1981; al-Azmeh 1981; Himmich 1987).

Not only does the Platonic equation of knowledge with being come under heavy attack, but also Ibn Rushd's rationalism. The focus of his attack was directed against the pretension of the Socratic school to equate the total dimension of being with knowledge.<sup>1</sup> These idealistic philosophers, he stated, made the same error as the naturalists who only emphasize the body. In the

Latin West a similar opposition to the concepts (called universals) of Thomistic—Aristotelian-inspired—philosophy had led to the new, more realistic paradigm of nominalism. According to our fourteenth-century scholar, the reign of pure reason is not a universal or categorical imperative; it has natural limits. Man is not only moved by the knowledge of the good; he is also driven by a will for power and by material aspirations such as the desire for wealth. However, if the *élan vital*, the competitive drive and the desire for comfort degenerates in lust for power and luxuries, it ultimately leads to the destruction of man and society. This is the kernel of Ibn Khaldun's "realistic" philosophy. Its seeds germinated in medieval Islam in critical confrontation between philosophical rationalism, Muslim law, and *kalam* (Nassar 1967).

In keeping with this realistic focus, he also distanced himself from Ibn Taymiyyah's fundamentalist stance, particularly the *al-siyasa al-shari'a*. This is a treatise on a political regime and community ruled by the *shari'a*. This notorious Hanbalite juriconsult exercised for years the function of *muhtasib*, or supervisor of the markets: the control of weight measures, prices, and the quality of money. This supervision of the *suq* gave Ibn Taymiyyah first-hand insight into the motivation of buyers and sellers, in the practical laws of the market, and in the social and economic mechanisms of society at large. In his discourse on a community ruled by divine law, the Hanbalite jurist aimed at a revival of primeval Islam. In opposition to the hellenizing philosophers who dreamed of a philosophizing as a substitute to the early caliphate, his plea was a call for devout leaders, like the early right-guided (*rashiduri*) successors of the Prophet, to take over political leadership. Ibn Khaldun, the realist, opined that this nostalgic idealization, aimed at a renaissance of the caliphate, left a wide gap between religious zeal and the historico-concrete functioning of the world.

The reading and the almost uncritical absorption of the "mirror of the prince" literature enriched Ibn Khaldun's research with a tradition of Persian origin. It set his pragmatic mind upon a fruitful path.<sup>2</sup> With the move to the east under the Umayyad regime, and still more so under the Abbassid dynasty, Islam underwent an intense process of *Iranization*. One of the consequences was that their scholars came into contact with the oriental wisdom literature of Iran. In the eighth century, Ibn al-Muqaffa initiated this didactic genre with two manuals. In the fourteenth century al-Turtushi closed this long series of open letters to the prince (Rosenthal 1962).

In the mirror literature, the moral principles of social justice and public equity are not conceived as absolute ethical norms, but rather as practical devices in the interest of the state, the society, and its leaders. The efficient ruler is not perceived as a religious devotee or as a philosopher. Rather, he should be a practical manager with an eye on the checks and balances of reality. An efficient ruler applies the sound principle of *raison d'état*; blending political authority with propaganda aimed at popularity. The mirror-genre had as origin the courtly ethos fostered by the Sassanian aristocracy. This reached unparalleled peaks of earthly wisdom and *joie de vivre*, its final aim was to obtain the willing

submission and legitimism of the sultans subjects. The mirror books abound with discourses on public administration, fiscal systems, the organization of commerce, and the economy. These essays, written as manuals for the enlightened political manager (*mulk hazm*), are the result of functional pragmatism in the service of sociopolitical realism. They are almost the opposite of the philosophical discourses on the ideal city. The mirror books also offer a reasonable alternative to Ibn Khaldun's dislike of despotic rule by intriguing sultans. A manager-type regime was also more to his taste than a theocracy or a regime solely based on the *shari'a*.

With the Persian authors Ibn Khaldun agreed that ruling a community well is a rare skill; an efficient statesman is like a manager of a historico-concrete society, he does not rule utopia. This requires the knowledge of the practical determinants, the specific causes, and the social and economic laws of development that move it. When he retreated to a three-year sojourn in a desert castle, Ibn Khaldun opined that the best way to serve the coming statesmen consisted in the writing of a book on the dynamics of history. But it should not be a mere court chronicle destined to flatter the ruler; it ought to be a useful manual for the statesman. The book he wanted to write would pass beyond the mere relating of the facts; it should preferably unveil the basic dynamics of becoming.<sup>3</sup> Ibn Khaldun, the realist, embarked upon the study of the social and economic forms of life as they had actually existed and were known in history. He was not interested at all in idealist speculation and was averse to another version of a *madina fadila* of his theory. In the introduction of his *Kitab al-ibar*, he boldly announced without a blush that his treatise launches a new science, namely the science of societal development (*ilm al-umran*).

### A TREATISE ON NON-SUSTAINABLE DEVELOPMENT

Since the time of Greek and Roman antiquity, litterateurs had tried to structure the unfolding of facts and events along different interpretative themes, with the expectation of a deeper insight into the laws and the dynamics of history. In this genre, the theme of the rise, growth, and decline of societies, states, and civilizations had been treated already in Hesiod's three stages of development. Plato and Aristotle theorized on the historical unfolding of constitutions. Polybius, a Greek scholar living in Rome during the second century BC, wrote a remarkable essay on political development (Polybius 1923). In the sixth book of his *Histories*, the Greek historian witnessed Rome's rise to power by their conquest of the central Mediterranean and set himself to expound a theory on the development cycle of regimes (*anakuklosis politeion*).

To Polybius this cycle was a natural sequence of birth, growth, and decline through which historical societies were bound to pass. The rise to power and the territorial expansion by conquest could not endure, since the richer and more powerful a commonwealth became, the harder it would be to maintain moral and civic virtue in proper equilibrium. With a clear emphasis on internal

causes, Polybius explored the two avenues that lead to societal decadence. The first avenue is social and economic: the achievement of a high level of prosperity feeds the drive for luxury; this inevitably brings decline (*tes epi to kheiron metaboles*). The second—and most of the time the simultaneous—cause is sociopolitical. The political emancipation and later the radical claim of the people for more freedom ends in the worst regime of all, namely the tyranny of the masses (*ochlokratia*). Another famous littérateur, the Roman rhetor Cicero, was also preoccupied with the historical cycle of constitutions. Being an accomplished popularizer of abstract ideas, he relayed the view of Polybius to the Roman intelligentsia.

The Polybian cycle theory had been a valuable attempt to prophesize the misdevelopment of the early Roman republic, but in theory it was a tributary of Aristotle's political philosophy. Ibn Khaldun's realistic bent, supported by his intimate knowledge of the Islamic commonwealth's problematic development cycle, led him to write his lengthy volume on stability and instability of regimes and to come forward with a more comprehensive analysis. His horizon was wider and he approached his domain of study as a social scientist rather than as a political philosopher. In his view, the conditioning factors—that is, the political, social, and economic variables—interact in a more or less autonomous way. On the theme of realism in power politics his work illuminates a classic and universal issue: how to establish and maintain a stable state with a sustainable development model. With his hard-headed approach, he came almost a century and a half ahead of Machiavelli's theses.

The scholarly commentaries of our time offer a wide variety of opinion on the object of Ibn Khaldun's new science and on the author's intentions. Indeed, the richness and complexity of the work mean that it can be read and interpreted as a theory on decline. In Himmich's book, *Penser la dépression*, Ibn Khaldun is profiled as a nostalgic who senses the end phase of a civilization. But the *Muqaddimah* can also be read as a high-quality product in the genre of mirror literature. His scientific method, however, offered surer guidelines for rulers than the outright descriptive and conformist literature of the Persians. According to one's standpoint, the *Prolegomena* can be read as a philosophy of history or as a treatise on social dynamics.

Noteworthy is the fact that Ibn Khaldun was a deeply religious man, and some hesitant passages of his book end with "for God knows best." In several passages he recognizes that in the prime time of Islam, religion had welded the *umma* into a community submitted to the will of Allah. After the Prophet's revelation of the Qur'án, the believer could hold that religion offered the final salvation for the individual and for society. In the religious view on history, Christian and Muslim alike, the social drama of decline or worse, of decadence, were sensed to be a sanction inflicted upon the unfaithful who betrayed their trust in God. But the *Muqaddimah* opened the path to a secular view of history. In fact it unveils a complex matrix of natural causes, of autonomous factors, which imply that with or without religion, history itself is not linear. History is

cyclical—for reasons which are intrinsic to the unfolding of the human socio-drama itself. When the coercive forces of a civilized state and its institutions are increasingly felt to cramp and obstruct the vigorous and creative forces in society, and it has not enough resilience to resist them, the organic alliance disintegrates. Limiting himself to be an acute observer of reality, our treatise writer refused to preach.

In my view Ibn Khaldun is the first but also a classical proponent of the nondurability of development. His work offers a superposition of various cycles—the political, the social, the economic, the fiscal, the demographic—each having their intrinsic dynamics, but with a dialectical impact on each other. The interesting point is that his analysis pointed to the internal misdevelopment of society and the dysfunctional growth of its economy as the major determinants of decline. The intrinsic laws of socioeconomic development are such that all the primitive cultures that succeeded to break through the level of basic material needs, and that entered into a process where the clan solidarity (*asabiyya*) dwindles as a result of detribalization, are sooner or later caught in a maelstrom.

The weakening of *asabiyya* through detribalization permits the formation of a bigger-scale society; second in line comes the division of labor, with its ensuing uplifting of labor productivity and general welfare. After this takeoff to luxury a society cannot escape for long the dysfunctional traps of misdevelopment. The growth fever that in the initial stages functions as a leverage to higher forms of societal and economic development turns into a cancer. The message of Ibn Khaldun is clear: the intrinsic laws of growth and development have the inevitable consequence that, viewed in the long course of history, they prove to be nondurable. In the long course of history there are no known forms of development that proved to be sustainable. This thesis, ably demonstrated by a medieval scholar, brings a clear message for the economists interested in the problems of our own long-term development.

### THE SOCIAL CORE OF POLITICAL CHANGE

In the beginning of the seventh century the revelation of the prophet Muhammad had given rise to a spiritual and social revolution in Arabia. Islam imposed itself as a novel response to the political crisis resulting from the continuous feuds between the desert people in the Hijaz and the urban merchant oligarchy in Mecca and Medina. The social conflict was defused by the new religion with its binding element of a higher order, namely the *umma* or the spiritual link of believers. In the space of barely one century, Islam, driven by a holy zeal for Allah and lust for booty, would conquer an area stretching from Persia to Morocco and up to the Pyrenees in Europe.

After the death of Muhammad, a vicar or *khalif* presided over the community of believers. According to the ideal model set by the rightly guided leaders of primeval Islam, the caliph was the supreme spiritual authority who also served



as the temporal ruler and judge. In the course of time the caliphate gave way to mere earthly power relations. Sultans, emirs, and in due time despots gripped the reins of power with the aid of military force. The spiritual guidance was gradually monopolized by the interpreters of the revealed message and of sacred law. The history of medieval Islam is a tale of a magnificent civilization regularly torn apart by new conquerors, most of the time tribal leaders of desert nomads. These brave newcomers toppled the exhausted urban rulers with the cohesive military clout of their unspoiled clansmen.

Ibn Khaldun, who in his schooling had absorbed all the available knowledge and who as a political activist had participated in some major power struggles of his time, became fascinated by the natural development cycle: the genesis, the flourishing and the decline of political power and authority. In his search for the operational foundations of this repeated cycle he singled out its underlying social dynamics as the prime mover. As a medieval scholar he drew more than he admitted on the prescriptive norms of the *fukaha*, on the apologetic literature of *kalam*, and on the metaphysical schemes of the hellenizing Muslim philosophers. But in the social contextualization of his thesis he proved to be a most original thinker. He came up with a new science in order to explain how and why things are as they are in the natural development course of human societies. Ibn Khaldun, the realist, sided with the facts of life while the hellenizing philosophers cherished the Utopian schemes of an ideal state. He felt that the juridico-religious norms of the *fukaha* seemed to be more apt to offer guidance to the believer for his salvation, but were no match for the despots and their power holders.

In Ibn Khaldun's sociopolitical dynamics, *asabiyya* or the primary group cohesion and solidarity based on blood ties is the pivotal concept. The kinship ties lead to affection and support in one's social relations. The members of the nomadic tribes concentrated on the satisfaction of the primary needs, like food and shelter. The social organization of the clan guarantees that each member gains the means of subsistence, and moreover it secures the mutual protection of the group. As a result of the natural vicissitudes of the subsistence economy the clan member has to fall back on the solidarity of the group. Consequently, he takes its cohesive power structure for granted.

*Asabiyya* alone, however, is not sufficient to found a great civilization. With the development of cities where several tribes are clustered together and with the formation of the state, a different social organization and additional force are needed to buttress the cohesion of this multiethnic entity. According to Ibn Khaldun the primeval *umma* was linked together with God's help. But in the course of time, a multiethnic empire developed, and after the charismatic founding fathers, the cohesive impulse of religion weakened. Ambitious rulers monopolized power, and some behaved as despots. They were set to keep the community together with a paid army and with an exacting state bureaucracy.

The development of urban agglomerations (*tamaddun*) resulted in a process which may be called detribalization. This entails a gradual loosening of natural solidarity ties. In order to safeguard the state authority of the ruler, the army and the

bureaucracy assisted by a learned power elite became the instruments of law and order. In due time this coercive machinery could not function without considerable financial means. The prodigality and the luxury of the court and of the ruling class swallowed an exorbitant mass of resources. The tax levies beyond the rate admitted by the canonical prescriptions created a fiscal overload eliciting the moral disapproval of dissident *fukaha*. In order to fill the void, the state authorities felt obliged to take over some of the most profitable economic activities and, by doing so, alienated large sectors of the business community. The resulting dissolution of the social fibers weakened the state to the point of exhaustion. The times were ripe for a desert tribe, still unspoiled by civilization, to open a new cycle.

The inductive method of the author and the realistic contextualization of the development cycle, based upon the pivotal changes in *asabiyya*, have led some modern readers to hail Ibn Khaldun as a sociologist *avant la lettre*. True, for his time, he was an original social analyst but this does not make him yet a sociologist in the modern sense. He was, after all, a medieval scholar deeply rooted in Islamic culture.

### THE MECHANICS OF THE LONG TERM

Ibn Khaldun called his new science *ilm al-umran*, but most readers familiar with his semantics agree that *umran* is too complex a term to translate into one word. In the text, *umran* refers to the cultural, societal, and material unfolding of history. In some passages it means social change. Ibn Khaldun's analysis rests on a series of binary dichotomies, the most important being: primitive-civilized, nomadic-sedentary, rural-urban, small-scale society versus big-scale, feeling of solidarity versus anomie, natural subsistence economy versus money economy with a surplus. These ideal types change from one stage to another. Ibn Khaldun's reasoning is essentially a discourse on stages of development. Readers with a schooling in sociology identify these ideal types as forebears of the Durkheim-Weber-Parsons scheme. Readers with an education in economics opine that the German Historical School and Rostow's stages of growth had a medieval ancestor. The most important distinction is the one between *umran badawi* and *umran hadari*. The historical cycle consists in a dynamic change from *badawa* into *hadara*.

#### The *umran badawi*

The principal meaning of *badawa* is primitive; its derivative meanings are nomadic, rural or backward. Today we would call this societal form an underdeveloped subsistence economy in which people strive for basic needs like food and shelter. The desert people practice stock-raising and oasis-agriculture; they are either Bedouins or seminomads. The *badawa* people live a natural life whose simplicity engenders certain physical and moral qualities. Used to standing up to hardship, they are brave and live on the close-knit ties

of common ancestry or common interests. The manifest link uniting them is *asabiyya* or social solidarity. After the necessary aggrandizement of scale, these seminomads are able to conquer an existing civilized state, or to create one; because their striking power is sustained by an intense feeling of inner cohesion and solidarity. As time passes, some tribes get lured into the attractions of civilization. Ibn Khaldun underlines the progressive division of labor as a consequence of scale aggrandizement. The ensuing rise in productivity creates a surplus, so that trade intensifies between food producers and craftsmen.

### **The *umran hadari***

This is the sedentary way of life or the civilized society with people living in big and complex cities. The luxury of *hadara* is the result of advanced technical skills. But the desires of townspeople soon become unlimited. In the process of urbanization, this is a few generations after a powerful tribe has taken over power in an existing state, detribalization sets in, and *asabiyya* gradually weakens. The conquering leader, who initially could count on the strong solidarity ties of his followers, is obliged to hire mercenaries to defend himself and to guarantee his power and his authority. With the dwindling of *asabiyya*, the need for a standing army becomes greater and starts to swallow up a considerable share of the state budget. More public works (notably flood control and irrigation) and the patronage of education, science, the arts, and especially the luxurious courts, cost money and gradually overburden the royal treasury. In order to meet the financial requirements for the growing administration and army, the public authorities engage in economic activities to meet the bill, but they simultaneously start to levy heavier taxes. For a couple of generations these devices may be able to avert the problems of overload.

At this point, it should be emphasized that Ibn Khaldun showed no interest in the problems of commutative justice—the search for the value equivalence in commercial exchange—nor in a theoretical discourse on the intricacies of commensurability in the terms of trade between exchangers of goods and services, like Aristotle and the thirteenth-century Latin scholastics had so masterfully done (Baeck 1994). As an analyst of the macrosphere he focused his attention on the sociopolitical levers of wealth distribution between the power holders (the state machinery) and the rest of society.

In the beginning the impulses of the state work as a booster on economic development. The state is the greatest employer and also the biggest provider of public utilities like public buildings, ports, canals, roads. After a period of commercial and economic expansion and creation of wealth, leading to welfare and to luxury, the fiscal overload spins off a series of vicious circles. The first one is that the commercial and economic establishment loses its profits and its motivation as a consequence of excessive taxes. The forces of decline set in, once the fiscal income of the state (which originally induced the greatest stimuli for the economy as its greatest spender) becomes unable to finance the

ballooning public deficit. In chapter 3, section 39 of the *Muqaddimah*, the different stages and effects of taxation are clearly formulated:

In the city, the bedouin simplicity loses its importance and needs become more varied. Taxes continually rise to keep pace with the rise in needs and luxury. Finally, the subjects are gradually overburdened with heavy taxes. Consequently, the subjects lose interest in social and economic activities, since the expected profits are not realized. At last civilization is destroyed, because there is no incentive for social and cultural activity.

(Rosenthal 1958: chapter 3, section 39)

One of the basic themes of the *Muqaddimah* is that once the natural economy, characterized by basic needs and social solidarity, changes into a highly productive economy (producing luxury and social anomie) the internal coherence weakens. A vicious circle of dysfunctional development sets in. This leads to decline. The loss of solidarity, the tyranny of the masses and luxury figured already in the picture of Polybius as the villain of the piece. But it was Ibn Khaldun who first offered a well-documented global analysis of unsustainable development. A civilized state with a highly developed economy, with comfort and luxury, is the *telos* of most historical societies. But once a society and its economy achieves *hadara*, the very success augurs its dissolution.

The developed modes of production resulting in surplus production (in agriculture, stock-raising, crafts, and industries), the intense exchange and trade relations between these sectors, the use of money, the refinement of arts and skills evolved as a response to man's desire for material comfort. In the next course of development, however, the rise and growth of the economy is intimately related to the assertive power of the State. In order to underpin their legitimacy the rulers embark upon the construction of public works and distribute attractions and public utilities for the people. In a sort of mercantilist interplay the State and the commercial classes activate the professional skills of the craftsmen and of the other productive sectors.

With greater emphasis and clarity than any author before him, our medieval scholar discourses on the value of labor, the productivity effect of the division of labor, the stimulus of profit, the profit motive, the accumulation process, and on the impetus given by inflation to economic growth.<sup>4</sup> The importance of labor and the profit motive merit special mention. Chapter V, section 1 of the *Muqaddimah* is replete with statements such as: "profit is the value realized from human labor" or "capital is the value realized from labor." A number of Marxist writers, like Batsieva, were tempted to profile our author as an early socialist and labor-value theorist. Ibn Khaldun would be the first to take umbrage at such a label. For an author who denounces the luxury, the parasitical idleness, and the fiscal hunger of the ruling leisure class, the emphasis on labor as the real source of value is not only an illustration of his economic realism but also of his moral disapproval of feudal parasitism.

The division of labor, the specialization of the craftsmen and traders in a variety of skills is explained by the profit motive. The differential upward trend of prices works as a pulling force for the occupational transfer of labor over the sectors: from basic necessities toward the sector of luxury goods. When the mentality of *hadara* develops, the demand for comfort and luxury goods grows proportionally faster than demand for basic needs. What happens is the price of luxury goods, and the profit to earn, attracts relatively more people in that activity. The differential trend in price and profit induces labor to move from the primary goods sector to industry and trade, and finally to the sector of the superfluous. In order to satisfy the demand for riches, the state is tempted to intervene with price controls. These obstructions to the law of demand and supply force the producers and merchants to work for lower profits. When the State, moreover, raises the tax rate above the tolerable limit and above the traditional/religious norm, the growth cycle has passed its peak and starts to spiral down.

The analysis of the demographic cycle forms another important subsystem in his cyclical theory of stages. Here follows the scenario in a nutshell. When a new tribe of Bedouins and seminomads take over a visibly decadent regime of the cities, their invasion and high number of children initially boosts the population growth. The increase in population permits more division of labor and specialization, and thus more productivity and prosperity. For a while this cumulative process feeds itself. As the process of more population with higher productivity and prosperity goes on, the richer regions see their cities grow bigger and more prosperous, while other cities and the rural areas lag behind. And here again our author shows his interpretative power: when the demographic cycle reaches maturity, internal bottlenecks enter the scene which turn the cycle into a vicious process of dysfunctional growth. First the prosperous cities grow too large and get overcrowded. The earlier positive effects of urban life (*tamaddun*), like division of labor and specialization, enter into the zone of diminishing returns. The mass of the urban poor becomes restless, and a growing number resort to criminality as a way of living. And second, the rural exodus or the flight of population from the countryside brings about a decrease in agricultural production. The results are famine and disease, ending up in a decrease of the population.

## CONCLUSION

Islam was the latest revealed religion of antiquity. Ibn Khaldun lived seven centuries after its revelation. In the transition from Late Antiquity to the emergence of the Latin West in the twelfth century, Islam was at its zenith and played an eminent role as a marker of Mediterranean culture and history. Classical Islam made an important contribution to economic thought (Baeck 1991). During that long span of time, the lands of Islam witnessed a series of tribes with a fervent *esprit de corps* taking over the lead in order to found a new regime and a reborn society. In the eastern lands the Ummayyads took over the caliphate from the early followers of the Prophet, and in their wake, the

Abbasids, the Seldjuks, and the Mongols. In Andalusia and in the Maghreb, the Almoravids were conquered by the Almohads. Our author entered his manhood when the Almohad empire had given way to a series of rival princedoms. He was educated by the best scholars of his time, and his career evolved as a rare combination of roles and functions: political activist, grand judge and scholar.

Thoroughly familiar but dissatisfied with the best of what the science of law, *kalam*, and *falsafa* of his time could offer, he created a new framework of thought to make his contemporaries conscious of the patterns and the overall determinants that govern the rise, growth, and decline of societies. In the preface to his *Kital al-ibar* he proudly declared "this topic is something new, extraordinary, and highly useful for statesmen." With a rare show of chivalry he admitted that Aristotle, in his *Politics* (book I, chapters 8–11), had initiated the eternal theme of *Gemeinschaft* and *Gesellschaft*. But he hastened to dismiss Aristotle's few pages on the topic as a set of general ideas without all the arguments it deserves. His own new discipline, the *ilm al-umran*, had the avowed ambition to offer "an exhaustive, very clear and fully substantial interpretation" of the politics, sociology, and economics of development. For our contemporaries who sense the impossibility of extrapolating our Western development model to the other five billion people on earth, his message questions the thesis of "sustainable" development.

His *Summa* is now universally recognized as a benchmark in the history of sociopolitical and economic thought. In my view, Ibn Khaldun is the greatest social scientist of classical Islam. In the Latin West, the Italian humanists of the fourteenth century, like Leonardo Bruni, Matteo Palmeri, Leon Battista Alberti, Giannozzo Manetti, and Lorenzo Valla, had also reacted to the normative treatment of social and economic affairs by canon law and speculative theology, with a more secular or realistic version. Also Nicolas Oresme's *Treatise on Money* is sometimes quoted as a notable example of matter-of-fact writing on economics. Oresme's essay, however, like Al-Maqrízi's, is a monograph on one topic, namely money. They both lack, as the works of the Italian humanists do, the comprehensiveness, the analytical muscle, and the systematic interplay of the political, social, and economic factors. In Ibn Khaldun's time, political science, sociology, and economics were not yet conceived to form an analytically isolable sphere of thought. In this respect this medieval scholar was thoroughly Mediterranean, or premodern. With him, however, the economic concepts and determinants are more forcefully developed than with any other medieval author. Today we would call Ibn Khaldun's oeuvre a perfect example of the interdisciplinary approach. In this genre the *Muqaddimah* is a masterpiece.

## NOTES

- 1 When the Arab scholar declares that he wrote his book with God's help and without the instruction of Aristotle, he is shielding himself from the criticism of the orthodox

establishment, who might find his analysis too far away from *kalam*. The attack on a theory without facts and arguments is also unfair, since Aristotle's research team garnered the impressive number of 157 constitutions, which he methodically classified and systematized. Here, as in some other passages, Ibn Khaldun's immense pride and his pretense had won over the gentleman.

- 2 In the Latin West, this *specula principum*, also called *Fürstenspiegel* literature, flourished from the twelfth century and formed the seeds for the theory of "*Staatsraison* or reason of state. Machiavelli was largely inspired by this Persian tradition absorbed by the West (Senellart 1989).
- 3 Here again, Ibn Khaldun is more influenced than he cared to admit by Aristotle's philosophy of development—the Aristotelian tension that regulates the unfolding of the potential (*dunamis*) to maturation in actual reality (*energeia*).
- 4 In the last decades a number of Ph.D. theses were written on his economic thought. For a sample of comments see Belal (1968), Boulaïka (1971), Benassine (1982), and Busau (1990).

## REFERENCES

- Abdeselem, A. (1983) *Ibn Khaldun et ses lecteurs*, Paris.
- al-Azmeh, A. (1981) *Ibn Khaldun in Modern Scholarship*, London.
- al-Wardi, A. (1962) *Mantiq Ibn Khaldun*, Cairo.
- Baeck, L. (1991) "The Economic Thought of Classical Islam," in *Perspectives on the History of Economic Thought*, vol. V, Aldershot: Edward Elgar, pp. 3–22.
- (1994) *The Mediterranean Tradition in Economic Thought*, London: Routledge.
- Batsieva, S. (1974) "Les idées économiques d'Ibn Khaldun," *Orientalia Hispanica*: 96–109.
- Belal, A. (1968) "Sur la pensée économique d'Ibn Khaldun," *Bulletin économique et social du Maroc* 30:3–11.
- Benassine, M. (1982) "La pensée économique de Abderrahmane Ibn Khaldoun," *Revue Algérienne des Sciences Juridiques, Economiques et Politiques* 19(1): 7–22.
- Boulaïka, J. (1971) "A Fourteenth Century Economist," *Journal of Political Economy* (29): 1105–18.
- Busau, A. (1990) "Economic Views of Ibn Khaldun," *Journal of Objective Studies* 3:48–66.
- Dawood, N. (1967) *Ibn Khaldun: the Muqaddimah*, London (an abridged version; edited in paperback 1978).
- de Slane, M. (1863) *Les Prolégomènes d'Ibn Khaldoun*, 3 vols., Paris (new edition in 1939, with an introduction by G.Bouthoul).
- Gabrieli, F. (1966) "Il concetto della asabiyya nel pensiero storico di Ibn Khaldun," *L'Islam nella Storia*, Bari, pp. 211–52.
- Himmich, bin Salem, H. (1987) *Penser la depression: partant d'Ibn Khaldoun*, Rabat.
- Irabi, A. (1982) "Zum Stand der gegenwertigen arabischen Soziologie," *Zeitschrift für Soziologie* 11:167–182.
- Kepel, G. and Richard, Y. (1990) *Intellectuels et Militants de l'Islam Contemporain*, Paris.
- Lacoste, Y. (1966) *Ibn Khaldoun, naissance de l'histoire*, Paris.
- Lambton, A. (1981) *State and Government in Medieval Islam*, Oxford.
- Mahdi, M. (1957) *Ibn Khaldun's Philosophy of History*, London.
- Mazarino, S. (1959) *La fine del mondo antico*, Rome.
- Monteil, V. (1967) *Ibn Khaldun: Discours sur l'Histoire Universelle*, Beirut (French translation of the *Muqaddimah*, new edition, Paris 1978).
- Nashaat, M. (1944) *The Economic Ideas in the Prolegomena of Ibn Khaldun*, Cairo.
- Nassar, N. (1967) *La pensée réaliste d'Ibn Khaldun*, Paris.
- Oumlil, A. (1979) *L'Histoire et son discours: essais sur la méthodologie d'Ibn Khaldun*, Tangiers.

- Polybius (1923) *The Histories*, translated by W. Platon, Loeb Classical Library, London.
- Rabi, M. (1957) *The Political Theory of Ibn Khaldun*, Leiden.
- Rosenthal, E. (1962) *Political Thought in Medieval Islam*, Cambridge.
- Rosenthal, F. (1958) *Ibn Khaldun: The Muqaddimah*, 3 vols., Princeton.
- Sabagh, G. and Ghazalla, I. (1986) "Arab Sociology Today: a View from Within," *Annual Review of Sociology* 12:373–99.
- Senellart, M. (1989) *Machiavellisme et raison d'Etat*, Paris.
- Sharif, M. (1955) "Ibn Khaldun: the Pioneer Economist," *Islamic Literature* 6(5): 33–40.
- Sherwani, H. (1970) "Ibn Khaldun and his Politico-Economic Thought" *Islamic Culture* 44(2):71–80.
- Siddiqi, M. (1981) *Muslim Economic Thinking*, Jeddah.
- Sohbi, M. (1932) *Les idées économique d'Ibn Khaldoun*, Leiden.
- Spengler, J. (1964) "Economic Thought of Islam: Ibn Khaldun," *Comparative Studies in Society and History* 6:268–306.
- Taleghani, Ayatullah S. (1982) *Society and Economics in Islam*, Berkeley.
- Walbank, F. (1957) *A Historical Commentary on Polybius*, Oxford.



# MAIMONIDES ON PROPERTY

## Its accumulation and its distribution

*Nelson P.Lande*

The economic, religious, and philosophical views of the twelfth-century Jewish thinker Moses Maimonides are thoroughly intertwined. Indeed, since his economic views issue from his religious and his philosophical views, one could scarcely understand the former without understanding the latter. Furthermore, since Maimonides interprets his religious views in light of his philosophical views, it is ultimately his philosophical views that render his economic views fully intelligible. So, at any rate, I shall argue, by reference to both his position on the accumulation of wealth and his position on our duties toward the poor.

### ECONOMIC VIEWS: THE DETAILS

#### The accumulation of wealth

Maimonides's views on both poverty and luxury—he regards them both as evils—are quite foreign to us. Few of us would claim that luxury is an evil—quite the contrary—and even though we do agree with him that poverty is an evil, it is doubtful that we share his reasons for so viewing it.

For Maimonides, poverty is an evil in two respects. It is an obstacle to *study*, the study of the texts central to Judaism, such as the Bible and the Talmud. It is also an obstacle to the right sort of *conduct*, the adherence to the precepts of the Law. “[W]hen one is troubled here on earth with diseases, war or famine, he does not occupy himself with the acquisition of wisdom or the performance of religious precepts” (Maimonides 1981:92a). The reasoning here appears to be that the desperately poor will simply be too distracted by their needs to have sufficient time or energy to devote to study. Moreover, they will find it difficult to resist the temptation to violate certain of the negative precepts (e.g., the prohibition against theft), and—because poverty often leads to disease—to fulfill certain of the positive precepts (e.g., those requiring the performance of various rituals). Central to Maimonides's thinking on poverty, then, is the view that it is an evil because it is an obstacle to study and to conduct prescribed by the Law (1981:91b).

The pursuit of excessive wealth is itself an evil—and in part for the very

same reason: it too interferes with study. “Of all precepts,” Maimonides writes, “none is equal in importance to the study of the Torah” (1981:59a). “Possibly you may say: When I shall have accumulated money, I shall resume my studies; when I shall have provided for my needs and have leisure from my affairs, I shall resume my studies. Should such a thought enter your mind, you will never win the crown of the Torah. Rather make the study of the Torah your fixed occupation and let your secular affairs engage you casually; do not say: ‘When I shall have leisure, I shall study;’ perhaps you may never have leisure” (1981:59a–59b). Here he cites approvingly two rabbinical dicta: “Nor can one who is engaged overmuch in business grow wise” and “Engage little in business and occupy thyself with the Torah” (1981:59b).

Of course, it does not follow that because the *pursuit* of wealth is an evil, its *possession* is also an evil. On the contrary, one might suppose that Maimonides would approve of wealth possessions on the grounds that those who have plenty would also have the time to devote to study. Indeed, he himself writes that upon those who both engage in study and observe the commandments, God “will bestow . . . all the material benefits which will strengthen [their] ability to fulfil the Law, such as plenty, peace, abundance of silver and gold” (1981:91b).

Maimonides’s reference to “silver and gold” certainly makes it *appear* that he would approve of the possession of wealth, but other statements of his point in quite the opposite direction. Indeed, at times he writes as if wealth and study were inherently incompatible:

The words of the Torah do not abide with . . . those who learn amidst luxury, and high living, but only with one who mortifies himself for the sake of the Torah, constantly enduring physical discomfort, and not permitting sleep to his eyes nor slumber to his eyelids.

(1981:59b)

Despite these harsh words, Maimonides is not an ascetic.<sup>1</sup> His point here seems to be that one can devote oneself to the Law for its own sake—through the religious life—and one can devote oneself to pleasure for its own sake—through the life of luxury—but one cannot devote oneself to both at the same time. His position is not unreasonable: a little wealth is a good thing—insofar as it provides one with the necessary leisure to engage in study—but an abundance of riches threatens to reorient one’s focus and thus one’s life.

The ideal that he invokes is certainly rooted within the tradition: it is that of an individual who “works a little daily, just enough to provide for his needs, if he would otherwise have nothing to eat, and devotes the rest of the day and night to the study of the Torah” (1981:59b). At the same time, this ideal is also rooted in Aristotle’s doctrine of the mean, which Maimonides expressly endorses:

*Good actions* are those balanced in the mean between two extremes, both of which are bad; one of them is an excess and the other a deficiency.

The *virtues* are states of the soul and settled dispositions in the mean between two bad states [of the soul], one of which is excessive and the other deficient.

(Maimonides 1975:67. Emphasis mine)

Not surprisingly, Maimonides enjoins us to cultivate a desire for only a moderate amount of property. On this issue, he believes, Aristotle and the rabbis are in full agreement:

our ancient sages exhorted us that a person should always evaluate his dispositions and so adjust them that they shall be at the mean between the extremes.... [Thus one] will only desire that which the body absolutely needs and cannot do without, as it is said, “The righteous eats, to satisfy himself”... He will only labor at his occupation to obtain what is necessary for his sustenance.

(Maimonides 1981:47b)

So far Maimonides’s views are entirely consistent with the Jewish tradition: the idea that poverty and luxury are evils because they detract from Torah study is hardly a radical one. It will become clear in the third part of this paper, however, that the focus on Torah study will be supplanted, in his philosophical writings, by an emphasis on study of a *philosophical* sort—and *that will prove to be quite radical indeed.*

### **Duties toward the poor**

Maimonides addresses the question of what *tsedakah*—i.e., charitableness, righteousness, or justice—calls for. He observes that one is commanded “to give charity to the poor among the people of Israel, each according to his needs, if the donor can well afford it” (Birnbaum 1974:155).<sup>2</sup> It follows that one is *obliged to give charity*; one is not free *not to give*.<sup>3</sup> It follows, moreover, that one is not free to decide *how much* to give; rather, one gives as much as one “can well afford” to give in order to satisfy the recipients needs.

Two obvious questions arise. First, how does one determine what one “can well afford”? Second, what constitutes a *need*—as opposed to, say, a *luxury*—on the recipient’s part? Maimonides is silent with respect to the first question, but he suggests an answer to the second.

If he [the recipient] has no clothing, he should be clothed. If he has no house furnishings, they should be bought for him. If he has no wife, he should be helped to marry. If it is a woman, she should be given in marriage. *Even if it had been his wont to ride a horse, with a manservant running in front of him, and he has now become poor and has lost his*

*possessions, one must buy him a horse to ride and a manservant to run before him, as it is said, "Sufficient for his need in that which he wanteth."*  
 (Klein 1979:77. Emphasis mine)

To be sure, Maimonides is quick to qualify his position: "You are thus obligated to fill his want; you are not, however, obligated to restore his wealth" (Klein 1979:77). Nevertheless, his notion of what counts as a need calling for charity is obviously quite broad. Clothing is an obvious such necessity, as is food. That house furnishings are such a necessity plainly implies that housing itself is. That spouses are such necessities—presumably in order to fulfill the commandment to procreate—suggests that *whatever* one needs to fulfill the commandments counts as a necessity. That a formerly wealthy person should be provided with at least *some* of the accoutrements of his former wealth suggests that what counts as such a necessity is sometimes contingent not merely upon one's unique circumstances but also upon one's expectations.

Apart from the charitable obligations that individuals have, the community itself has obligations: its members must

appoint from among themselves well-known and trustworthy persons to act as alms collectors.... They should demand from each person what is proper for him to give and what he has been assessed for, and should distribute the money every Friday, giving each poor man sustenance sufficient for seven days.

(Klein 1979:84–5)<sup>4</sup>

It is plausible to think of the institution that Maimonides is describing here as the prototype for at least a minimalist version of a welfare state. To maintain otherwise, one would have to contend that one is free not to give to charity *or* that one is free to decide how much to give—neither of which, as we have seen, is the case—*or* that the community is free not to establish such an institution—a possibility that Maimonides rules out by proclaiming that no "disciple of the wise may live in a city that is unprovided with" (among other things) "a treasurer of charity funds for the poor" (Maimonides 1981:52b).

It goes without saying that the existence of such a treasurer presupposes the existence of funds intended for charitable donation. Hence Maimonides clearly views the existence of community-based charity as mandatory.

He distinguishes eight different ways of giving charity, and ranks them. Although he does not make explicit the principle that underlies the ordering, it is certainly possible to discern the reasoning behind this hierarchy. The highest form of charity is to provide assistance to a poor person "by handing him a gift or a loan, or entering into partnership with him, or finding work for him, in order to strengthen his hand, so that he would have no need to beg from other people" (Klein 1979:91). Maimonides has little difficulty finding support for this within the tradition:

One should always restrain himself and submit to privation rather than be dependent upon other people or cast himself upon public charity.... Even if one is a Sage held in honor, once he becomes impoverished, he should engage in a trade, be it even a loathsome trade, rather than be dependent upon other people. It is better to strip hides off animal carcasses than to say to other people, "I am a great Sage, I am a priest, provide me therefore with maintenance." So did the Sages command us. Among the great Sages, there were hewers of wood, carriers of beams, drawers of water to irrigate gardens, and workers in iron and charcoal. They did not ask for public assistance, nor did they accept it when offered to them.

(Klein 1979:91–3)

It is clear why Maimonides assigns this form of charity to the highest rank: being dependent on others for life's necessities is humiliating, and it is humiliating because we perceive it as an obvious evil, just as we perceive being self-supporting as an obvious good. It is clear that for Maimonides, avoiding the humiliation of dependency is the best course. Indeed, throughout his ethical writings, Maimonides never tires of excoriating those who humiliate others. It is unsurprising, then, that the highest form of charity should consist in a prescription for obviating the need for charity.

In the second highest form of charity, one "gives alms to the poor in such a way that he does not know to whom he has given, nor does the poor man know from whom he has received. This constitutes the fulfilling of a religious duty for its own sake" (Klein 1979:91). Two questions arise. First, why is this form higher than all the remaining forms of charity? Second, what does Maimonides mean by deeming this "the fulfilling of a religious duty for its own sake"?

Since the giver and the recipient are unaware of each other's identity, the recipient suffers less humiliation from accepting charity than he would suffer if either he were aware of the giver's identity or the giver were aware of his. By the same token, the giver experiences less pride—i.e., he glories less in his power to affect the lives of other human beings—than he would experience if either the recipient were aware of his identity or he were aware of the recipient's.

In characterizing such an act of charity as "the fulfilling of a religious duty for its own sake," Maimonides is almost surely claiming that the giver is motivated not by a consideration such as pride but rather by the love of God. Elsewhere, for example, he identifies the act of doing "what is truly right because it is truly right" with serving God out of love (Maimonides 1981:92b). Hence it would be surprising if he did *not* view charitable acts (at their best) in the same light.

It seems to me, therefore, that Maimonides's ranking principle, where the eight degrees of charity are concerned, has a twofold aim: to lessen the extent of both the humiliation that the recipient will endure and the pride that the giver will experience. If humiliation is an obvious evil, so—for Maimonides, at any rate—is pride. Indeed, pride is the flaw of character that, at least as much as any other, puts us at a distance from God:

our sages . . . said that anyone who permits his heart to swell with haughtiness has denied the essential principle of our religion, as it is said, “And thy heart will be proud, and thou wilt forget the Lord, thy God.”

(Maimonides 1981:48b)

The underlying thought here seems to be that one should always be mindful of one’s dependence on God—and on God’s providence. Thus the giver of charity who takes pride in his superiority over his beneficiary is likely to see himself as being dependent only on his own powers, and so as being less dependent on—or even independent of—God. It is just such an individual who is likely to exempt himself from the requirements of the Law.

In the third highest form of charity, the giver knows the identity of the recipient but the recipient does not know the identity of the giver, whereas in the fourth, it is just the reverse. It seems to me that the third is higher than the fourth insofar as the giver’s pride and the recipient’s humiliation are less in the third than they are in the fourth. To be sure, the giver in the third can glory in the knowledge that a particular recipient, whose identity he knows, is dependent on him—and thus he *can* feel superior to him. At the same time, however, this sense of superiority is surely less than that to be found in the fourth. After all, the recipient in the third does not know the giver *as his benefactor*—and thus does not view him *as his superior*. Hence the giver cannot glory in the knowledge that a particular individual exists (the recipient) who knows him (the giver) as his (the recipient’s) benefactor, and who therefore views him (the giver) as his (the recipient’s) superior.

By the same token, the recipient in the third suffers the humiliation of knowing that *someone* exists upon whom he is dependent and toward whom, therefore, he may well feel inferior. This sense of humiliation, however, must be less pronounced than that which he suffers in the fourth, where he knows the *precise identity* of his benefactor—and thus feels inferior to him.

I shall simply cite the four remaining forms of giving charity, without elaborating upon them. It will be clear that the same theme—of reducing the two evils of the recipient’s humiliation and the giver’s pride—runs through each of them. In each, so it appears, both the giver and the recipient know each other’s identity. In the fifth, the giver gives without being solicited; in the sixth, after being solicited. In the seventh and (presumably) the eighth, the giver gives less than he should give, but in the seventh gives cheerfully; in the eighth, grudgingly. There is an echo here of Aristotle, for whom one is not to be deemed virtuous merely because he performs virtuous acts: one must take pleasure in performing them, or, at the very least, not find it painful to perform them (Aristotle, *Nicomachean Ethics*: 1104b7).

### THE POINT OF CHARITY

The underpinnings of Maimonides’s view of our duties to the poor are at once religious and philosophical. Central to his thinking is his conviction that none

of God's acts is an arbitrary expression of will; instead, each is an expression of wisdom and as such is purposeful. It follows that each of the commandments—and thus the commandment to be charitable—has its own purpose.

Now the overriding purpose of the Law, so he maintains (and indeed, of each of the individual commandments), is the advancement of the welfare—and ultimately the perfection—of both the soul and the body. Where the soul is concerned, this purpose is achieved once one acquires correct opinions and develops and exercises ones intellect, i.e., once one acquires the distinctively *intellectual* virtues and thereby comes to know “everything concerning all the beings that it is within the capacity of man to know” (Maimonides 1969:511).

[Where the body is concerned, the perfection that the Law] seeks consists in being healthy and in the very best bodily state, and this is only possible through [ones] finding the things necessary for him whenever he seeks them. These are his food and all the other things needed for the governance of his body, such as a shelter, bathing, and so forth. This cannot be achieved in any way by one isolated individual. For an individual can only attain all this through a political association, it being already known that man is political by nature.

(Maimonides 1969:511)

Specifically, the Law secures the body's perfection through “the improvement of [our] ways of living with one another,” whereby everyone comes to observe two sorts of duties: the negative duty of refraining from acts of wrongdoing or injustice—since these (e.g., theft or battery) typically impinge upon the victims physical well-being—and the positive duty of furthering the welfare of the community. In other words, the body's perfection can be achieved only if one lives in a community whose members possess the virtues of *character*; and in particular such distinctively *moral* virtues as justice and charity (Maimonides 1969:510).

Among the principal obstacles to the acquisition of both sorts of virtues—the intellectual and the moral—are the various desires that collectively constitute the desire for pleasure. (It is this desire, of course, that accounts for ones immoderate desire for wealth and that inhibits ones charitable inclinations.) Hence Maimonides calls for

the abandonment, depreciation, and restraint of desires in so far as possible, so that these should be satisfied only in so far as this is necessary.... For when only the desires are followed, as is done by the ignorant, the longing for speculation is abolished, the body is corrupted, and the man to whom this happens perishes before this is required by his natural term of life; thus cares and sorrows multiply, mutual envy, hatred, and strife aiming at taking away what the other has, multiply. All this is brought about by the

fact that the ignoramus regards pleasure alone as the end to be sought for its own sake.

(Maimonides 1969:532)

Although the soul's welfare is of greater importance than the body's, it is achievable only once the body's welfare has been achieved. One simply cannot exercise one's intellectual powers "if he is in pain or is very hungry or is thirsty or is hot or is very cold" (1969:511). Hence the necessity for charity: one cannot achieve one's highest perfection—the perfection of one's soul—unless one advances the welfare of one's body, i.e., unless one is free of illness, pain, and poverty. Where one cannot rid oneself of these evils on one's own, it is mandatory for others to provide assistance.

Maimonides acknowledges the traditional division of the commandments into two classes: those that concern the relation between man and man, and those that concern the relation between man and God. Curiously, he places the precepts pertaining to charity into the latter class. His initial justification for these precepts is commonsensical and straightforward: "they are equally useful in turn to all men. For one who is rich today will be poor tomorrow, or his descendants will be poor; whereas one who is poor today will be rich tomorrow, or his son will be rich" (1969:536). The problem with this justification is that it fails to suggest how the commandments relating to charity address the relation between man and God rather than the relation between man and man.

In his discussion of the former relation, Maimonides notes that

every *commandment*...which only concerns the individual himself and his becoming more perfect, is called by [the Talmudic sages] [a commandment dealing with the relation] *between man and God*, even though in reality it sometimes may affect relations *between man and his fellow man*.

(Maimonides 1969:538)

The claim here is quite astonishing. It appears that the *ultimate* purpose of the laws of charity is *not* to relieve the suffering of the poor and thereby render their lives somewhat more *pleasant*, as one might have thought—although of course they will have that salutary effect. Instead, they would appear to have rather different purposes: to cause us to *act* so as to remove the obstacles that prevent others from achieving the perfection of their souls, to instill in us the *disposition* to remove these obstacles, and to enable us thereby to achieve the perfection of *our own* souls.

### WEALTH, CHARITY, AND THE KNOWLEDGE OF GOD

In focusing on our perfection, Maimonides must have in mind a single goal, albeit a comprehensive one, toward which we should all be striving. Indeed he



does—and it is precisely here that he advances far beyond the framework of traditional Judaism. The Law commands us to *love* God—and Maimonides interprets this commandment as calling upon us to acquire *knowledge* of God. Such knowledge, however—consisting in *rational demonstrations* of God's existence, unity, and providence—is wholly metaphysical in its focus, and thus is quite different from the sort of Biblical or Talmudic knowledge that traditional Judaism requires of one. Nevertheless, it is only through such demonstrative knowledge that the soul's perfection is achieved.

To worship God is our highest aim, Maimonides contends—but his conception of worship is distinctively philosophical, as it involves the demonstration, “to the extent that that is possible, of everything that may be demonstrated.” One must study mathematics and logic first, then natural philosophy (or physics), and finally metaphysics (Maimonides 1969:619). Genuine worship is possible only for those who have attained *this sort* of knowledge of God—i.e., demonstrative knowledge—and who concentrate all their thoughts on Him.

Our ultimate perfection, then, consists in acquiring this knowledge, after which

total devotion to Him and the employment of intellectual thought in constantly loving Him should be aimed at. Mostly this is achieved in solitude and isolation. Hence every excellent man stays frequently in solitude and does not meet anyone unless it is necessary.

(Maimonides 1969:621)

The goal is to strengthen the link between oneself and God—and that link, of course, is the intellect. One strengthens it by devoting oneself to the “intellectual worship” of God; one weakens it by dwelling on mundane matters (1969:623).

By now, the relationship between Maimonides's views on wealth and charity, on the one hand, and his philosophical views, on the other, should be apparent. Whoever devotes his life to the accumulation of wealth thereby fails to engage in the kind of study—*philosophical* study—that leads to the knowledge of God. Thus he weakens the link between himself and God and fails to achieve the perfection of his soul. Whoever fails to display charity fails to help others secure the perfection of their bodies. Hence they too will be unable to engage in the kind of study that leads to knowledge of God and will fail to achieve the perfection of their souls. Furthermore, the uncharitable individual weakens, by his example, the institutions of charity that he himself might need to call upon in the future. He thereby jeopardizes his *future* ability to acquire the knowledge of God and achieve the perfection of his own soul. Finally, insofar as charity is one of the cardinal moral virtues, and insofar as the perfection of the soul consists in the cultivation and exercise of *all* the virtues—both intellectual and moral—the uncharitable individual also jeopardizes his *present* ability to perfect his soul. Ultimately, then, Maimonides's views on wealth and on charity are

anchored in his conviction that wealth impedes and charity advances the human perfection that consists in acquiring knowledge of God.

### NOTES

I am very indebted to Stephen Nathanson for his valuable comments on an earlier draft of this paper.

- 1 See, for example, Maimonides 1981:47b and 49b.
- 2 The phrase that Birnbaum translates as “each according to his needs,” Isaac Klein translates as “according to what is fitting for them” (Klein 1979:77).
- 3 Birnbaum, (1974:157), translator’s footnote.
- 4 To be sure, not *all* acts of charity are involuntary: members of the community must also “appoint other collectors to gather every day, from each courtyard, bread and other eatables, fruits, or money from anyone who is willing to make a free-will offering at that time. They should distribute these toward that same evening among the poor, giving therefrom to each poor man his sustenance for the day” (Klein 1979:85).

### REFERENCES

- Birnbaum, Philip (trans.) (1974) *Mishneh Torah: Maimonides’ Code of Law and Ethics*, New York: Hebrew Publishing Co.
- Klein, Isaac (trans.) (1979) *The Codes of Maimonides: Book Seven: The Book of Agriculture*, New Haven: Yale University Press.
- Maimonides, Moses (1969) *The Guide of the Perplexed*, Chicago: University of Chicago Press.
- (1975) “Eight Chapters,” in Raymond L. Weiss and Charles E. Butterworth (eds.), *Ethical Writings of Maimonides*, New York: Dover Publications.
- (1981) *Mishneh Torah: The Book of Knowledge*, ed. Moses Hyamson, New York: Feldheim.

AL-MAQRÍZI'S *BOOK OF  
AIDING THE NATION BY  
INVESTIGATING THE  
DEPRESSION OF 1403–6*

Translation and commentary

*Mark Tomass*

**INTRODUCTION<sup>1</sup>**

This chapter is a translation of significant parts of a 53-page manuscript entitled *Kitáb Igháthat Al-Ummah bi-Kashf Al-Ghummah* or *Book of Aiding the Nation by Investigating the Depression* [of 1403–6], written in Arabic by the Egyptian historian Taqy Al-Din Ahmad ben Abd Al-Qáder Al-Maqrízi during the depression of 1403–6. Six versions of the manuscript are known to exist. My translation is based on a 1940 publication of that manuscript in a 90-page book by two editors: Muhammad Mustafa Ziyádah and Gamál Al-Dín Muhammad Al-Shayyál, who, because of the clarity of its script, used the version at the Wali Al-Dín Library in the mosque of Bayzíd in Istanbul (reference no. 3195, scribed in the month of Sha‘bán of 1101/1690)<sup>2</sup> as the primary source for its publication. They also used two less readable versions of it to insert some additional words in the body of the published text. Of these versions, one was at the Egyptian Library in Cairo (reference no. 77, collections, no date), which is classified within a collection of letters by several authors and was the source for most of the insertions; and the other, less useful version was the one at Cambridge University Library (reference no. 746–2, scribed in the year 1112/1700). Two of the three remaining versions, which the editors claim are the least valuable of all, are in Istanbul at the ‘Atef Afandí Library and the Nour ‘Uthmaniyah Library. The sixth is at the National Library of Paris (Al-Maqrízi 1940: w-z).

**BACKGROUND**

Al-Maqrízi was born in 1364 during the Mamluk rule of Egypt, at the time when the region was about to switch from the rule of twenty-five Turkish sultans

(1250–1382)<sup>3</sup> to one of twenty Circassian sultans (1382–1517). Al-Maqrízi started his detailed account of the causes of the 1406 depression (*ghummah*) beginning with this latter period. Corruption was then rampant within the entire structure of power.<sup>4</sup> During that time, half of the population of Egypt was wiped out by mass starvation, and shortly thereafter he had lost his daughter, his only child, in the plague that followed it; he felt that it was his civic duty to inform the public of its real man-made causes. Al-Maqrízi did not live to see the end of Circassian rule. He died in 1442.

There were two great issues in Al-Maqrízi's day that, according to him, led to the economic depression of 1403–6: One was the shortsightedness of the ruling elite, who resorted to coercive means for raising funds and to increases in property taxes and rents that left farmers destitute—they consequently fled the countryside; the other was the excessive circulation of copper coins that led to high prices and reduced the real income of most of the inhabitants. Taking advantage of his background as a Muhtasib, whose official duty was to control prices, exchange rates, and to inspect weights and measures, he observed the pecuniary behavior of the sultans who were always in dire need for money with which they bought political loyalty and conspired to remain in power. He was also in a position to observe closely the price changes of commodities, especially prices of precious metals, and to determine their impact on the purchasing power of money. Thus, he was not satisfied by supply-side explanations of the decline in agricultural output but extended them to analyze the impact of sociological processes on agricultural production, land returns, and the money supply. Furthermore, he suggested policy recommendations to overcome the prevailing depression. The manuscript led me to believe that it is worth an evaluation by historians of economic thought to determine its proper place in the evolution of economic thinking.

Below, I offer a fairly literal translation of the manuscript where I have attempted not to convert Arabic phrases into their English equivalents but rather maintained the structure of the former in order not to inadvertently attribute to Al-Maqrízi's narration false notions of causality. At all times, I have tried to preserve the flavor of the writing style of the time. For instance, I translate the title of the manuscript *Kitáb Igháthat Al-Ummah bi-Kashf Al-Ghummah* literally to mean “Book of Aiding the Nation by Investigating the Depression” rather than present it in a Westernized version, such as “A Treatise on Famines,” or “A Study of Famines,” as it has been translated in the literature. I also avoided using the vocabulary of contemporary economic literature in order not to mislead the reader into reading more into the text than what was intended by the author. Occasionally, I inserted words in the translation for the purpose of clarification. All my quotes from the manuscript and references to it henceforth are based on its published version (Al-Maqrízi 1940). Below the title of each section, I refer to the actual sheets of the manuscript on which the section is scribed.

Following a brief review of the historical circumstances which led Al-Maqrízi to write his essay, I translate the preface and those parts of the eight sections

which narrate what economists refer to now as an economic process. In commentary paragraphs which I insert at the end of each section and within some sections where a clarification is required, I inform the reader of the contents of the parts which I considered less significant for economists, and therefore chose for space limitations not to translate.<sup>5</sup> I follow the translation with a glossary of terms and my reflections on the significance of Al-Maqrīzī's essay.

### THE MAMLUK RULE OF EGYPT AND SYRIA

The “opening” of Mesopotamia, Syria, and North Africa by the newly unified Arabian tribes of the Arabian Peninsula in the first half of the seventh century was followed by a process of Arabization and Islamization of the indigenous population who, with the exception of some minorities, soon assimilated the new culture and religion.<sup>6</sup> The new leaders made these regions centers for an emerging civilization. But as was the case with many past civilizations, internal forces began to weaken the governing structure of the empire as its ruling dynasty became increasingly tyrannical and decadent. It was during the third, Abbasid (750–1258), period of the Arab-Islamic empire that the ruling dynasty could not rely on traditional tribal loyalty to protect its interests and tighten the chains of command of the military apparatus that presided over a large geographical area and insured the flow of tax revenue to its center in Baghdad. As a result, the caliph Al-Mu‘tasim (833–42) began to rely on slaves as the major recruits for his armies in order to consolidate his power. The practice soon became an essential feature of the governing structure of all the caliphs who followed. The young men from the Kipchak and the Caucasus who were either kidnapped, captured in wars, or sold by their parents, were then traded by slave merchants in the slave markets of Iraq, Syria, and Egypt. They ultimately found themselves in the military quarters of the caliph being raised as soldiers. They were owned by him and called accordingly in Arabic, *mamālīk*, the plural of mamluk, meaning “owned.” They were consequently referred to in Western literature as mamluks. Their loyalty was due to the caliphs who by then were isolated from the public and in constant fear of reprisals from an angry populace. The mamluks became the core force of the army and the personal guards of the caliph. This practice continued with the successive caliphates that followed the Abbasid ones after 1258. It also proliferated throughout the empire when wealthy landlords or military leaders associated with the caliph, otherwise known as princes, had their own mamluks. The mamluks were then referred to according to the person who owned them as “the mamluks of x or y,” of the princes or sultans.

Though Islamized, the mamluks were nevertheless brought from foreign Turkish and Circassian cultures. Since they lived among a separate caste of people, they had no attachment to, or sympathy with, the population whom they were trained to repress. Not surprisingly, after being dehumanized, commodified, and raised in abnormal environments away from their families, they ended up forming an estranged warrior class that had no respect for the most basic civil values.

With the passage of time, they became conscious of their strength and felt independent of the caliphs, whose powers increasingly diminished. Thus, the mamluk generals frequently deposed or murdered caliphs and installed new ones to rule under their command. They ultimately established a Mamluk dynasty that ended the Ayyubid sultanate in Egypt and Syria and ruled there from 1250 to 1517.<sup>7</sup> Their direct rule ended after the Ottoman occupation of Egypt (1517–1798) and Syria (1517–1916), but they maintained their privileged political status in Egypt under its new Ottoman-appointed foreign rulers.<sup>8</sup>

## TRANSLATION

### **Book of Aiding the Nation by Investigating the Depression**

*Preface: sheets 1B-2A<sup>9</sup>*

In the Name of God, the Compassionate, the Merciful. May God's blessing and peace be upon our Lord Muhammad, his relatives and companions. Praise be to God who handles matters with his wisdom and who, with his might, directs their course according to his wishes. He blessed certain people by revealing to them the secrets of his magnificent makings and assisted them to succeed in following what he has taught in his legislation. He endowed them with eloquence and sagacity; inspired them with knowledge and scholarship; affirmed their sayings and guided them to act in the right ways in order for them to explain to humankind the reasons for what calamities befell them. He acquainted them with the ways to rid themselves of what had caused them great ordeals. However, he misguided others who ended up committing on earth frequent acts of perversion. He granted them respite until they annihilated humans and land with their tyranny. He led them on in ways of which they were unaware to make them wander astray, happy about their wrong-doings, insulting God's worshipers, and contemptuous of the worship of their God.

I praise him, the praise of a slave who knows the value of what God blessed him with and is unable to thank him enough for it, and as one who knows that matters are initiated by God and are due to him and therefore depends upon him in easing their constraint [on people].

God bless our Prophet Muhammad, through whom God guided humanity, and through whose legislation eliminated injustice and corruption; bless his relatives, companions, devotees, and beloved with continuous and uncountable blessings.

Having said the above, we proceed.<sup>10</sup> Since the present apparent distress has been prolonged and has befallen humans with kinds of humiliating suffering, many people think that these calamities are unlike any of the past ones throughout all times. They unreasonably conclude that these calamities can never disappear and leave humankind. That is because they do not understand; they are ignorant of the causes of events; they are familiar with their habits and have given up hope in the spirit of God. Whoever has contemplated this event from beginning to end

and knew it from its onset to its goal, would have realized that what is ailing people is the mismanagement of chiefs and rulers; their neglect of looking after the best interest of humankind. What has been experienced in high prices and ruinous years needs clarification and explanation and requires explication and illustration. I therefore committed myself to unveil the reasons leading to this horrid matter and will explain why this deplorable affliction is having a prolonged impact on the country and on the people. I will end by specifying what cures this disease and eliminates this ordeal while alluding to some current prices and outlining past periods of high prices and ordeals, hoping from the glorious God to guide to success those to whom he has entrusted his worshipers' affairs and in whom he has invested power over his land and country to the rightness of matters and usefulness for people. For, whenever the reasons of all great and insignificant matters are known, it becomes easy for an expert to remedy them and from God, help is sought in all that is hard and that is easy [for, he tells the truth and shows the right way]<sup>11</sup> [Qur'án 33:4] (Al-Maqrízi 1940:2–4).<sup>12</sup>

### Commentary

In the preface, Al-Maqrízi reveals an inconsistency between two beliefs which he simultaneously holds. One is his belief in teleological determinism where human action is driven by super-individual goals; the other is his belief in the free will of human action and in the course of history it generates, an inconsistency that is still unresolved in the writings of religious Islamic scholars. For, despite his belief that the rulers are fulfilling a role assigned to them by God, he, nevertheless, as we will see below, condemns them for not following the teachings of God. In addition to the preface, in which he explicitly expresses the two conflicting beliefs, frequent quotes from the Qur'án confirm this conflict. Some quotes inform us that it is God who is doing what he wishes and that the rulers had no choice but to act in a way that caused the depression. Indeed, they give the impression that events were planned according to God's wishes through the actions of the corrupt rulers. Examples of these quotes are: "If we want to destroy a village, we order its self-indulgers, they lead in it a dissolute life so that the word proves true against it. We therefore destroy it utterly" (45);<sup>13</sup> "if God wants to hurt people, he cannot be resisted" (72); "that who God deludes, has no guide" (74); "but God does what he wishes" (80); "had your God wished, they would not have done it" (85). Yet, other quotes give us the opposite impression; that the rulers and people were acting contrary to God's teachings and were guilty of it. Examples of these quotes are: "God does not guide the deceit of the treacherous" (74); God delivered people a punishment "for what their hands have earned and to make them taste some of what they have done so that they may return [to righteousness]" (86); "What has befallen you of catastrophe is what your hands have earned" (75). But, aside from part of the preface where he presents this inconsistency and the quotes from the Qur'án, the body of the text itself is consistent with his diagnosis that the depression is due to mismanagement rather than to natural causes. Furthermore, in addition to explaining the causes of the depression, his narration suggests concrete measures to eliminate it as he promised to do in the preface.

*[One] A section on stating a necessary introduction comprising a universal principle: sheets 2A–2B*

### Commentary

In the first section, Al-Maqrízi attempts to comfort the reader with the use of anecdotes and proverbs that the present crisis is not the first one, but that people had indeed gone through more trying times in the distant past. The universal principle is that people magnify their current pains compared to pains they experienced in the past. He therefore asks the readers to be patient, for he will next inform them of the history of the hardships that befell people up to the present depression.

*[Two] A section on stating what befell Egypt of high prices and some stories of the news of those years: sheets 2B–13A*

### Commentary

In this lengthy section (7–41), Al-Maqrízi recites incidents of high prices and famines that took place in Egypt since the time of Noah. In most of the section, he describes the consequences of thirty-one periods of high prices and famines, eighteen of which are caused by a receding level of the Nile. The rest of the periods of high prices, according to him, were caused by wars, hoarding of crops, or by unknown reasons. In one incident, he mentions a period of high prices that persisted for seven years, beginning in the year 457/1064–5. In a way unusual to his contemporaries, he attributes the resulting famine to the combined effect of “the weakening of the sultanate, the disorder in the conditions of the kingdom, the princes’ [military officers’] seizure of power, the persistence of strife among bedouin tribes, the receding of the Nile, and the absence of sowing in irrigated lands” (24). Al-Maqrízi also describes in this section the type of procedures implemented by the authorities when food became scarce. Most of those procedures were based on the belief that the provision of food is a collective responsibility and to be administered by the ruler. Thus, the authorities did not hesitate to institute antilibertarian rules during times of low agricultural production. Apparently, speculators took advantage of the low level of output and hoarded cereals in order to raise prices artificially and profit from them. Thus, authorities penalized the hoarding of crops and prohibited free trade in grain during times of scarcity to prevent an artificial rise in prices. They forced farmers to sell their crops to the authorities, who centralized retail outlets for crops and supervised their sale to the public. Furthermore, in times of famine, destitute people were taken to the quarters of rich people, who were responsible for feeding them (35, 40). In his narration of the consequences of these procedures, he states that prices declined after their initial substantial increase, a fact indicating that the initial increase in the price was a combined effect of the drought and hoarding (13–18). However, the authorities’ reaction was not always directed to influence the supply side. In the following case, they attempted to manipulate the demand side in order to reduce prices. Al-Maqrízi narrates:



A period of high prices took place in the year 387/997–8 during the reign of Al-Hákim bi-Amr Al-lah and under the management<sup>14</sup> of Abi Muhammad Al-Hasan ben Ammar. It was caused by the receding Nile, where it reached sixteen cubits (dhirá‘) and few fingers (i‘ba‘). Prices increased as grain was demanded but could not be afforded. Fear increased among people, and women were taken from the streets. The situation deteriorated further as the price of bread ended up being 1 dirham for 4 ra‘ls. However, conditions improved later as prices declined. Then in the year 395/1004–5, the Nile stopped flowing, thus causing the gulf to subside at the end of Masrá, where it reached a level of fifteen cubits and seven fingers, then ended up at sixteen cubits and few fingers. As a result, prices increased and the state of exchange<sup>15</sup> came to a halt as people became obstinate<sup>16</sup> with the mu‘ámalah, which were then called muzáyadah and qita‘ dirhams. The dinár that used to be exchanged for twenty-six dirhams [increased in price in the year 397/1007 to become thirty-four dirhams for a dinár].<sup>17</sup> The price increased,<sup>18</sup> and people became more anxious and more obstinate in the exchange. This brought conditions to a halt.<sup>19</sup> Twenty boxes full of dirhams were ordered to be brought from the treasury. They were distributed to the money-exchanges (al-‘ayáref). An order was read to the public prohibiting people from dealing in qi‘a‘ and muzáyadah dirhams and that their holdings of them were to be taken to the mint within three days. People were distressed for this loss in their holdings of money because one new dirham was exchanged for four qita‘ and muzáyadah dirhams. It was also ordered that twelve ra‘ls of bread were to be sold for one new dirham and that the dinár should be exchanged for eighteen of them. Several millers and bakers were flogged with whips and were defamed for letting crowds of people wait for bread and selling it not fully baked to them. Then, prices rose when the Nile receded to thirteen cubits and fingers. Orders were therefore issued to Mas‘oud Al-‘aqlaby, the chief of guards, to look into the question of prices. The latter assembled the crop warehousemen, the millers, the bakers, and seized all the crops available on the coast and ordered that they should only be sold to the millers for the following prices: A dinár minus a karat per tillís of grain, a dinár for 10 waybahs of barley, a dinár for 10 ‘amlahs of lumber, and he priced all cereals and other commodities. He flogged a group with whips and defamed them. Consequently, people were calmed by the availability of bread (14–16).

### Commentary

Al-Maqrízi informs us that the natural supply shock lowered agricultural output and led to an increase in prices, expressed in dirhams, thus the value of the dirham depreciated against the dinár. Expectations of yet higher prices made people reluctant to exchange dirhams for dinárs at the prevailing rate. What is peculiar about this situation is that the dirhams were of inferior quality because of being either oversized (muzáyadah) or clipped (qi‘a‘). The refusal of people to exchange dinárs for the inferior dirhams gave the monetary authorities the excuse to issue new coins that replaced the old ones in order to stabilize prices. This was done by setting the

exchange rate at four old dirhams for one new dirham, an act, along with fixing the prices of necessities, that reduced the purchasing power of people's holding of money. The state, of course, profited from replacing the old coins with the new ones at the expense of the public.

At other instances of natural supply shocks, Al-Maqrízi informs us of the coercive measures taken by the authorities to reduce prices. By requisitioning additional supplies of grains and raiding the warehouses where grains were hoarded, the governing authorities were able to effectuate an increase in supply and a quieting of bullish price expectations on the part of the buyers such that the net result is a fall in prices. Al-Maqrízi then continues to mention several other incidents where the receding Nile also led to high prices of agricultural products and where people's complaints about a prevailing period of hunger were answered with threats and intimidations of the suppliers to sell their hoards of grain.

The third section also contains two short stories that inform us of Al-Maqrízi's depiction of an economic process. One demonstrates the impact of competition on prices; the other attempts to discourage speculation with food items. Al-Maqrízi narrates:

In each of Old Cairo<sup>20</sup> markets, there was a master for every craft whose duty was to monitor the activities of his fellow craftsmen. During times of deprivation, bakers could not sell their bread once it got cold because they used to cheat with its ingredients [thus rendering them inedible]. A master of bakers once had a store in which he sold bread. Next to him, an outcast had a store as well. One day [the outcast] was selling every four raʿls of bread at the prevailing price of 1 1/8 dirhams. When [the outcast] noticed that his bread may get cold, he called the price of four raʿls for a dirham. People thereon crowded upon it, and he sold all what he had baked while the master's bread became unsaleable. As a result, the master got angry and asked two officers of the ʿisbah to fine [the outcast] ten dirhams. When the chief judge [minister], Abu Muhammad Al-Yazouri, passed through on his way to the Mosque, [the outcast] called for his help. The minister brought the muhtasib<sup>21</sup> before him and reprimanded him for what he had done. The muhtasib responded that it is customary to have masters in all markets who observe the behavior of members of their craft and whose statements have been accepted, and therefore, since the master of bakers came in and asked for two officers of the ʿisbah, it was thought that he was justified in what he had disapproved of. The minister, then, brought the master of bakers before him, reprimanded him for what he had done, and dismissed him of his position as a master of bakers. He furthermore paid the outcast thirty rubáʿiah<sup>22</sup> of gold. The outcast almost became mad with joy. He went back to his store to find his dough had been baked. He called the price of five raʿls for a dirham. As customers headed in his direction, the rest of the bakers matched his price fearing that their bread will be unsaleable. He responded by calling the price of six raʿls for a dirham; and necessity made the rest of the bakers follow suit. When the outcast noticed that they were following him in pricing, he intended to aggravate the former master of bakers by the reduction

in price. He therefore kept on offering more [bread for a dirham] a raʿl by raʿl. The bakers also kept on matching his offer fearing unsaleability. This process continued until the calls were ten raʿls for a dirham. Soon after, the lower prices of bread spread throughout the city and as people heard about it, they rushed to [buy] it. When the [minister] chief judge came out of the Mosque, 10 raʿls of bread were selling everywhere in the city for 1 dirham.

During those times, 100,000 dinárs worth of crops used to be purchased annually on the sultans behalf for the purpose of trade. When [minister] Al-Yazouri went back to his house in Cairo, he met with the sultan and told him what had happened that day about the fall in prices and how people wished him well in their prayers, and that it was almighty God who had done that and reduced prices, for he wished his parish well; no one else had anything to do with it; it was only the kindness of God and a strange agreement. He also told him that the trading which takes place with the crops hurts the Muslims. Besides, their price may fall to a level below what they were bought for. In such case, they will not be sold and will perish in the warehouses. The [minister] Al-Yazouri then recommended that [the sultan should instead] trade in items which do not hurt people and bring more profits than the trade with crops. Besides, these items [that he recommends the sultan to trade with] are not perishable nor do they decline in price: such as wood, soap, iron, lead, honey, and the like. The sultan agreed to his recommendation and kept on doing so as prosperity continued [for years]<sup>23</sup> (18–20).

### Commentary

The story of the outcast and the master reveals to us the consequences of the minister's punishing monopolizing behavior by smashing the bakers' guild. The collapse of the guild produced lower prices of bread. It seems that the master of bakers has committed the fallacy of attempting to regulate the price of bread without controlling supply. The result is that a supplier fearful of his bread turning cold has the incentive to cut the price. In this case, it was the outcast, who, not having a respectable social status to maintain by obeying the rule set by the master, initiated the downward trend on the price. The minister tried to take advantage of the positive consequence of lower prices for bread to convince the sultan to refrain from speculating in food crops.

The second paragraph sheds some light on the fact that although the public's hoarding of grain was severely punished, the sultan was a regular speculator in agricultural products—a practice that he abandoned in favor of hoarding non-perishable products with less volatile prices after being offered an advice by the minister. By making the sultan believe that it was God's will that lowered the price of bread and by offering him a consultation on a safer speculation, the minister was able to get the government out of hoarding crops.

The last drought and the ensuing high prices which Al-Maqrízi mentioned in this section is the one caused by the receding Nile in the year 776/1374–5 and that ended two years later. He ends the section by reminding the reader again that

people throughout those trying times thought that the crisis would never end, but they nevertheless ended, and prosperity soon returned once the Nile quenched the thirst of the land (40–1). By now, Al-Maqrízi has prepared the reader for the third section in which he explains the reasons for the persistence of the famine.

*[Three] A section on explaining the reasons for the emergence and persistence of the present calamities to which we were driven: sheets 13A–19B*

Know, may God guard and guide you, and not leave you without sufficiency and care, that the high prices [ghaláʿ]<sup>24</sup> which afflicted humankind since the existence of people are in most cases caused by heavenly disasters: such as a low flow of the Nile in Egypt; the absence of rainfall in Syria, Iraq, the Hijaz and elsewhere; a disease that burns crops with its poisons; parching winds that dry them; or locusts that eat them, and the like. [We know this] from what we have been told about them in all countries from the distant past to present times, according to what is known of the conditions of existence and the nature of habitation, and from what is known of the history of humanity. This is the custom according to which God treats humankind if they act at variance with his command and perform what he forbids. He afflicts them with that as a punishment for what they have committed.

But what has befallen Egypt is contrary to what we have presented earlier. This is explained by the fact that the Nile receded in the year 796/1393–4 when most of the lands dried up and became idle. Prices rose to the extent that the price of the ardeb of grain reached 70 dirhams. Then God, to whom we ascribe all perfection and majesty, relieved humanity with the increase in the flow of the Nile, spreading it over the entire region. People therefore wanted a large amount of seeds but the crops at their disposal were scarce because most of the countryside was not cultivated in the year 796/1393–4, as indicated earlier. Prices therefore rose to the level that the price of the ardeb of grain became 200 dirhams, and of barley 105 dirhams. This is what used to happen in Egypt since antiquity: If the Nile was late in its flow through it, high prices followed for two years. When it was time for the advent of the new crops in the year 798/1395–6, prices kept on declining to reach the level they used to be before they increased, or to some level close to it.

The state of affairs continued in this manner up to the death of Al-ʿáhir Barqouq in the middle of the month of Shawwál 801/June 1399. At the time, the price of wheat in Cairo had not yet reached 30 dirhams for an ardeb. But in the day following his death, the ardeb of wheat was sold for 40 dirhams. The price continued to increase up to the year 802/1399–1400 when the ardeb was sold for a little more than 70 dirhams. Prices remained at this level until the Nile receded in the year 806/1403–4. Conditions then became atrocious and prices rose to exceed 400 dirhams for an ardeb of wheat. The high prices of wheat spread to all that is sold of food, beverage, and clothing. Furthermore,

wages of workmen increased—such as builders, construction workers, and craftsmen—to a degree unheard of in contemporary times. This persisted to the year 807/1404–5 when relief then came from God, be he exalted. The flow of the Nile grew, benefiting the entire region, and people were in need of seeds. During then, officials of the state and others had stored large stocks of crops for two reasons: first, the state was hoarding foodstuff to prevent people from obtaining them unless they pay the prices it wished; second, the increase in crops' [prices] in the year 806/1403–4, for it reached a level unheard of in contemporary times. For these and other reasons which, in God's willing, will be mentioned later, the state of affairs became critical. Trouble and catastrophe intensified, the ordeal spread and surged to the extent that more than half of the population of the region died of starvation and cold. Death spread to sumpters in the year 806/1403–4 and 807/1404–5. They therefore became scarce, and their prices reached to levels that we will be embarrassed to mention. Now, we are at the beginning of the year 808/1405–6 where [the value] of money has changed,<sup>25</sup> necessities are scarce, the economy is incompetently managed, and poor views prevail, the aim of which is nothing but a great disaster and an outrageous matter.

The causes (sabab) for all what had occurred are three, not a fourth one:

The first cause, being the origin of this decadence, is that appointments to positions relating to the [execution of] the sultans plans and to religious offices were made through bribery. These positions were the vizierate, judgeship, governorships of districts, the *'isbah*, and the rest of the positions which no one could reach without paying a large sum of money. Therefore, every corrupt, ignorant, and unjust transgressor sought the appointments which he could never have otherwise hoped for among honorable positions and great commissions. He approaches one of the sultan's entourage and commits himself to pay a sum of money to the sultan once he is appointed to a post of his choice. Soon after the offer, he assumes the position. But since he does not have at his disposal what he promised to pay, he borrows approximately half of that amount. His debts multiply when he also borrows for what he needs of insignia, uniforms, horses, servants, and other items. As a result, his debtors haunt him. [In order for him to pay back his debts,] he ignores the crimes he commits by keeping a blind eye on what he has taken from people in kinds of money, nor cares about the number of souls that he destroys in that process, the blood that he sheds, and the free women that he enslaves. He also needs to levy taxes on his own aids and press them for payments of money. They, in turn, keep on extorting money from the citizens without any limit. When summoned by the princes and the sultans entourage, the deplorable drifts in collecting the monies which he borrowed. Or if some of these appointments are in rural areas, he has to offer expensive gifts to the princes and to the sultans aids who occasionally visit him, such as horses, slaves, and other items that measure up to his status. Despite this, and while he is still in debt, he finds himself replaced by a rival who has also obtained an appointment through committing himself to a sum of

money. Consequently, his possessions of furniture, animals, and other properties are seized. He ends up in the worst of conditions and is afflicted with painful punishments. He therefore finds no alternative but to commit himself to another sum of money in order to be given back the same post or another one.

When the inhabitants of the countryside were afflicted by a multitude of heavy taxes and [subjected to] a variety of injustices, their conditions deteriorated; they were torn apart. As they evacuated their homes, the land became vacant of the inhabitants, who abandoned the countryside because of the severity of the administrators' oppression of them and of those who survived. Tax collection and crops diminished because less land was being sown. These events took place as we mentioned during the reign of Al-ʿÁhir Barqouq. They persisted until prices rose during the year 796/1393–4 as we have indicated above.<sup>26</sup> For the two following reasons, some but not complete disturbance appeared in the general state of the public: first, people's storage of grain leftover [from the preceding year] made the high prices tolerable; second, the frequency of Al-ʿÁhir's gifts and the continuity of his beneficence for the period of high prices in the year 798/1395–6, during which, as far as we know, no one died of starvation.

Appointments continued to be made through bribery up to the death of Al-ʿÁhir Barqouq. Then, a conflict took place among statesmen, leading to clashes and wars which I have mentioned in a separate book.<sup>27</sup> Such state of affairs led to the revolt of the inhabitants of the countryside and to the spread of thugs and bandits who terrified travellers to the degree that one had to pass through great dangers in order to reach the countryside. The foolishness of the statesmen also increased. They abandoned caring for the interests of [God's] worshipers and immersed themselves in pleasures in order to deserve the word torment. "If we want to destroy a village, we order its self-indulgents, they therefore lead in it a dissolute life so that the word proves true against it: We destroy it utterly" [Qur'án 17:16].<sup>28</sup>

The second cause [of the depression] is the high cost of cultivatable lands: This took place when some people who ascended the social ladder in serving the princes by currying favor with them through giving them what they collected in money until their social status was established. Then they wanted to get closer to the princes. Since pecuniary means were the easiest way to get to them, they overreached to the streaming lands in the princes' feudatories and summoned the peasants who were renting the lands and increased the amount of rent. They considered the consequent increase in the princes' income a favor they provided to the latter and a benefaction counted by the princes for them. Thus, they made the increase in rent a habit they practiced every year until the rent became ten folds what it used to be before this practice started. They did not feel that they were committing a crime when the rent of an acre of land became a multiple of what it used to be and the value of an ardeb of grain needed for sowing reached the level that we had mentioned earlier.<sup>29</sup> The cost of cultivation, sowing, harvesting, and other activities also increased. The governors and their aides increased their subduing of the peasants and intensified

their oppression. They were forced to fortify the dikes more frequently<sup>30</sup> as well as to perform other works—since these injustices grew, the crop obtained was enormous [in value] and costly for the agricultural masters, especially the land—the land diminished its returns and did not give back what it consumed as it usually did; everyone of course refuses loss and does not volunteer to it. With the fact that most of the proceeds belonged to government and military officials whose desire in seeking pleasure and comfort grew, the price of grain remained high without any hope for its decline. As a result, most villages were devastated, and the lands remained idle. Crops and other agricultural produce declined because the hard times which peasants experienced, including the death of their livestock, drove most of them to death or homelessness and furthermore, because those who owned lands failed to cultivate it as a result of the high prices of seeds and the scarcity of farmers. The region was therefore left at the brink of idleness and devastation. “[This was] the practice of God for those who lived in the past and you will not find a change in the practice of God” [Qur’án 33:62].

The third cause [of the depression] is the circulation of flous: (41–7)...

### Commentary

Since the next 15A-19B sheet section of the manuscript is a presentation of the history of coinage in the Arabian Peninsula, Iraq, and Syria, and therefore does not directly pertain to Al-Maqrízi’s analysis of the causes of the prevailing depression, I choose to interrupt my translation at this point and summarize the remaining material of the third section at the end of this commentary section.

In his explanation of the above two causes of the depression, Al-Maqrízi is indicting the ruling elite of abuse of power, corruption, and of disrespect for the rule of law which resulted in infringements on personal liberties in the form of extortion and enslavement of people, excessive taxation that depleted reinvestment resources, and outright forced labor that exhausted the rural population, some of whom died of repression, and the rest fled the countryside. The Circassian mamluks’ frequent auctioning of administrative positions in order to raise the maximum amount of money to sustain their rule and expensive lifestyles resulted in a severe decline in national output. Al-Maqrízi, thus, wants his reader to know that there are limits beyond which surplus cannot be extracted from people and nature. What distinguishes his explanation of the depression from the writings of his contemporaries is his enumeration of different causes acting simultaneously to cause economic decline, the cause of which originates in the leadership’s abandonment of traditional moral principles inscribed in Islamic law by resorting to bribery, the open and unlimited pursuit of pleasure, enslavements of free people, murder, theft, the unlawful persecution of peasants, and excessive taxation.

However, although he concludes the negative consequences of infringements on property rights and individual liberties, he falls short of specifying that the resulting decline in output is the direct consequence of the violation of the universal conditions under which human action maintains and generates life-sustaining institutions. One can only deduce that this is what Al-Maqrízi may have had in mind while enumerating

the causes of the depression. For instance, with the notion of economic explanation in his writing still underdeveloped, we find that he forgoes the opportunity to explain the reason for the land's diminished returns, he just asserts it. Only in this sense, his explanation of the depression does not satisfy the necessary conditions to establish a causal law. Indeed, unlike his explanation of supply shocks, whereby his repeated documentation of the relationship between the receding Nile and the fall in agricultural output is intended to establish a regularity of sequence that amounts to an empirical generalization, his partial presentation of the causes of the depression is neither based on empirical generalizations nor on specifications of necessary relations, the violation of which leads to poverty and death.

Then comes the issue of the role of the quotes from the Qur'án in the case that Al-Maqrízi wanted to make. The second quote: “[This was] the practice of God for those who lived in the past and you will not find a change in the practice of God,” is the most useful quote from the Qur'án in the entire text which serves his case, because it supports an interpretation that Al-Maqrízi cites the Qur'án as a metaphysical source of universal truths with which he confirms that the devastation of the countryside was not coincidental or a one-time occurrence but a necessary outcome of the violation of the universal conditions required for human action to sustain life on earth. That is, the practice of God has always been such that whenever people are excessively oppressed, they cease to produce means of livelihood, a fact which applies to nature as well. In this, Al-Maqrízi comes closer to the notion that there are laws for nature and for human cooperation; once violated, devastating outcomes emerge. But, the first quote from the Qur'án: “If we want to destroy a village, we order its self-indulgers, they lead in it a dissolute life so that the word proves true against it: We destroy it utterly,” confuses the reader rather than corroborates Al-Maqrízi's intention to prove to us that the depression is man-made rather than an outcome of divine punishment, as was the case for the supply-side shocks. The self-indulgers are the corrupt and tyrannical elite whose reprehensible actions are apparently directed by God's wishes! For, God can also be tyrannical; an adjective in accordance with one of God's names: *ʔálim*, meaning tyrannical. As I argued in the commentary on the preface, and assuming that the quote was placed in the text by Al-Maqrízi and not added by the scribe, it provides further evidence of an unresolved tension in Al-Maqrízi between divine determinism and free will guiding human action.

Continuing with the third, more interesting, cause of the depression (which will be translated below), Al-Maqrízi first states that money has been minted either in gold or in silver since time immemorial (47). Then, he presents a history of coinage in the pre-Islamic period of the Arabian Peninsula, then in Mesopotamia and Syria under Arab-Islamic rule (48–61). He informs us that throughout that history, with the exception of few violations, kings kept strict control of the coins' weights and the pure precious metal content of the coins. Maintaining the pure gold or silver content of coins was, he argues, in harmony with divine wisdom. He states that the monitoring of coinage continued until the influence of the foreign military commanders of the caliphs grew, and they started to tamper with the purity of the coins. He ends the section with the following paragraph:

When the Turks killed [the caliph] Al-Mutawakkil [in 247/861] and shared



power with the Abbasids, the state became creative in being extravagant, and the light of guidance weakened.<sup>31</sup> Then the state of [Islamic] jurisprudence and religious laws changed. They created and invented what God did not permit. The debasement of the dirhams was one of what they did. It is said that the first one who debased the dirhams and minted them debased with forgeries was ‘Ubaid Al-Lah ben Ziyád when he escaped from Basrah in the year 64/683–4. Then forged silver coins were widely circulated in the cities during Persian/non-Arab (‘Ajam) rule.<sup>32</sup> People in Iraq did not unanimously accept them and their situation was never settled ever since. I hope that God, in his willing, will grant me success in presenting this issue in detail (61–2).

*[Four] A section on [coinage in Egypt]: sheets 19B–22B*

### Commentary

In this section, Al-Maqrízi claims that gold was the only monetary standard in Egypt before and during Arab rule. To confirm this, he refers to Islamic sources indicating that the Arabs collected taxes from non-Islamized Egyptians in dinárs while tax collection from the non-Islamized people of Iraq were in dirhams (62–3).<sup>33</sup> He then tells us about how silver started to be minted on a large scale in Egypt.

Silver, however, was used for jewelry and utensils. Some silver was minted to be used for daily household expenses. I have found the first mention of dirhams in Egypt during the reign of Al-‘Ákim bi-Amr Al-lah, one the Fatimid caliphs. Al-Amír Al-Mukhtar ‘Izz Al-Mulk Muhammad ben ‘Ubaid Al-lah ben Ahmad Al-Mussabbahí<sup>34</sup> said in his *Al-Tarikh Al-Kabir* [?-AD1029] that the circulation of qita’ and muzáyadah coins increased in the month of Rabí‘ Al-Awwal of the year 397/1006 to the level where thirty-four of them were sold for a dinár. Prices, as a result, increased and people became restive. The authorities responded by removing [the inferior] dirhams. They brought twenty boxes of new dirhams from the treasury and distributed them to the exchanges; an official scroll was read to remove the old coins and prohibit their circulation. People were given three days to bring their old dirhams to the mint and exchange them with the new ones. They were unsettled as the [old] qita’ and muzáyadah dirhams were exchanged [with the new ones] at a ratio of four [old dirhams] to one [new dirham]. The new dirhams’ exchange rate with the dinár was then determined at eighteen to one. It became then known in the books of Al-Akhhár [that silver was regularly minted and circulated in Egypt and was called]<sup>35</sup> among the dirhams by the name ‘the blackened’ (al-mussawaddah). They became the only coins with which people in Old Cairo, Cairo, and Alexandria dealt. [They were known as the coins of Egypt. When I arrived in Alexandria]<sup>36</sup> [I noticed that] the inhabitants dealt only with dirhams and called them the wariq. [Ever since the dirham was issued,] its measure was controversial among the caliphates and kings of Egypt and hasn’t been settled up to now.<sup>37</sup>

The truth regarding the blackened dirhams is that they are made of copper

with a small amount of silver in them. These dirhams remained in circulation until the Ayyubids dominated the Kingdoms of Egypt and Syria during the reign of Muhammad Al-Kámil ben Al-'Adel.<sup>38</sup> It was in Dhi Al-Qa'dah 622/ November 1225 when Al-Kámil ordered the minting of round (mustadírah) dirhams. People were asked not to deal with old Egyptian dirhams, known to them as wariq. People therefore abandoned the wariq dirhams and stopped dealing with them, for the citizens followed the belief of their guardian. The Kámiliyah dirhams, which people were using when I came to being, contained ? silver and ? copper. They are made by adding 50 dirhams of copper to 100 dirhams of pure silver.

The circulation of these dirhams increased in the rest of the Ayyubids' state as well as during the reign of their Turkish followers (mawalíhem) in Egypt and Syria. [This increase in the circulation of the dirhams] led to the relative diminishing [of the circulation] of gold. Valuable transactions began to be conducted with the dirhams. Prices of commodities and values of labor were expressed in them. Land tax, housing rents, and other payments were collected in dirhams as well. The dirhams [weight] was eighteen kharroubahs, while the latter was equal to three grains [qamhahs], and the mithqál to twenty-four kharroubahs. These weights differed between Egypt and Syria; each 100 Syrian mithqál weighs less in Egypt by 1¼ mithqals, a difference that applies to dirhams as well.<sup>39</sup>

### Commentary

Al-Maqrízi intends with his quote from Al-Mussabbahi to show the relationship between the introduction of dirhams as the new standard of value and the following elements: their excessive circulation; their value vis-à-vis the dinárs; their ultimate effect on prices of commodities; and the official government response of removing the excessively circulated, clipped, and oversized silver coins and setting new exchange rates vis-à-vis the dinár in order to reduce prices. Apparently, successive governments experienced difficulties in agreeing on a rate of exchange between these newly circulated dirhams and the dinár. Al-Maqrízi explains this by pointing out that the new dirhams were debased and became inferior because they contained mostly copper and very little silver. In addition, the exact proportions of mix of the two metals was not precisely known. The Ayyubid's policy of replacing the blackened dirhams with the new Kámili ones, which contained a precise combination of two silver to one copper measures, seems to have been directed at enhancing the precious metal content of the dirham, presumably to stabilize its exchange rate with the dinár. Here, however, Al-Maqrízi observes that the excessive circulation of the Kámili dirhams, particularly after the Turkish mamluks' seizure of power, had begun to throw the dinárs out of circulation and became the standard of value. Although these observations fall short of an induction of a law for reasons I stated above, their association with similar observations, which he makes later in the text regarding the introduction of copper coins, which threw out of circulation both gold and silver coins, may make a case to argue that Al-Maqrízi is alluding to a regular association of facts known to economists as Gresham's Law. Finally, arriving at the circulation of flous, he narrates:

But flous [were minted for the following reason:] Since some commodities have small values and are sold for less than a dirham or for a fraction of it, people in ancient and modern times needed something other than gold and silver which can equal in value those insignificant commodities. But it was never called money in the history of humankind, not even for one hour, nor was it given the state of one of the two coins. People’s beliefs and views differed on what values to equate such insignificant commodities. Because of their disdainful pride, bitter antagonism, desire to back up their rule, the multitude of their ambitions, and love of power, the kings of Egypt, Syria, the two Iraqs of Arabs and non-Arabs/Persians (‘Ajam), Persia, the Eastern Roman Empire, in the beginning to the end of times, minted some copper in small pieces which the Arabs call flous to equate their value with these insignificant commodities and purchase them. Only a small amount of these flous was circulated, and they were never considered to be in the same category as one of the two coins. They were minted in Egypt during the reign of Al-Kámil Al-Ayyubi—before which they did not exist. [They were minted] after a woman confronted the speaker of the mosque in Old Cairo and asked him for a legal interpretation: “Is it kosher to drink water or not?” [the woman asked the speaker]. He responded: “Bondmade of God! What prohibits the drinking of water?” She said: “The sultan has minted these dirhams, and I buy a bottle for ½ a dirham of them. [When I pay for it with] a dirham which I have, the water carrier returns to me ½ dirham in wariq as if I end up buying from him water and ½ a dirham for a dirham.” Abu Al-Táhir then renounced that and met with the sultan Al-Kámil and spoke with him about the matter. The latter, in turn, ordered the minting of flous (64–7).

### Commentary

Finally, arriving at the circumstances that led to the appearance of flous, Al-Maqrízi reports the dialogue between the woman and the speaker of the mosque to confirm to the reader that the initial intention for minting copper coins was the lack of fractions of Kámili dirhams with which to purchase items priced at less than a dirham. For the lack of more convenient coins, the water carrier returned to the woman ½ a wariq (blackened dirham). Since the circulation of the blackened dirhams was made illegal, the speaker of the mosque recognized that people were forced to disobey the law. He therefore convinced the sultan of the need to tackle the problem. The latter, presumably, was advised to mint flous.

It may be worthwhile to note that the woman intended to argue her case with that speaker of the mosque in particular because only he had the religious authority to decide whether an act is kosher (or legal according to Islamic laws). For Al-Maqrízi used the verb “tastafteeh” to refer to the desire of the woman to ask for his opinion according to the Islamic law (shari’ah). If Al-Maqrízi intentionally used that verb, then he is identifying the speaker of the mosque as being the mufti who has the authority of interpreting the Qur’án in any modern context. Any new interpretation of the text regarding the legality of an act is, in turn, called a fatwa, which is the

mechanism by which observing Muslims reconcile between their practice of any emerging institution (or even their use of a new invention) and the literal words of Islamic sharí'ah.

Al-Maqrízi then mentions several kinds of non-metallic currency that were used before fλους were minted by Al-Kámil (67–9). Some of it was specifically made by Baghdadians to be used as money, such as overbaking unusable dough with smoke so that it hardens and can be used in transactions. The acceptability of these coins also followed certain rules that people agreed upon. For instance, “a cracked or moldy piece was rejected in the same way a forged dirham or an inferior dinár would be rejected” (67). Other coins used in Egypt included seashells, chicken, residue of flour, and linen fibers. These nonmetallic currencies, Al-Maqrízi insists, were used to “purchase inferior things only, and no one used them as money to be stored or to purchase with it any valuable object” (69). He then narrates the reasons for the increased circulation of fλους.

When fλους were minted, as mentioned above, during the reign of Al-Kámil, those kings who succeeded him minted more fλους to the point where people ended up holding large quantities of them. However, the public was still obstinate<sup>40</sup> with the fλους, for there were among them coins that violated the specifications set by the sultan. The governors, therefore, went ahead to tackle the issue. Each Kámili dirham used to count for forty-eight fλους, while the fals used to be cut in four pieces. Each of these pieces, in turn, stood for a fals, with which people purchased whatever they did with fλους. This eventuality brought about an indescribable indulgence for the needy (69–70).

### Commentary

Al-Maqrízi emphasizes that the copper fλους, which appeared soon after the silver Kámili dirhams were minted by the Ayyubid sultan, Al-Kámil in 622/1225, were initially intended to satisfy the demand for small coins to be used for the purchase of items valued at fractions of a silver dirham. However, the continuation of official and unofficial minting of fλους after Al-Kámil's death in 635/1238 made people suspicious of the fλους, and they began to reject them for transactions for the uncertainty they presented. The loss of people's confidence in the fλους as a medium of exchange acceptable for small purchases prompted government action. Al-Maqrízi's next sentence points out that the fals used to be cut in four pieces and still have the same value of the whole fals. But it is not clear from the text whether cutting the fλους in four pieces was the way in which the authorities remedied the problem of the acceptability of the fλους. What is worth noting is that no price increases were observed as a result of this action, not even in the prices of the small items bought by fλους. This indicates that the increase in the circulation of fλους has not yet been significant enough to cause a general increase in prices.

Matters continued this way until after the year 650/1252–3,<sup>41</sup> when some officials seduced the heads of state into the love of profit.<sup>42</sup> [One of them] secured the minting of fλους [for himself] with his own money [in exchange for

a payment to the heads of state],<sup>43</sup> He made each fals weigh a mithqál, and the dirham count twenty-four fous. This act weighed down on people and irritated them because of the loss which it made them incur. For, what they were able to buy with a dirham could have been bought before with one half of a dirham. Then they got used to the new exchange rate, for people are the kind who get used to things. Despite this, fous were still not used for the purchase of valuable items but for household expenses and items, such as vegetables, spices, and the like (70).

### Commentary

Al-Maqrízi notes the beginning of the mamluks' reign as a turning point in the history of coinage where corruption started to creep into the structure of the government. For the first time, he mentions an incident where the mint was taken over by an entrepreneur. The latter apparently persuaded the authorities to give him the right to issue fous in exchange for a sum of money as a fee for granting him such permission. He made the minting of fous an enterprise from which he could profit. Al-Maqrízi only hints at one way in which the entrepreneur intended to profit. But, in order to substantiate his claim one has to make additional assumptions not mentioned in the text. The first assumption is that the old fous were withdrawn from circulation by ordering people to exchange them for the new ones at a rate of 2:1. This rate is confirmed by the new exchange rate between the dirhams and the fous which was set at 24:1 to replace the old exchange rate of 48:1. Second, there was no change in prices. This should have been true for valuable commodities purchased with dirhams as well as groceries purchased with fous. By making these two assumptions, one may conclude that his statement regarding the consequences of minting the fous and their new exchange rate with the dirham should read as the following: "what they were able to buy with [fous valued now at] a dirham could have been bought before with [fous valued at] half a dirham." The new issue of the fous and its exchange rate with the dirhams therefore reduced people's holdings of fous by half. Thus, they were able to buy half of what they used to buy with the old fous. The assumption that there was no general increase in prices is confirmed by his insistence that fous were still used to purchase small items valued at fractions of a dirham and therefore had not yet become a standard of value for all items. The mintage of the fous, therefore, could not have caused an increase in the prices of goods which they were not used to purchase. After specifying these two assumptions, one may conclude that Al-Maqrízi intended to explain the source of the official's/entrepreneur's profit: by setting the new fous exchange rate with the dirhams, he could acquire dirhams for half of their current value and purchase with them items whose prices are denominated by dirhams. Since these prices have remained unchanged, then his net wealth increases as long as he can exchange the fous, which he mints for dirhams.

During the sultanate of Al-'Adel Kitbughá [694–6/1294–6], the abuses of power by the vizier, Fakhr Al-Dín Omar ben 'Abd Al-'Azíz Al-Khalíli, became more frequent. The sultan's entourage and his mamluks also aggrieved people. They coveted taking money, bribes, and protection money. Fous were also minted.

But people did not accept them in circulation for their lightness. It was, consequently, announced<sup>44</sup> in the year 695/1296 that flous should be weighed on the scale and that a fals should [be considered to be the quantity of copper coins] equal in weight to a dirham. Then one raʿl of flous was announced to equal in value two [silver] dirhams. That was the first time in Egypt when flous were weighed and were dealt with [and valued] by weight, not by count (70).

### Commentary

This is a key passage in the manuscript that indicates a significant change in the monetary standard of the mamluk period. Here again, Al-Maqrízi fails to indicate whether the new flous replaced the old ones or simply added to the existing quantity of them. One may presume that, the latter is the case, since there is no mention of a change in the exchange rate between the dirham and the flous at the time of their circulation. Since flous were still used as means to purchase insignificantly valued retail items and assuming that their production cost is less than the purchasing power of their equivalent with a dirham, one can conclude that those who minted them hoped to profit by exchanging them with the dirhams rather than by purchasing retail items and then selling them at retail again after their prices rise. But the fact that they weighed less than the old flous and were therefore not accepted in circulation prompted the landmark legislation to determine its value by weight. Here again, Al-Maqrízi does not note any increase in prices as a consequence of the circulation of flous. Below, he arrives at the period most significant for the emerging monetary crisis.

During the reign of Al-ʿáhir Barqouq [784–801/1382–99], the Ustadár Mahmoud ben All was appointed to manage the sultans treasury. His appetite to profit and amass wealth was the cause for the excessive increase in the circulation of flous. He imported red copper from Europe and secured the mint in Cairo with an amount of money. Flous continued to be minted there during his appointment; he also took on a mint in Alexandria in order to produce flous. As a result, peoples holding of flous increased considerably, and their circulation increased to become the dominant circulating money in the country. Furthermore, the circulation of dirhams diminished for two reasons: first, for not being minted at all, and second, for whatever people had of them were cast to be used as jewelry to be worn by the princes of the sultan and their pleasure-seeking followers who liked to wear the finest of cloths and glorious insignia. Despite this, gold was to be found with people, after a period of scarcity, because Al-ʿáhir [Barqouq] either gave it away as gifts to the princes of the state and to statesmen, financed with it wars and expeditions, or provided with it means of subsistence to the needy during periods of high prices.<sup>45</sup> When Al-ʿáhir [Barqouq] died in the year 801/1399, people had three kinds of coins, most of which were flous, being the dominant circulating coin. The second more scarce coin was gold. Silver became the least available among the coins, and then was completely withdrawn from circulation for its scarcity. The gold dinár used to

be exchanged for thirty [silver] dirhams. But when the circulation of gold increased to the extent that commoners possessed them, the circulation of fous increased as well. The result was that all commodities and values were exclusively measured by fous (71).

### Commentary

Marking the beginning of the Circassian mamluks' rule, the reign of Al-ʿáhir Barqouq also marks the beginning of even lower standards of government. For the first time, Al-Maqrízi refers to the minting and circulation of fous as excessive—copper was specifically imported for that purpose by the administrator of the sultan's treasury, a position that was assumed in exchange for a payment to the sultan's aides, as Al-Maqrízi has informed us in his outline of the first reason that caused the depression of 1403–6. The point of interest to us is Al-Maqrízi's allusion to the fact that the excessive increase of fous made it the dominant circulating coin and the exclusive measure of value even when people's holdings of gold increased as a result of the sultan's increase in spending. Regarding the disappearance of the silver dirham, Al-Maqrízi adds, in his *Shudhour Al-'Uqoud fi Dhikri Al-Nuqoud (841/1438)*, that:

During the administration of Mahmoud ben 'Ali the Ustadár of Al-ʿáhir Barqouq, God bless his soul, he exceeded the limits in increasing [the quantity of] fous, at the time when the Europeans began to carry red copper to profit from it. The minting of fous continued for several years while the Europeans took what was available of dirhams to their countries and the inhabitants [of Egypt] cast it to seek profit until it became scarce and almost nonexistent. The circulation of fous increased greatly to the point where [the value of] all commodities were measured by them and people started to say: Each dinár is for such amount of fous (24).

### Commentary

With his narration on the state of silver, Al-Maqrízi shows that once it lost its function as a medium of exchange and a measure of value as a result of the increase in the circulation of fous, people melted the silver dirhams and sold them as bullion.

In his *Ighátha*, Al-Maqrízi continues his narration by presenting the reason for the monetary crisis:

Each mithqál of gold was exchanged for a 150 [dirhams-] fous.<sup>46</sup> [And silver, the weight of each dirham of it minted, equaled to five dirhams-fous.<sup>47</sup>]<sup>48</sup> Each dirham [-fous], in turn, amounted to the quantity of fous which [weigh] twenty-four [dirhams];<sup>49</sup> and the mithqál of gold in the coastal city of Alexandria reached 300 dirhams-fous. People were, consequently, struck with an adversity that eliminated their money's [function]<sup>50</sup> and obligated the scarcity of nutriments. Items demanded became difficult to find because of the difference in [the value

of] the coins. It is feared that the continuation of this will lead to the devastation of the regions inhabitants.<sup>51</sup> “If God wants to hurt people, he cannot be resisted; without him, they have no guardian” [Qur’án 13:11] (72).

### Commentary

Al-Maqrízi gives us the following parities:

1 dinár=1 mithqál of gold=150 dirhams-flous,  
 1 dirham-flous=the quantity of flous weighing 24 dirhams,  
 Therefore, 1 dinár=150×24=the quantity of flous weighing 3,600 dirhams,  
 1 silver dirham=5 dirhams-flous,  
 Therefore, 1 silver dirham=5×24=the quantity of flous weighing 120 dirhams,  
 in Alexandria, 1 dinár=1 mithqál of gold=300 dirhams-flous,  
 Therefore, 1 dinár=24×300=the quantity of flous weighing 7,200 dirhams.

From the above, we conclude that the fals (a copper coin) is no longer a unit of account and a measure of value. It is replaced by the dirham-flous, which represents the quantity of flous (copper coins) equivalent to the weight of 24 dirhams (71.4 grams). The monetary crisis stems from the difference in the value of the dirham-flous, vis-à-vis the dinár, between Cairo and Alexandria. While the value of the dinár was trading at 150 dirhams-flous in Cairo, it was trading at 300 dirhams-flous in Alexandria. From the language used in the text, I am presuming that these exchange rates were set by market forces rather than by the authorities. For, Al-Maqrízi uses the word “balagh” meaning “reached” or “came to” to refer to the prevailing exchange rate between the dinár and the dirham-flous. With such disparity in the value of copper coins between the two cities, one may conclude that Al-Maqrízi is referring to the fact that the Alexandria mint has surpassed the Cairo mint in its increase of the money supply, thus causing the dirham-flous to depreciate against the dinár to half of its equivalent in Cairo. Under these conditions, people in Alexandria could exchange 1 dinár for a quantity of flous weighing 7,200 dirhams, then bring them to Cairo and get  $7,200 \div 3,600 = 2$  dinárs for it. This also means that the commodities will be undersold in Cairo, the fact that led to their scarcity in Cairo’s markets, as Al-Maqrízi noted. This commodity arbitrage would eventually equate prices in the two cities, but the result is that most people—with the exception of those who minted the flous—will end up with a lower standard of living, as Al-Maqrízi explains in the next section.

*[Five] A section on the classes of people, their categories, and a brief description and examination of their conditions: sheets 22B–23B*

Know, may God guard you with his eyes which , never sleep...that the entire population of Egypt is composed of seven classes (aqsám):<sup>52</sup> The first is the statesmen’s class; the second is the rich class of merchants and the wealthy who live extravagantly; the third is the salesmen class. They are middle-income merchants who are called asháb al-baz, followed by proprietors who are the commoners; the fourth is the peasant class, the inhabitants of the villages and



the countryside who sow and cultivate the land; the fifth is the poor class who are the majority of scholars,<sup>53</sup> students, and many of the soldiers of the circle and the like; the sixth is the craftsmen and the apprentice class; the seventh is the needy and the pauper class. Those are the beggars who survive by asking people for subsistence.

Regarding the first, statesmen class, their conditions are as they appear to them, and according to what it appears to those who are thoughtless and ignorant that their holdings of money<sup>54</sup> have increased during these calamities compared with the period preceding these ordeals. For, [according to them,] when considering what they collect in land tax (kharaj)<sup>55</sup> the land on which the tax amounted to 20,000 [silver] dirhams before these events, has now become a 100,000 dirhams-flous. However, such belief is incorrect, for their wealth diminished compared to the wealth which similar people had before: This is explained by the fact that the owner used the 20,000 dirhams in the past to spend from it what he liked and chose then save from it a substantial amount<sup>56</sup> because they used to be dirhams, the value of which was 1,000 mithqáls of gold or an amount close to this. Now, instead of them he gets a 100,000 dirhams-flous which has a value of 666 mithqáls of gold. He spends them on his daily needs of meat, vegetables, spices, oil, and the like. He also spends on clothing for him and for his family, and on what is needed for horses, arms, and other things. He used to purchase all these items before these calamities with 10,000 silver [dirhams] or close. If people,<sup>57</sup> upper-class or commoners, are not equally [affected] by the difference between prices of commodities now and their prices before these calamities started, we would have shown that. However, it is necessary to allude to one side of it, in God's willing: for the statesmen, if they wised up and advised themselves, they would have known that they did not profit from the increase in land [rent] nor from the increase in the price of gold which was the cause of this distress and the cause of these calamities; rather, they would have realized that they are losers. They would have also realized that their loss is caused by the deceit of the directors of their affairs so that they can obtain what they behold as luxuries. "Vile deceit only afflicts those who promote it" [Qur'án 35:43] (72–4).

### Commentary

Al-Maqrízi demonstrates an understanding of the difference between the nominal and real incomes of the statesmen who ended up worse off than before rents and land tax were increased and before the excessive quantity of flous was minted. He shows that, while their nominal income increased, their real income measured by its purchasing power had declined. If the statesmen did not profit, then who did? Although Al-Maqrízi does not specify in this paragraph who deceived the statesmen and profited from the minting of the excessive quantity of flous, he has indicated earlier that those who took over the mint intended to profit from minting flous. One may conclude that this is what Al-Maqrízi had in mind by emphasizing that the statesmen were deceived by their subordinates. They deceived them because they

came out ahead of them in terms of net worth after the flous were minted and circulated. However, Al-Maqrízi fell short of describing the process by which those who minted the flous reaped their profits, namely, from the first round of its circulation before prices rose further. Al-Maqrízi then continues his narration on the welfare of the remaining six classes:

Regarding the second class, the affluent merchants and the wealthy who live with indulgence, if the merchant profited, for example, 3,000 dirhams[-flous] from his merchandise, he receives them in flous or with 20 mithqáls of gold.<sup>58</sup> He needs to spend it on necessary provisions for him and for his family, as well as on clothing for him and for his family. Had he been thoughtful, it would have been clear to him that, for example, when he used to gain 1,000 [silver] dirhams from merchandise similar to this, it used to cover his expenses much more than what these 3,000 dirhams-flous do. The miserable, for his foolishness, claims that he gained, where in fact he had lost. Soonafter, this will be unveiled to him. He will see that his money has been eroded by expenses and wasted by the difference in [the value of] the coins. He will recognize the incorrectness of his presumption and the falsehood in what he used to claim. “That who God deludes, has no guide” [Qur’án 13:33].

The third class, textile and dry goods salesmen and the proprietors, survive during these hardships on whatever they obtain in profits. Each of them is not content but with substantial gains. However, just after few hours pass in his day, he spends what he had gained on necessities, that is, if he did not have to borrow for the rest of his needs. He is content as the saying states:

I am content to bear a fancy and dispose of it without a liability or a claim.

Most of the fourth class of peasants perished from the severity of the times and the recurring hardships caused by little irrigation. Among them are those who became wealthy. They are those whose lands were irrigated during the barren years. They obtained from farming them large sums of money and were able to live through these times; among them were those whose wealth increased and acquired what they desired in excess of their expectations. “God holds back or extends his offerings; to him will be your return” [Qur’án 2:245].

The fifth class is comprised of most scholars, students, witnesses,<sup>59</sup> many of the soldiers of the circle, and the like, such as those who own property or receive fixed payments from the sultan or from someone else. They are between dead and wishing death to escape the misfortune that has stricken them. If, for example, one of them receives a hundred dirhams [-flous], he takes, them in flous or in two thirds of a mithqál [of gold]. He spends them on what he used to purchase with twenty dirhams of silver. They, consequently, suffered of insufficiency and destitution, and their conditions worsened. “What has befallen you of catastrophe is what your hands have earned; [God] forgives many of them” [Qur’án 42:30].

The sixth class is comprised of craftsmen, hirelings, carriers, servants, hostlers, weavers, masons, unskilled workers, and the like. Their fees multiplied

substantially. However, very few of them are left, for most died. Now, one has to expend a substantial effort in order to find one of them. “With God rest the consequences of all affairs” [Qur’án 22:41].

Most of the seventh—destitute and servile—class perished from starvation and cold. Only fewer than few of them are left.” [God] is not questioned for what he does; they are questioned” [Qur’án 21:23] (74–5).

### Commentary

In stating that the real incomes of the members of the rich merchant class declined, Al-Maqrízi is unconvincing because he misses the opportunity to point out that when prices increased, the prices of their stocks of goods increased as well. To substantiate his claim of the decline in their real income, he should have observed that prices of other commodities were rising faster than the prices of their stocks. But the fact that this was a class of merchants, whom we expect to trade in all kinds of goods, their net wealth may have stayed constant or even increased, as is usually the case in inflationary periods where the net wealth shifts in favor of people with variable incomes at the expense of those with fixed incomes. Indeed, with himself being a member of the fifth class, he does show that those with fixed nominal income suffered most from the excessive circulation of flous. He, furthermore, states that those proprietors with variable nominal incomes were able to charge higher fees, thus escaping the consequences of the inflationary period. The death of many of them, as a result of the plague, contributed to the increase in the price of their labor. Here, Al-Maqrízi fails to indicate whether the increase in their fees was due to the nature of their variable income, to their scarcity, or to both factors.

*[Six] A section on reporting some of current prices and citing some of the news of the present calamities: sheets 24A–25A*

Know, may God grant you eternal happiness and the attainment of immortality, that the people of Egypt have settled on the flous to be the coins which they accept in all sales. With them, they pay for all kinds of foodstuffs, beverages, and for all other commodities. They also accepted them for payments of land tax, the tithes on trade gains,<sup>60</sup> and dues to the sultan. With them, they valued labor costs for insignificant as well as substantial works. Indeed, they have no coin or money but flous. Each qinʿár of flous, which is a weight equal to 100 Egyptian raʿls, equals to 600 dirhams[-flous]. Therefore, a raʿl, which is the weight of [144 dirhams equals 6 dirhams[-flous], and each dirham[-flous] of them weighs 2 uqiyahs, which in turn weigh]<sup>61</sup> 24 dirhams; it is an innovation and a distress they started. It does not originate in any prophetic community<sup>62</sup> and for which no legal reference or historical precedent exists, nor can be suspected that its innovator has followed someone’s model in the past. But what has been done vanquished the world’s delight and removed its embellishment; it wasted wealth and spoiled its pleasures. The masses are thus destined to insufficiency and the majority are embraced by destitution and degradation. “God fulfills a matter already done” [Qur’án 8:42] (76).

Regarding [exchange rates] and prices of commodities, the mithqál of gold ended up in the capital city of Cairo and its territory to equal 150 dirhams-floos while it reached 300 dirhams-floos in Alexandria. The mu‘ámalah dirham reached 5 dirhams-floos for the weight of each dirham of them. The ardeb of wheat ended up to be 450 dirhams-floos, excluding the [following] costs: 10 for commission fee,<sup>63</sup> 7 for delivery, 3 for sifting, 30 for grinding, thus adding to 50 dirhams[-floos]. Therefore, one obtains from 1 ardeb of wheat only 5 waybahs of refined wheat, incurring a loss of 1/6 of the initial amount. As a result, each ardeb of it comes to 600 dirhams-floos. The price of an ardeb of barley and fava beans reached over 300 dirhams[-floos]; of green peas 800 dirhams[-floos], and of chickpeas 500 dirhams[-floos]; a head of cattle was sold for a 100 mithqál of gold—equaling 15,000 dirhams-floos; a raʔl of raw beef for 7 dirhams-floos and a raʔl of mutton for 15 dirhams[-floos]; a chicken for 100 dirhams-floos—equaling 20 [silver] dirhams;...one chicken egg 1/2 dirham-floos....

In Alexandria and Tarujah every qadaʔ of wheat reached 40 dirhams-floos and of barley 30 dirhams[-floos]. A raʔl of bread reached 10 dirhams-[-floos], a raʔl of mutton 60 dirhams-floos.... One chicken egg for 2 dirhams-floos....<sup>64</sup>

Whoever observes prices by considering gold and silver to be the standards of value, he does not find them to have increased except for an insignificant amount, but in relation to the higher quantity of floos, there exists no issue more outrageous to mention than what has stricken people as a result of it. There is nothing that can have more serious consequences than that. For, it led to the deterioration of the state of affairs and to the prevalence of disorder. People perished because of it, while the region came close to devastation and degeneration. “But God does what he wishes” [Qur’án 2:253] (76–80).

### Commentary

This section contains two important pieces of information. First, Al-Maqrízi provides the correct figures for the rates of exchange between the gold dinár, the silver dirham, and the floos. The rates are:

1 qinʔár of floos=100 raʔls=600 dirhams-floos, and

1 raʔl=the weight of 144 dirhams=6 dirhams-floos, therefore,

1 dirham-floos=a quantity of copper coins that equals to the weight of 24 dirhams=1/6 raʔl.

1 silver dirham=5 dirhams-floos

Since 1 dirham-floos=2 uqiyahs of floos=the weight of 24 dirhams, then

1 uqiyah=the weight of 12 dirhams=1/12 raʔl

In Cairo, 1 mithqál of gold=1 dinár=4.25 grams=150 dirhams-floos, while

In Alexandria, 1 mithqál of gold=1 dinár=4.25 grams=300 dirhams-floos, then the weight of 1 dirham=7/10 mithqál=2.975 grams.

Given these exchange rates, the dirham-flous vis-à-vis the dinár is valued twice as much in Cairo versus Alexandria. Indeed, according to the evidence given by Al-Maqrízi, by contrasting the prices of wheat, barley, and mutton in Alexandria versus Cairo, it is evident that they are higher in Alexandria. After making the conversion from the qada? to the ardeb at the rate of 1 qadah=1/96 ardeb, we get the following prices:

Wheat (dirhams-flous per ardeb)=W  
 Barley (dirhams-flous per ardeb)=B  
 1 Chicken egg (dirhams-flous)=C  
 Mutton (dirhams-flous per ra?l)=M  
 1 dinár=dirhams-flous per mithqál of gold=1-D

	W	B	C	M	1-D
In Cairo	450	300	0.5	15	150
In Alexandria	3840	2880	2	60	300

With wheat, barley, chicken eggs and mutton being respectively, 8.5, 9.6, 4, and 4 times more expensive in Alexandria, it is not surprising that goods became scarce in Cairo. Commodity arbitrage led to the depletion of goods in the markets of Cairo. Adding to the confusion of the public was that the value of the dirhams-flous vis-à-vis the dinár in Alexandria was half of its value in Cairo, while prices in Alexandria were higher than in Cairo between a range of 4 to 9.6 folds, with the prices of necessities increasing more than the others. This gives the incentive for arbitrage to be more profitable in goods rather than currency, thus the scarcity of goods in Cairo.

*[Seven] A section on what eliminates this disease for humankind and remedies the illness of the time: sheets 25A-25B*

Given that we have explained above the reasons for the occurrence of the prevailing ordeals, what remains to be done is that those whose mind God has opened and cleared the blur from their sight recognize what is to be done to remove these adversities in order for their conditions to return to what they used to be in the past. We say: Know, may God guide you to righteousness and inspire you the wisdom of your kind, that the currencies which are accepted by law, reason, and habit are only of gold and silver; any other thing does not qualify to be money. Furthermore, peoples conditions will not be set straight unless they are made to follow a natural and legal rule. That is, they must value their commodities and be compensated for the values of their labor with only silver and gold, with the price of every 100 dirhams of pure silver—that is not minted nor debased—being [6]<sup>65</sup> mithqáls of gold, it needs a quarter of a dinár [to be added to it] once it is in the mint for the cost of copper, tax collection for the sultan, cost of lumber, wages for workers, and the like—given current prices. By this, [the weight of 100 dirhams of pure silver] becomes 150 mu‘ámalah dirhams, amounting to 6¼ mithqáls of gold. Accordingly, each mithqál of sealed gold will be exchanged for 24 dirhams of the mu‘ámalah silver. Now, however, a mithqál of gold is exchanged for 23? ra?ls of red copper that is minted in pieces called flous: The mithqál of

gold, in turn, is calculated by them to equal 140 dirhams-flous which is the exchange rate of the dinár with the flous at the time.

If, with God's consent, whoever rules the parish succeeds in applying the above ratio [between gold and silver] when minting the mu'ámalah silver, people will be relieved of this degenerated state. Commodity prices and values of labor will go back to what they used to be before these calamities. For, as we indicated, it is clear that the mithqál of gold should exchange for 24 dirhams of mu'ámalah silver, and the 24 dirhams of silver should exchange for  $23\frac{1}{3}$  ra'ls of flous. Each one of these silver mu'ámalah dirham would be equivalent to [the quantity of] flous [weighing] 140 [dirhams]. The latter can be spent on insignificant commodities and household expenses. The benefit will be significant, and prices will fall. Once these arrangements are implemented, flous will be scarce because people will cast them into metalware. With that is the improvement of conditions, the abundance of nutrients, and the unlimited increase in prosperity. "God knows and you do not know" [Qur'án 2:216] (80–1).

### Commentary

While the exchange rates set by the authorities, according to Al-Maqrízi, are the following:

$$1 \text{ mithqál of gold} = 140 \text{ dirhams-flous} = 23\frac{1}{3} \text{ ra'ls of flous, where} \\ 1 \text{ ra'! of flous} = 6 \text{ dirhams-flous,}$$

his recommendation is that silver dirhams should be reinstated to circulate along with the dinár and the flous. According to Al-Maqrízi, the three coins will exchange at the following rates:

$$1 \text{ mithqál of gold} = 1 \text{ dinár} = 24 \text{ silver mu'ámalah dirhams} = 23\frac{1}{3} \text{ ra'ls of flous,} \\ \text{and} \\ 1 \text{ ra'! of flous} = 6 \text{ dirhams-flous, then} \\ 1 \text{ dinár} = 23\frac{1}{3} \times 6 = 140 \text{ dirhams-flous. And since} \\ 1 \text{ ra'!} = 144 \text{ dirhams, then} \\ 1 \text{ dinár} = 144 \times 23\% = \text{a quantity of flous weighing } 3,360 \text{ dirhams.}$$

This conforms to the alternative way of measuring the dinár vis-à-vis the dirhamflous:

$$1 \text{ dirham-flous} = \text{a quantity of flous weighing } 24 \text{ dirhams, therefore,} \\ 1 \text{ dinár} = 24 \times 140 = \text{a quantity of flous weighing } 3,360 \text{ dirhams.}$$

While the exchange rate of the silver mu'ámalah dirham vis-à-vis the dinár, given the cost of minting silver dirhams, will be:

$$150 \text{ silver mu'ámalah dirhams} = 6\frac{1}{4} \text{ mithqáls of gold, therefore,} \\ 1 \text{ dinár} = 1 \text{ mithqál of gold} = 150 \div 6\frac{1}{4} = 24 \text{ silver mu'ámalah dirhams.} \\ 1 \text{ silver mu'ámalah dirham} = 6\frac{1}{4} \div 150 = 0.04167 \text{ mithqáls of gold.}^{66}$$

And the exchange rate of the silver mu'ámalah dirham vis-à-vis the flous, in turn, will be:

1 silver mu'ámalah dirham=(23?+24=)0.9723 ra?l of flous, and since  
 1 ra?l of flous=6 dirhams-flous, and  
 1 ra?l of flous=1.0286 silver dirhams, therefore  
 1 silver mu'ámalah dirham=5.8332 dirhams-flous, and  
 since 1 dirham-flous=the quantity of flous weighing 24 dirhams, then  
 1 silver mu'ámalah dirham=5.8332×24=the quantity of flous weighing 140  
 dirhams.

This rate is verified by dividing the value of a dinár in terms of the quantity of flous equivalent to it (3,360 dirhams) by the number of silver dirhams which the dinár exchanges for (24 silver dirhams), thus 1 silver dirham=3,360÷24=140 dirhams.

The introduction of silver dirhams in circulation will, according to Al-Maqrízi, return gold and silver as the standards of value and the flous will be good only to purchase minor household goods. Below, in the final section, he attempts to convince skeptics of the merits of his policy recommendation.

*[Eight] A section on explaining the merits of this measure which benefit the population at large: sheets 25B–27A*

Know, may God beautify you with virtues and protect you from the dishonor of vices, that who is possessed by habits and enslaved by familiar norms, who is tied up by his thoughtlessness so that he stands still, and who is content with what he knows, does not strive to know what is hidden to him and does not imagine something other than what he perceives. Such a person says: It is futile to tire your mind and lengthen your hard work, critically to revise your own opinion and transcend the work of others. For, after a long period of toil, gold and flous will remain the same without any appreciation or depreciation in their [relative] prices. We respond by saying that God spoke the truth when he stated: “Are those who do know and those who do not, equal?” [Qur’án 39:9]. There is no doubt that our mentioned [recommendation] has two important benefits: First is the return of the public’s state of affairs to what they used to be before these calamities began in matters pertaining to prices and sales conditions; the second benefit is that people will continue to hold whatever they have now of gold and flous—which are now the dominant circulating money—without addition or diminution, with a return to prosperity and low prices to what conditions used to be before these hardships.

By my life, no one, even if he possesses the least ability to distinguish between things and is the least sensible of people, can ignore the value of these two important benefits and deny the adequacy of these two great blessings. Only the person who intends to betray his covenant with God to care for the welfare of his worshipers ignores our recommendation and promotes the decadence which leads people to their death. “God does not guide the deceit of the treacherous” [Qur’án 12:52]. I, therefore, with the aid of God, for he is the supporter, say:

I still have you standing by my words  
 Since I failed to get your help in action.

Be aware, may God guide you to listen to the truth and inspire you to believe advice for humanity's sake, for it has become evident from what preceded that the deterioration of the state of affairs is due to mismanagement rather than to a [real] increase in prices.<sup>67</sup> If God guides whomever he entrusted in running the affairs of his worshipers to return transactions to what they used to be in gold, and to return the values of goods and compensations for all labor to the *dirár*—or to what occurred thereafter in dealing with minted silver [thereof to return the values of labor and the prices of commodities to the *dirham*],<sup>68</sup> the nation would be relieved, matters would be put back on the right track and the decay that is threatening devastation would be forestalled.

This is shown by the fact that once the previous standard of currency is adopted, that who receives money from land tax, rent from real estate, a salary from the sultan or the religious establishment, or wages, he takes it in gold or silver, according to what whoever monitors public affairs decides; he would spend it on what he needs of food, beverages, clothes, or other items. Despite what has befallen us now of unstable conditions, if [my recommendation] is adopted, whoever receives something in one of the two currencies is protected from being defrauded, because prices expressed in *dirhams* or *dirárs* are not subject to change, as used to be the case before these calamities with the exception of prices of some items which may vary for two reasons: The first is the lack of insight and ignorance of the person investigating the increase in the price of that item, which is the case in most incidents; second, the natural disaster that reduces the supply of that item. An example of the latter is what happened to mutton when cattle perished in the year 808/1405–6 and what happened to sugar as a result of the decline in planting its cane and pressing it in the years of 807/1404–5 and 808/1405–6. Indeed, the latter [cause of price increase] is insignificant when compared to the former.

Despite this, had there been a well-guided and reason-inspired person, matters would have turned out differently than the present hardships which we are experiencing. For the money, which everyone receives from land tax or other sources, is *fous* expressed in *raʿls* as we have already indicated. Gold, silver, food, clothing, land tax, and all the rest of commodities are also expressed in *fous*. People say: Each *dirár* is worth such and such of *dirhams-fous*, and for silver, each *dirham* of it is worth such and such of *dirhams-fous*. The same is said in the entire region with regard to clothes, all commodities, as well as land tax, that: Each such and such is worth such and such of *dirhams-fous*. Therefore, any sensible person, even one who is ignorant to the extent of being foolish, necessarily notices that when people receive money from land tax, sales revenue, value of labor, or charity, they spend it on exigencies and other objects, either economically or extravagantly. If one receives an amount of these *fous* and spends them on objects of his needs, he faces a fraud with no purpose for it.



To explain this point, consider a case when the sultans divan receives 60,000 dirhams-floos. The manager of the divan receives them in 100 qinʿárs of floos or with its equivalent in gold. If, for instance, it [the 60,000 dirhams-floos] accrued to the ministry’s divan, the minister purchases his needs of sultanic mutton what weighs  $66\frac{2}{3}$  qinʿárs with an amount of gold equivalent to the 60,000 dirhams-floos which weigh 100 qinʿárs of floos, where each qinʿár is valued at  $[60,000 \div 66\frac{2}{3} = 900]$  dirhams[-floos].<sup>69</sup> However, before these calamities started, 1,500 qinʿárs of mutton were purchased with 60,000 [silver] dirhams, where each qinʿár is valued at 40 [silver] dirhams, a great difference and a grave injustice between the first and the second case.

When you then consider the rest of the sultans receipts, and the way in which they are spent, and moreover, if you descend to the princes’ receipts then to the statesmen’s below them, such as the ministers, the judges, the notables, the wealthy merchants and others, you will find, for instance, a middle-class person with a fixed monthly income of 300 [silver] dirhams, calculated as 10 dirhams per day. If he wants to spend the 10 silver dirhams on his family, he buys for them, for example, 3 raʿls of mutton with 2 [silver] dirhams and spices with 2 [silver] dirhams. He therefore satisfies the nourishment needs of his child and family and whomever serves him with 4 dirhams. Today, however, the 10 [dirhams] become [10 dirhams-] floos that weigh 20 uqiyahs. If he wants to purchase 3 raʿls of mutton, he gets it for 27 dirhams-floos. He spends 10 dirhams [-floos] on spices needed for it and on whatever middle-class taste requires in a meal. The meal needed for his child and family will cost him 37 dirhams-floos. In what way would he obtain nourishment for his child and family with 37 dirhams-floos? Whence can he, from his income of 10 dirhams [-floos], spend 37 for one meal, excluding what he needs of oil, water, rent, provisions for a sumpter, clothing and other items that will make a long list of items known by everyone? This is the reason for the abatement of the blessings that existed in Egypt, the decline of its state of affairs, the disappearance of its affluence, the appearance of destitution and humility on the faces of people. “Had your God wished, they would not have done it” [Qur’án 6:112].

If God, be he exalted, grants success to whom the affairs of humankind are entrusted in returning money to its old standards, and if the possessor of these 10 dirhams [-floos] receives them in silver, they would be more than sufficient for him given present prices. For the meal that is valued now 37 dirhams-floos today is paid for with  $6\frac{1}{6}$  dirhams in mu‘ámalah silver, where each dirham of silver is equivalent to  $[37 \div 6\frac{1}{6} = 6]$  dirhams-floos, which, in turn, weigh  $[6 \times 2 = 12]$  uqiyahs.<sup>70</sup> Therefore, people are not afflicted with high prices but are stricken by the bad management of the rulers. Thus, God eliminated people’s wealth and afflicted them with want and humiliation as a punishment “for what their hands have earned and to make them taste some of what they have done so that they may return [to righteousness]” [Qur’án 30:41].

These two examples suffice for whomever God has removed greed from his heart and inspired him to come to the aid of humankind and build the nation.

“With God is the Command; as it was in the past; it will be in the future” [Qur’án 30:4].

The author, God bless his soul, said that: “It was possible for me to organize and to revise this essay in one night of the month of Mu?arram of the year 808/ July 1405. God shows the right path to whomever he chooses. Praise only to God. God’s blessing and peace upon the Prophet, after whom no Prophet will be.”

On the nineteenth of the honorable [month of] Sha’bán of the year 1101/ 1690 the poorest of humankind, Muhammad, known as Al-Qa?ari, the Imam and speaker of Al-Wazír Mosque, located in Bandar Jaddah Al-Ma?rous, finished scribing the essay (82–6).

### Commentary

While Al-Maqrízi had argued in the preceding sections that money can be a source of instability, in this concluding section he asserts that it can be a source of stability. For him, prices are more stable when gold and silver are the mediums of exchange. In that case, prices can only rise because of supply shocks or other distribution problems which are not appropriately handled. But Al-Maqrízi fails to explain to us why unadulterated gold and silver currencies lead to more stable prices than copper does. He fails to state explicitly that their stability in value is due to their scarcity, while copper can be produced more abundantly and is relatively less scarce. Furthermore, the major flaw in Al-Maqrízi’s prescription stems from his belief that a change in the monetary standard will bring back the abundance of goods. This flaw suggests that he did not understand the medium of exchange function of money. He underestimated the extent to which the inflationary period redistributed income and impoverished the masses, which is a matter that cannot be corrected only through monetary reform. Given the limits of resources, the standard of living of the masses cannot return to the level before the excessive circulation of flous had started without reversing the redistribution of wealth and income. Therefore, in the absence of a supply-side argument to justify an increase in production, Al-Maqrízi fails to explain how everyone using gold and silver as a medium of exchange can purchase more goods at the same time. Even if it would have been possible to convert all the hoards of silver into dirhams, there had to be an increase in the economy’s capacity to produce in order for everyone to acquire more goods with ‘the silver dirhams at the prevailing prices. If everyone was paid 10 silver dirhams instead of 10 dirhams-flous, as his example shows, prices would not remain at the same level. They would increase to adjust to the excess demand. Thus, the poor would remain poor even if they were paid in silver. But, to grant Al-Maqrízi a point, no further increases in prices would occur once this adjustment had taken place.

### REFLECTIONS ON THE ESSAY

Al-Maqrízi’s essay demonstrates a mastery of some rudimentary economic principles. The author was motivated by the suffering around him and he reached beyond the scholastic practice of making moral judgments about how well

individual practices conform to given religious instruction. Al-Maqrízi breaks new ground when he lays down general observations about the relationships among production, income, taxation, and prices. His book also outlines a vision of economic processes relating these variables and establishes the monetary standard for maintaining smooth trade conditions and stable levels of living standards. Although these relationships were presented by Al-Maqrízi as empirical facts, one can discern from his overall thesis that he believes he has found what contemporary economic writers call confirmed generalizations. A statesman's knowledge of these generalizations should, according to Al-Maqrízi, empower him to manage institutions in a way that promotes prosperity. Al-Maqrízi's findings also warn of the consequences that follow once profiteers are allowed to take over the state's key administrative positions. With fragments of analysis designed to persuade statesmen about the futility of artificial and coercive measures to enhance personal wealth, Al-Maqrízi presents historical events in a way that is calculated to convince his readers that defrauding the public with monetary measures reduces supply and brings about high prices. In addition, he argues that coercing labor and abusing nature devastates the countryside and causes agricultural production to sink.

However, Al-Maqrízi's fifteenth-century narration falls far short of the standards that economists require in order to characterize his narration as truly "economic theory." Indeed, he did not see himself as undertaking such a task at all. He saw himself primarily as a historian. Frustrated by the events unfolding before his eyes, he decided to depart from a passive role of merely documenting facts and shows that the prevailing depression could be remedied. But, this essay does not pretend to establish a "new methodological approach" to social problems. It is a far cry from an academic piece and recent claims by contemporary historians that Al-Maqrízi pioneered a "dynamic approach to social organizations" or that he introduced "a new methodological approach that defied the straitjacket of disciplinary classification" are exaggerations and overglorifications (Essid 1987:94). Had Al-Maqrízi's essay been composed in an academic environment and subjected to careful evaluation and revision, then it may have stood some chance of becoming a landmark in the social sciences. The reality is that this book was written under exceptionally cruel circumstances, while Al-Maqrízi was enduring the pains of starvation and mourning his daughter's death. Al-Maqrízi defied despair and raised this writing to teach people that there was a way out of the calamities he observed around him. He documented and reasoned about the causes and consequences of a variety of circumstances pertaining to money, exchange, and production in a storytelling style that was calculated to appeal to laymen.

The question that faces the historian of economic thought is how to classify Al-Maqrízi's work. The common answer may be that he should be ranked among Arab scholastics because of his puritanical attitude toward conspicuous consumption, his belief in the uncontrollable causes of natural disasters, and his belief in the supernatural requirement of maintaining both gold and silver

as media of exchange. However, there is enough evidence in work at hand to argue that Al-Maqrízi attempted to transcend scholasticism in its Christian, Jewish, or Islamic incantations.

In his *History of Economic Analysis*, Schumpeter started his investigation of the significance of the scholastic literature in terms of its “economic content.” St. Thomas divided “tooled knowledge into the sciences that work by the light of human reason only, including Natural Theology, and Supernatural Theology” where the latter makes use of revelation in addition to reason (Schumpeter 1954:82). Economics, according to him, did not fit into either of these divides. While in St. Thomas’s work, economics “formed parts of moral theology or ethics which was itself both part of natural and supernatural theology,” it was later in the sixteenth century

treated within the system of scholastic jurisprudence. Individual questions mainly about money and interest, were occasionally dealt with separately. So were political questions. But economics as a whole never was.... [Furthermore, the] motive of scholastic analysis was manifestly not pure scientific curiosity but the desire to understand what they were called upon to judge from a moral standpoint.... Thus the normative motive, so often the enemy of patient analytic work, in this instance both set the task and supplied the method for the scholastic analysts.

(Schumpeter 1954:83, 102)

Given Schumpeter’s depiction of Christian scholasticism, one can ask three questions about Al-Maqrízi’s essay: First, to what extent is this book part of a larger study about moral theology or ethics? Second, to what extent is the book a separate freestanding study in economics? Third, is Al-Maqrízi’s motive for writing it scientific analysis or moral judgment? This translation of the *Book of Aiding the Nation* gives a satisfactory answer to all three questions. First, Al-Maqrízi’s essay is definitely not a study in moral theology or ethics. It contains ethical condemnations of corruption and infringements of individual liberties, but its major task is to demonstrate the economic consequences of such immoral behavior rather than their condemnations per se. Second, the essay is indeed a separate freestanding study of economic matters. It deals exclusively with the economic consequences of supply shocks, corruption, debasement of money, high rent, excessive taxation, intensive farming, speculation, and the excessive circulation of money. Third, Al-Maqrízi’s narration does not confine itself to the moral condemnation of malpractices of government officials. He makes specific policy recommendations to restore normal living conditions. In fact, his case against such malpractices are made through a demonstration of their negative effect on the formation of national wealth. It is with his fragments of analysis that he successfully explained the man-made causes of the depression.<sup>71</sup> Still, his motive is moral and “not pure scientific curiosity;” a charge to which Al-Maqrízi, along with most contemporary scientists and philosophers, would plead guilty.

With respect to Islamic scholasticism—the system of beliefs in teleological determinism along with a system of jurisprudence emanating from Islamic scriptures—Al-Maqrízi showed early signs of emancipating himself from teleological determinism but his struggle to reconcile the notion of free will with determinism left the issue unresolved.

This is just as well because in Al-Maqrízi's time a resolution in favor of free will could amount to blasphemy and render his work outlawed. However, if one ignores the inconsistencies presented in his preface and the quotes from the Qur'án, the message from the body of the text is unmistakably clear: the depression is man-made and could have been avoided. A reading of the above translation leaves little doubt in the conclusion that Al-Maqrízi's *Book of Aiding the Nation by Investigating the Depression* is not representative of scholastic thought at all, but rather is an attempt to rise up from it. It is a work that has some common grounds in intention but not in scope with *Al-Muqaddimah* (1967) by his predecessor and teacher, Ibn Khaldun, and with *Al-Taysír* (1968) by his little-known successor, Al-Asadí. In each of these three works, an appeal to reason is used to explain the dynamics of social change, a tradition that was kept alive in the Arab—Islamic world up to present times. During the twentieth century the struggle between philosophy and religion continues to threaten a triumph of dogmatic thinking at the expense of reason, and with it, the demise of Arab—Islamic civilization may well be at hand.

## GLOSSARY AND APPENDIX

### Capacities

**Ardeb** Derived from the Arabic word *ardabb* or *irdabb*, equal to 5.44 imperial or 5.619 U.S. bushels, and to 6 waybahs (Al-Maqrízi 1940:77)

**Hamlah** A load that equals to 2 tallises (Al-Maqrízi 1970:826)

**Qada?** A cup=1/96 ardeb=1/16 waybah (Wehr 1976:745 and Al-Maqrízi 1940:77)

**Tillís** 150 ra?ls (Ibn Mammáti 1943:365)

**Waybah** 1/6 of an ardeb (Al-Maqrízi 1940:77)

### Coins

**Dinar** A gold coin=1 mithqál of gold=4.25 grams (Al-Maqrízi 1940:48–9)

**Dirham** There are several types of dirham coins as follows:

- **Mu'ámalah** silver dirhams which are officially minted and circulated according to their official value (Al-Maqrízi 1940:14)
- **Muzáyadah** silver dirhams which have the same weight as the mu'ámalah dirhams but with a larger size (Al-Maqrízi 1940:64)
- **Qita'** clipped silver dirhams that were accepted only in unofficial transactions according to their weights (Al-Maqrízi 1940:64)

- **Mubahrajah** dirhams that were made of inferior quality of silver and were not officially minted, thus were not accepted by either individuals or governments (Al-Maqrízi 1940:62)
- **Stouqah** dirhams made of silver-plated copper. They were considered illegitimate dirhams (Al-Maqrízi 1940:64)
- **Mussawadah** blackened dirhams made of an alloy of mostly copper and some silver (Al-Maqrízi 1940:48). Called wariq in Egypt.
- **Wariq** blackened dirhams made of an alloy of mostly copper and some silver (Al-Maqrízi 1940:48).
- **Dirham-flous** a unit of account introduced to measure the value according to which copper coins circulated= $\frac{1}{6}$  raʿl of copper coins= $\frac{1}{6}$  the weight of 24 dirhams=2 uqiyahs (Al-Maqrízi 1940:70-6, 80-1, 85).
- **Fals** one copper coin (see flous).
- **Flous** copper coins, the plural of fals ((Al-Maqrízi 1940:37, 66-7, 69-72)

### Lengths

**Dhiráʿ** An ancient unit of measurement equivalent to 18 inches (Baalbaki 1993:561)

**Isbaʿ** A measure by the width of the finger, equivalent to  $\frac{1}{24}$  dhiráʿ (Al-Maqrízi 1970:1115)

### Weights

**Dirham**  $\frac{7}{10}$  mithqál=6 danaqs=50.4 habbahs (Al-Maqrízi 1940:56) thus = $\frac{7}{10} \times 4.25 = 2.975$  grams.

**Kharroubah**  $\frac{1}{18}$  dirham= $\frac{1}{24}$  mithqál (Al-Maqrízi 1940:66) thus= $4.25 \div 24 = 0.17708$  grams.

**Mithqál** 4.25 grams=24 Kharroubah (Al-Maqrízi 1940:48, 66). It also equals 24 ʿabbahs (Al-Asadí 1968:129). 1 ʿabbah=100 mustard seeds (Al-Maqrízi 1940:50). Weight of a dinár.

**Qamʿah** 1 grain of wheat. It equals  $\frac{1}{3}$  Kharroubah (Al-Maqrízi 1940:66), thus= $0.17708 \div 3 = 0.0590278$  grams.

**Qintar** 100 Egyptian raʿls (Al-Maqrízi 1940:76), thus= $100 \times 428.4 = 42.84$  kilograms.

**Raʿl** 1 pound.  $\frac{1}{100}$  qintar=12 uqiyahs=144 dirhams (Al-Maqrízi 1940:49, 76, 84-5), thus= $35.7 \times 12 = 428.4$  grams.

**Uqiyah** 1 ounce.  $\frac{1}{12}$  raʿl=12 dirhams (Al-Maqrízi 1940:49) thus= $2.975 \times 12 = 35.7$  grams.

### NOTES

- 1 The author is grateful to S.Todd Lowry and Laurence S.Moss for comments and suggestions, and to Tom Kass for helpful insights into some obscure sentences in the Arabic manuscript.

- 2 Al-Maqrízi uses the Islamic calendar which is based on the year of the migration (Hijrah) of the Prophet Muhammad and his followers from Mecca to Yathreb (later called: Al-Madínah Al-Munawarah) on 16 July 622 as the beginning of the Islamic calendar. The day Al-Maqrízi claims to have finished editing the manuscript is the month of Mu?arram 808 of the Hijrah. The first day of Mu?arram is the beginning of the Islamic calendar and corresponds to 29 June 1405. But in cases when we do not have a reference to a particular month of the Hijrah, we are obliged to refer to the entire Islamic year which falls between two Christian years. Therefore, had we not known that Al-Maqrízi finished editing in Mu?arram, which is the case with most of the dates listed in the manuscript, we would have referred to the date of the manuscript as 1405–6. To obtain the Christian dates, I convert the months by following the rules given in *Al-Munjed* (Beirut: Al-Matba'ah Al-Katholikiah, 1967, pp. 356–8), and converted the years from the table listed in *Atlas Al-Tárikh Al-Islámí* (Smith 1955:44–5).
- 3 A study of the first Turkish period showed that seven of the sultans were killed while they were in power, four were killed after they were deposed, seven were deposed, two fled, and finally, five died of natural causes while in power. Furthermore, a study of the lives of 225 high government officials during the Mamluk period showed that eighty-four of them were executed, five died in prison, two died in exile, sixty-one died fighting enemies, eighty-eight died of natural causes during their time in office, six were asked to retire, and sixteen of them were unaccounted for. See Hassan (undated: 294).
- 4 In his *Kitáb Al-Mawa'iz wa Al-I'tibár bi-Dhikr Al-Khiat wa Al-Athár*, Al-Maqrízi states: “The sultan’s mamluks became the most vial, sordid, avaricious, the lowest and most ignorant kind of people who abandoned religion more than anyone else. ... They did not feel the crime involved in the destruction of the lands of Egypt and Syria from the mouth of the Nile to the riverbed of the Euphrates by their bad governance” (1970, vol. 2:214).
- 5 At the time of the presentation of this translation at the History of Economics Society’s annual meeting on 10–13 June 1994, no extensive English translation existed in print. However, there were two summary accounts in English regarding Al-Maqrízi’s work. One is in a paper by Yassine Essid on “Islamic Economic Thought,” in which the author devotes five pages of review and quotes from a French translation of parts of Al-Maqrízi’s essay (Oulalou 1976). The few errors in interpreting the text are most likely to have been carried over from the French translation of the text rather than being the author’s (compare with Essid 1987:93–7). Subsequently, Essid (1988) also submitted a doctoral dissertation in French on Al-Maqrízi’s *Igháthah*. See also Baeck (1991), where he devotes one and a half pages to Al-Maqrízi’s essay based on the same French translation. There are, however, some French authors who have studied the writings of Al-Maqrízi in French and German (see Hennequin 1977, 1979; Minsot 1936). I also include in the reference section the French and German literature that the editors of the manuscript included as sources on the Mamluk era in Egypt and the writings of Al-Maqrízi (see De Sacy 1905; Le Strange 1890; Tyachsen 1797; Wiet 1932; Zettersteen 1919).

But at the time of my final revision of this chapter, Adel Allouche published a book, entitled *Mamluk Economics: A Study and Translation of Al-Maqrízi’s Igháthah*. The book is an impressive scholarly work which contains an introduction, a complete English translation of the same essay, and nine appendices for measures, and the history of prices of essential items. There are, however, stylistic as well as substantive differences between our two interpretations of Al-Maqrízi’s essay, as is usually the case with translations. Regarding differences in style, I chose to be more literal to the Arabic text at the expense of being less lucid for the English language reader. Differences in substance pertain to the words chosen to express the meaning of Arabic phrases. For instance, I avoided using the term “inflation” to refer to high prices. Other more serious cases involved attributing to Al-Maqrízi’s narration more insight than is clearly evident. Due to space limitations, I will only refer to the page numbers where these differences occur (Allouche 1994:70,

- 71, 73, 74, 77, 81). However, with the exception of the last difference (81) pertaining to people's reaction to Al-Maqrízi's policy recommendation, none of the substantive differences changes the interpretation of Al-Maqrízi's thesis.
- 6 The Arab—Islamic "opening" included many more regions to the west, north, and east of those mentioned. However, although Islamized, their inhabitants were not Arabized. They strongly maintained their separate national identities. Examples include Persians, Turks, Caucasians, Indians, and others.
  - 7 The Ayyubids are the descendants of the Kurdish/Syrian General Saláh Al-Din Yousuf Ibn Ayyub (1138?–93), who established the Ayyubid state in 1171 and who, in the Battle of Hattin, defeated the Crusaders in Syria in 1187 and became the sultan of Syria and Egypt.
  - 8 After a brief occupation of Egypt by Napoleon in 1798, Mamluk power ended in 1811 with "the massacre of the castle," when the Mamluk notables were assembled at a banquet by the Ottoman-appointed Albanian ruler of Egypt, Muhammad 'Ali Pasha, then killed by archers. The latter rebelled in the 1830s against his Ottoman masters and declared the independence of Egypt, then of Syria (after occupying it), from the Ottomans. The last of the Albanian kings, Fárouq I, finally abdicated in 1952, and Gamál 'Abd Al-Náser assumed full power in 1956 to become the first Arab to rule Egypt in a millennium, after its Arabization process started in the second half of the seventh century.
  - 9 The preface covers side B of the first sheet and side A of the second sheet of the manuscript. Henceforth, I will indicate in the heading the number of sheets covered by every section.
  - 10 Al-Maqrízi uses the word "wa-ba'd," which literally means "and after." It is used after saluting the addressee in letter writing, or in general, after a cliché which does not relate to the substance of the subject to be presented.
  - 11 The quote from the Qur'án is added from the Cambridge manuscript.
  - 12 Henceforth, the page numbers at the end of each translated extract refer to the published version of the manuscript in Al-Maqrízi (1940).
  - 13 This and the following page numbers refer to Al-Maqrízi (1940). The quotes can also be located in the translation below.
  - 14 Al-Maqrízi uses the word "tadbír" which also means any of the following: planning, organization, direction, disposal, economy, economization and administration.
  - 15 Al-Maqrízi uses the word "al-'arf which means "exchange" as well as "spending." In this context, it seems that Al-Maqrízi used it in the former sense.
  - 16 Al-Maqrízi uses the word "ta'annat" which literally means to become obstinate or inflexible. In this context, it implies that people refused to circulate it at the prevailing exchange rate.
  - 17 Insertion from the Egyptian manuscript (sheet 18 B). The insertion also exists in the Cambridge manuscript.
  - 18 One of the problems that one faces with this translation is punctuation. It is particularly problematic with regard to this sentence. The original manuscript had no punctuation marks at all, as is the case with all the Arabic writings of the time. All sentences were linked together with the letter "w" (pronounced waw) or the letter "f" (pronounced fa). While the latter implies causality, the former is simply a continuation of a sequence of events which may not imply causality. In this case, when the editors punctuated the manuscript, they added a period after the insertion. But the new sentence still starts with the adjunct "w" which would be literally translated to "and." Therefore, it is not clear from the sentence whether Al-Maqrízi is referring to the price of the dinár as increasing further in unofficial market exchange *vis-à-vis* the dirham or to the increase in the price "level," since he is referring to the increase singularly as "the price." The latter seems to be more likely to be the case, since the depreciation of the dirham *vis-à-vis* the dinár will result in a decrease in its purchasing power.
  - 19 The phrase used by Al-Maqrízi is "tawaqafat al-a'wal," which literally means "the



conditions stopped.” This, however, is a common way in Arabic to refer to a considerable slowdown in business activities.

- 20 In their local dialect, Egyptians refer to the old section of Cairo (Qáhirah, in Arabic) as Egypt (Maʔr, in Arabic). Therefore, one has to distinguish between Maʔr as Egypt and Maʔr as Old Cairo from the context of the narration. In this paragraph, however, it is not clear whether Al-Maqrízi is referring only to the markets in the old section of the city or to the markets of Egypt, in general.
- 21 The muhtasib is the market supervisor (an office which Al-Maqrízi held several times), who dispatched the two officers of the ʔisbah at the request of the master of bakers.
- 22 A rubáʔiah was a dinár or a dirham minted and named by the ʔAbbasid Calíf Al-Maʔmoun (Al-Maqrízi 1940:19).
- 23 The insertion is from the Egyptian manuscript (sheet 19 B).
- 24 I have so far been translating “ghalá” literally to mean “high prices.” However, in this context, Al-Maqrízi is referring not only to a period of high prices but also to one with severe consequences, such as famine.
- 25 Al-Maqrízi uses the term “ikhtiláf al-nuqoud” which means “the coins became different.”
- 26 Earlier, Al-Maqrízi mentions that in 796 the Nile receded, and a period of high prices followed for two years (41–2).
- 27 Al-Maqrízi is referring to his book titled: *Kitáb Al-Sulouk Limaʔ rifat Duwal Al-Mulouk*, which was later published in four volumes (1956 and 1970–3).
- 28 The quote reads in Arabic: Wa Idhá aradná an nuhlika qaryatan amarná nutrifihá fa-fasiqou fihá fa-haqa ʔalayhá al-qawl fa-damarnáhá tadmiran. Some may translate the former statement differently. Mine is literal. In Ali (1938:698), for instance, it reads: “‘When We decide to destroy a population, We send a definite order to those among them who are given the good things of this life and yet transgress, so that the Word is proved true against them: then We destroy them utterly [Qurʔán 17:16].’”
- 29 The last time Al-Maqrízi mentions the price of an ardeb of grain is on page 42 of the manuscript, when it was sold for 400 dirhams in the year 1403. In this, he attempts to show that such a high price for the ardeb of grain was not only due to the receding Nile, but also is a result of the combined effect of many causes which are being enumerated.
- 30 Peasants were generally expected to work without compensation on fortifying the edges of the Nile in order to prevent its flooding. See Al-Maqrízi 1956, vol. 1:638 and 834. From the editors’ note.
- 31 This was the time when the mamluk generals started to acquire more political power.
- 32 This was when the ruling members of the Abbasid dynasty intermarried with Persians, and the latter gradually took over power.
- 33 According to Sauvare (1872:102–4), four kinds of silver coins circulated in the regions of the Islamic empire:
  - 1 Pure silver,
  - 2 nonpure silver forgeries that were accepted only in commercial, nongovernmental transactions,
  - 3 coins called “al-mubahraja” that were of inferior quality of silver and were not officially minted, thus were not accepted by either individuals or governments, and
  - 4 coins called “al-stooqa” that were made of silver-plated copper which were also considered illegitimate dirhams (62, 67 in footnotes by the editors).
- 34 Al-Mussabbahi is known to be a prolific historian who authored thirty books. The book from which the above paragraph is extracted has 26,000 pages. However, with the exception of the fortieth volume of *Al-Tárikh Al-Kabír*; or *The Grand History*, none of his books survived. The remaining of his work survived as scattered quotes by historians. See Hasan, *Al-Faʔimioun fir Maʔr*; p. 8. From the editors’ note (64).

- 35 Editors' insertion. I believe that this insertion is from one of the other two manuscripts which the editors did not footnote.
- 36 The insertion is from the Egyptian manuscript (sheet 35 A).
- 37 Since there is no indication on the manuscript as to where the quote from Al-Mussabbahí's text ends, the editors cautiously conclude in a footnote that the last sentence is also part of the quote.
- 38 Al-Maqrízi uses the word "As-Sham," the term used by Arabs to refer to Greater Syria, which was divided after World War I by the colonial powers into Syria, Lebanon, Jordan, and Palestine. As-Sham in spoken Arabic refers now to the city of Damascus.
- 39 The translation will start with the next paragraph in manuscript after the commentary section. Hereafter, I will do the same whenever no page numbers are added at the end of a translated paragraph.
- 40 Here again, "ta'annat fíha" means "to become obstinate or inflexible with them." However, the term also means "to be confused or puzzled with them." One can infer from the passage that both meanings of the word indicate what Al-Maqrízi had in mind. For the confusion of the public regarding the true value of coins make them become obstinate in accepting them.
- 41 The editors note that the date is 750 in the three manuscripts, with the exception of the Cambridge manuscript where the scribe notes on the margin that the date "may be 650," for this event takes place before the sultanate of Al-'Adel Kitbughá, which began in 694/1294. However, the date mentioned by Al-Maqrízi in his *Kitáb Al-Sulouk Lima'rifat Duwal Al-Mulouk* is 759/1357–8 (1970: vol. 3, 1131). The 650 date seems to make more sense from the context of the text because after the reign of Kitbughá, flous were no longer counted but weighed, whereas in this paragraph they were still being counted.
- 42 Al-Maqrízi uses the term "al-fái'dah" which also implies "interest" on a loan or "utility."
- 43 A literal translation of this sentence is "he secured the minting of flous with money that he determined upon himself from the Arabic sentence which reads as "Damina darb al-flous bimalin qarrarahu 'ala nafsihi."
- 44 Al-Maqrízi implies by "announced," or "called," the official orders of the ruler which were read aloud by a messenger in markets or wherever crowds of people gathered.
- 45 The "sultan's provision of means of subsistence in times of high prices" is referred to in the manuscript as "al-silát." The practice is a form of householding and redistribution, where, ideally, the sultan is supposed to assume the position of the head of household.
- 46 This is the key error in the manuscript that solves the otherwise inconsistent report on the value relationships between the coins. 150 flous should have been 150 dirhams-flous, the latter being the measure which represents the standard of value of the flous. For, as Al-Maqrízi has indicated above, flous are no more valued by count but by weight. Each mithqál of gold, being the weight of a dinár, is now equal in value to 150 dirhams-flous, each of which is the quantity of flous (copper coins) weighing 24 dirhams, the latter being a measure of weight that equals to 2.975 grams. See the commentary section below.
- 47 In other words, the value of a silver dirham vis-à-vis the unit of measure dirhams-flous is 1:5.
- 48 The insertion is from the Egyptian manuscript (sheet 37 B).
- 49 That is, each mithqál of gold, being the weight of a dinár, is equal in value to 150 dirhams-flous, each of which is equal to the weight of 24 silver dirhams in flous. In other words, the unit of measure dirham-flous is the quantity of flous (copper coins) weighing 24 dirhams, the latter being a weight measure. See the commentary section below.
- 50 Or, in contemporary language, "reduced the purchasing power of their money."
- 51 For a reference on the subject of Islamic coins, see De Bouard (1939:427–59). Editors' note.
- 52 Aqsám is the plural of qism meaning "division" or "segment." However, since Al-Maqrízi is dividing people according to their sources of income, I chose to translate it into "class."

- 53 Al-Maqrízi refers to them as “fuqahá’,” which includes legislators, teachers, theologians, philologists, reciters of the Qur’án, and all those who devote their time to studying and understanding.
- 54 Al-Maqrízi uses the word “amwál,” which is the plural of “mál” meaning money. However, amwál could also be considered in this context as wealth.
- 55 While “kharaj” strictly means “land tax,” we know from section three that land taxes were not the only dues that increased. Al-Maqrízi specifically referred to the increase in land rent as the second cause for the increase in prices and the depression that followed.
- 56 Al-Maqrízi uses the phrase “má shá’ Allah,” which, if taken out of context, strictly means “what God wished.” This, however, is a figure of speech in Arabic that should not be taken literally. It takes on different meanings when used in different contexts.
- 57 The Arabic word used in the manuscript is “al-‘álam,” which means “the world” in formal Arabic but means “people” in informal Arabic. However, the editors point out that, in all the three versions of the manuscript, the word used is “al-‘ilm,” which means “knowledge.” The meaning of the sentence nevertheless remains obscure.
- 58 3,000 dirhams-flous divided by 150 dirhams-flous=20 mithqáls of gold, where 1 mithqál of gold equals 150 dirhams-flous.
- 59 Witnesses are the employees of the Mamluk state who certify documents at government offices. See Al-Maqrízi (1956, vol. 1:593, 667, 937, 1046). Editors’ note.
- 60 For “interest payment on capital,” Al-Maqrízi uses the term “‘ushour amwál al-tijarah” which, if literally translated, means “the tenths [1/10s] of trade monies,” which is a form of tax levied on profits gained from trade.
- 61 The insertion is from the Egyptian manuscript (sheet 39 A).
- 62 By the word “prophetic community” Al-Maqrízi is referring to people who follow the rules set by one of the prophets of the three divine religions.
- 63 Al-Maqrízi (1970, vol. 1:88–9) mentions an interesting note on the repeal of a law that required the broker to pay half of his fee to the sultan: “The reason for the elimination of the half-commission fee tax [is the following]: Whoever sells an asset, gives, according to a traditional rule, a 2 per cent commission fee to the broker. When Nasir Al-Dín ibn Al-Shaikhy assumed the vizierate, he taxed the commission AL-MAQRÍZI AND THE DEPRESSION OF 1403–6 fee by 50 per cent. The broker, in turn, attained his usual fee by shifting the tax on the seller. As a result, people incurred a loss. Therefore, they [complained] until the sultan ordered the abandonment of the tax.” From the editors’ note.
- 64 Because of space limitation, I chose to translate only the prices of those commodities that can be compared between Cairo and Alexandria.
- 65 Corrected from 5 to 6, so that 150 *mu‘ámalah* dirhams divided by 6.25 *mithqáls* of gold=24 *mu‘ámalah* dirhams per *mithqál* of gold, as Al-Maqrízi concludes below.
- 66 This rate is verified by multiplying the gold equivalent of a silver dirham by the number of silver dirhams exchanging with a dinár. Thus, 0.04167×24 silver dirhams=1 *mithqál* of gold.
- 67 Al-Maqrízi intends in this sentence to convey the notion that prices would be the same as before the crisis, had values been measured in silver dirhams rather than in *dirhams-flous*. See below.
- 68 The insertion is from the Egyptian manuscript (sheet 41 B).
- 69 A correction from 1/3 to 2/3 and from 700 to 900 to arrive at a consistent example.
- 70 The last two numbers in the manuscript are 5 *dirhams-flous* and 10 *uqihahs*. They are corrected here to 6 and 12 in order for Al-Maqrízi’s example to be consistent.
- 71 I will leave it to historians of economic thought to conduct a comparative study between the work at hand and the work of Al-Maqrízi’s scholastic contemporary: *The Summa Theologica* of St. Antonine (1389–1459), who according to Schumpeter is “the first man to whom it is possible to ascribe a comprehensive vision of the economic process in all its major aspects” (Schumpeter 1954:95).

## REFERENCES

- Ali, Abdallah Yousef (1938) *The Glorious Kur'an: Translation and Commentary*, Beirut: Dar Al-Fikr.
- Allouche, Adel (1994) *Mamluk Economics: A Study and Translation of Al-Maqrízi's Igháthah*, Salt Lake City, Utah: University of Utah Press.
- Asadí, Muhammad ben Muhammad ben Khalíl Al- (1968) *Al-Taysír wa Al-I'tibár wa Al-Tahrír wa Al-Ikhtibár fímá Yajibu min ?usn Al-Tadbir wa Al-Tasarruf wa Al-Ikhtiyár*, ed. 'Abd Al-Qádir Ahmad Tulaymát, Cairo: Dar Al-Fikr Al-'Arabi.
- Baalbaki, Rohi (1993) *Al-Mawrid*, Beirut: Dar El-Ilm Lilmalayin.
- Baek, Louis (1991) "The Economic Thought of Classical Islam," in William J.Barber (ed.), *Perspectives on the History of Economic Thought: Themes in Pre-Classical, Classical and Marxian Economics*, vol. V, Aldershot: Edward Elgar.
- De Bouard, M. (1939) "Sur l'évolution monétaire de l'Égypte médiévale," Cairo: *Review of Social Economic, Political, and Statistical Legislation* xxx.
- De Sacy, Sylvestre (1905) *Traité des Monnaies Musulmanes* (French translation of Al-Maqrízi by Bibliothèque des Arabisants Français), Cairo: Imprimerie de l'Institut Français, d' Archeologie Orientale, vol. I, pp. 9–66.
- Essid, Yassine M. (1987) "Islamic Economic Thought," in S.Todd Lowry (ed.), *PreClassical Economic Thought: From the Greeks to the Scottish Enlightenment*, Boston: Kluwer-Nijhoff Publishers, pp. 77–102.
- (1988) *Al-Maqrízi: Ou l'Economie de la Crise*, Ph.D. Thesis, Department of History, Université de Paris I, Pantheon-Sorbonne.
- Hasan, Ibráhm Hasan (1932) *Al-Fa?imioun fir Ma?r*, Cairo: Wazárel Al-Ma'árif Al'Umoumiyah.
- Hassan, Ali Ibrahim (undated), *Tarikh Al-Mamaleek Al-Bahriah*, Cairo.
- Hennequin, G. (1977) "Bonne ou mauvaise monnaie: mutations monétaires et loi de Gresham avant l'époque moderne," *L'Information Historique* 39:203–12.
- (1979) "Monnaie ou monnayage? en relisant le traité des monnaies d'Al-Maqrízi," in G.Hennequin (ed.), *Hommages a la memoire de Serge Sauneron*, Paris, vol. 1, pp. 317–28.
- Ibn Khaldun (1967) *The Muqaddimah: An Introduction to History*, 2nd edn. (translated by Franz Rosenthal), 3 volumes, Princeton: Princeton University Press.
- Ibn Mammáti, As'ad Ibn Al-Mahadhdhab (1943) *Kitáb Qawáwin Al-Dawáwin*, edited by 'Azíz 'A?iyah, Cairo: Al-Jam'iyah Al-Zirá'iyah Al-Málákíyah.
- Le Strange, G. (1890) *Palestine Under the Moslems*, London: Palestine Exploration Fund.
- Lowry, S.Todd (ed.) (1987) *Pre-Classical Economic Thought: From the Greeks to the Scottish Enlightenment*, Boston: Kluwer-Nijhoff.
- Maqrízi, Taqy Al-Din Al-(undated) *Shudhour Al-'Uqoud fi Dhikri Al-Nuqoud*, ed. AlTabátbái, Al-Najaf, Iraq: Al-Maktabah Al-Murtadawiah. Registered and shelved in 1937 in the National Egyptian Library of Cairo under the reference numbers 4064/1937, H 7176.
- (1940) *Kitáb Ighathat Al-Umma Bikashf Al-Ghumma*, edited by Mu?ammad Mustafa Ziadah and Gamal Al-Dín Muhammad Al-Shayyal, Cairo: Matbaaet Lagnat Al-Talíf wa Al-Targama wa Al-Nashr.
- (1956) *Kitáb Al-Sulouk Lima'rifat Duwal Al-Mulouk*, Volumes 1 & 2, ed. Mu?ammad Mus?afa Ziyádah, Cairo: Matbaaet Lagnat Al-Talíf wa Al-Targamah wa Al-Nashr.
- (1970) *Kitáb Al-Mawá'i? wa Al-I'tibar bi-Dhikr Al-Khi?a? wa Al-Athár*, Volumes 1 & 2, Baghdad: Al-Muthanná.
- (1970–3) *Kitáb Al-Sulouk Lima'rifat Duwal Al-Mulouk*, Volumes 3 & 4, ed. Sa'id 'Abd Al-Fattáh 'Ashour, Cairo: Ma'ba'at Dár Al-Kutub.
- Minsot, E. (1936) "Au sujet du traité des monnaies musulmanes de Maqrízi," *Bulletin de l'Institut d Egypte* (Paris) 19:45–61.
- Oulalou, F. (1976) "La Pensee socio-economique d'Al-Maqrízi," *Bulletin Economique et*

- Social du Maroc* 130:1–136.
- Sauvaire, M.H. (1872, 1885) *Materiaux Pour Servir a l'Histoire de la Numismatique et de la Metrologie Musulmanes*, 2 volumes, Extrait du *Journal Asiatique*, Paris: Imprimerie Nationale.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis*, New York: Oxford University Press.
- Smith, D. (ed.) (1955) *A?las Al-Tárikh Al-Islámíz* (translated by Záki Khorshid), Cairo: Matba'at Masr.
- Tychsen, O.G. (1797) *Al-Makrizi Historia Monetae*, Rostock: Arabical Ecodice Escorialensi.
- Wehr, Hans (1943) *The Hans Wehr Dictionary of Modern Written Arabic*, edited by J.M. Cowan, Ithaca, New York: Spoken Languages Services Inc.
- Wiet, G. (1932) *Les Biographies du Manhal Safi*, Cairo: Memories De L'Institute D'Egypte, T. 19.
- Zettersteen, K.V. (1919) *Beitrage zur Geschichte der Mamlukensultane*, Leiden: Brill.

## Part III

# THOUGHTS ABOUT MONEY, CREDIT, AND FINANCE



## A TEST OF SCHUMPETER'S APPROACH TO MONEY

The case of the sixteenth-century French  
monetary debate

*Ghislain Deleplace*

“Value and Money” in Schumpeter’s *History of Economic Analysis* (Part II, chapter 6)<sup>1</sup> is a good illustration of the fact that “views on money are as difficult to describe as are shifting clouds” (289). It is also an example of the challenge Schumpeter faces in following his own advice: “I prefer putting my doubts frankly before the reader to dogmatizing with a confidence I do not feel” (290, n. 5).

In this chapter, Schumpeter makes a sharp methodological distinction between real analysis, in which “money enters the picture only in the modest role of a technical device” (277), and monetary analysis, which “introduces the element of money on the very ground floor of our analytic structure” (278). Then, in a section dealing with “Fundamentals,”<sup>2</sup> he opposes at a theoretical level metallism, in which “it is logically essential for money to consist of, or to be ‘covered’ by, some commodity” (288), and cartalism (or antimetallism), “wherever we find denial of [that] proposition” (288). Finally, he distinguishes two levels at which metallism and antimetallism may be considered—the theoretical and the practical: for “theoretical and practical metallism need not go together. An economist may, for instance, be fully convinced that theoretical metallism is untenable, and yet be a strong practical metallist” (289).

It is unclear, however, whether one’s stand on one of these three dichotomies should determine, for consistency’s sake, one’s stand on another. Doubts about this matter apply to Schumpeter’s own conception of money as well as to his treatment of particular authors. The present chapter intends first to expose possible inconsistencies in Schumpeter’s chapter mentioned above. Next an analysis of the sixteenth-century French monetary debate shows that it may be interpreted in two ways: Schumpeter’s way, which relies on the “quantity theorem” and thus makes real analysis and antimetallism consistent with each other; and the alternative discussed here, which stresses the question of the separation between the unit of account and the means of circulation. Finally, Schumpeter’s choice in favor of real analysis is evaluated in light of the difficulties faced by the integration of money in general equilibrium models.



## PROBLEMS OF CONSISTENCY IN SCHUMPETER'S "VALUE AND MONEY"

### Three distinctions

The first distinction Schumpeter makes concerns *real analysis* and *monetary analysis*. Real analysis assumes that

so long as [money] functions normally, it does not affect the economic process, which behaves in the same way as it would in a barter economy: this is essentially what the concept of Neutral Money implies.... Not only *can* [money] be discarded whenever we are analyzing the fundamental features of the economic process but it *must* be discarded just as a veil must be drawn aside if we are to see the face behind it.

(277)

This approach to money is characteristic of the orthodox treatment of money in economic theory—for example, in general equilibrium theory—and it has been referred to as a “dichotomy” by Patinkin (1964). The method it implies is clearly summed up by Schumpeter: “The specifically monetary problems can then be treated separately, much as we treat many other things separately, for example, insurance” (277).

Monetary analysis is first defined in opposition to real analysis, as the “denial of the proposition that...the element of money is of secondary importance in the explanation of the economic process of reality” (277). Positively, “its most significant sense [is] of a theory of the economic process in terms of expenditure flows” (283). According to Schumpeter, it is based on “Becher’s principle,” after the name of a seventeenth-century mercantilist author: “the observation that one man’s expenditure is another man’s income—or that consumers’ expenditure generates income” (283). Quesnay and Keynes are presented as the most prominent defenders of what might be called today a “circulation approach.”<sup>3</sup>

The second distinction made in “Value and Money” concerns metallism and cartalism (or antimetallism), terms borrowed from Knapp (1905:288, n. 2). At the theoretical level, metallism holds that

The logical source of the exchange value or the purchasing power of money is the exchange value or purchasing power of [a] commodity, considered independently of its monetary role.

(288)

Although he recognizes that the “standard” may not be a metal, Schumpeter prefers the term *metallism* to the expression *commodity theory of money* because it conveys the idea that, in this approach, the monetary function of the commodity chosen has no influence whatsoever on the value of money. The value of the money depends entirely on the characteristics that give a value to

that commodity in its industrial use. As we shall see, this idea is important to draw a distinction between metallism and the “quantity theorem,” an expression used by Schumpeter to describe the quantity theory of money.

Cartalism or antimetallism rejects that position and considers that:

It is not true that, as a matter of pure logic, money essentially consists in, or must be backed by, a commodity or several commodities whose exchange values as commodities are the logical basis of their value as money.

(289, n. 5)

Illustrations of antimetallism are found in Barbon, who renounced “theoretical metallism on the ground that ‘money is a value made by law,’ to which the value of its material is not essential” (296), and Sir James Steuart, who “made so little headway and slipped up so often that the promising beginning was lost in the metallist current” (296).

The third distinction in Schumpeter's chapter is that between *theoretical* or *practical* commitments to metallism and cartalism. The rejection of metallism can be rooted in theoretical grounds, but, because cartalism derives the origin of the value of money from the State (as in Knapp), it may require a safeguard against a bad management of it:

Lack of confidence in the authorities or politicians, whose freedom of action is greatly increased by currency systems that do not provide for prompt and unquestioning redemption in gold of all means of payment that do not consist of gold, is quite sufficient to motivate practical metallism in a theoretical cartalist; this does not involve any contradiction.

(289)

### **Difficulties with Schumpeter's combination**

Schumpeter's own cocktail of preferences combines real analysis, theoretical cartalism, and probably practical metallism. His position toward metallism is straightforward at the level of theory—“I am taking it for granted that theoretical metallism is untenable” (289, n. 5)—and it seems that he speaks for himself when stating that there is no contradiction between theoretical cartalism and practical metallism. But it is on the opposition between real analysis and monetary analysis that he most commits himself.

Arguments in favor of real analysis are not found in the chapter under discussion, which deals with monetary theory prior to Adam Smith, but dissatisfaction with monetary analysis is obvious in two places. In both cases, Schumpeter's appraisal obviously applies to the form under which “monetary analysis has once more conquered in our own time” (276)—namely, Keynesian theory.<sup>4</sup>

The first critique is “the alliance between monetary and aggregative analysis, [which] is not a logical necessity but is nevertheless close” (278). Because

monetary aggregates are immediately homogenous, monetary analysis tends to reason in macroeconomic terms, and to discard the study of individual behaviors when dealing with the economic process as a whole. But “it can be strictly proved that this hypothesis is in general contrary to fact” (279); an illustration is provided by Schumpeter in the case of investment, and a long footnote rejects Keynes’s treatment of investment, because it “excludes the very essence of capitalist reality” (280, n. 6). This issue was later to give birth to the attempt to root macroeconomic analysis in microeconomic foundations.

The second critique concerns the antisavings prejudice of monetary analysis: “so soon as we see the economic process—primarily or exclusively—as a system of streams of expenditures...we may be led to identify saving with obstruction to that flow of expenditure and, in the limiting case, to see it in the role of economic Disturber General” (280). This conception is stigmatized as the view of “every servant girl [who] has felt that all would be well if only her employers spent their money freely enough” (281), or as “a major item of the economics of the man in the street” (281). Although the “association with [these popular prejudices] does not constitute a *prima facie* case for rejecting scientific monetary analysis” (281), it is striking that Schumpeter disdains a problem—the so-called law of reflux—which is so important in any circulation approach, from Quesnay and Marx to Keynes. He is even more ironical in his 1936 review of Keynes’s *General Theory*, where he concludes with the suggestion to rewrite the history of the French *ancien regime* in these terms:

Louis XV was a most enlightened monarch. Feeling the necessity of stimulating expenditure he secured the services of such expert spenders as Madame de Pompadour and Madame du Barry. They went to work with unsurpassable efficiency. Full employment, a maximum of resulting output, and general well-being ought to have been the consequence. It is true that instead we find misery, shame and, at the end of it all, a stream of blood. But that was a chance coincidence.

(Schumpeter 1936:795)

The irony has disappeared by the time Schumpeter wrote Keynes’s obituary in 1946, but the main critique survives in it, as well as in *History of Economic Analysis*, and with it the rejection of monetary analysis.

One may then raise the question: is Schumpeter being consistent in his cocktail of real analysis, theoretical antimetallism, and practical metallism? Three difficulties confront anyone dealing with that question.

First, in rejecting theoretical metallism, Schumpeter observes that “according to the metallist view, the theory of money derives directly from the logically prior theory of barter” (288, n. 2). This is precisely the method of real analysis, in which the economic process “behaves in the same way as it would in a barter economy” (277). One must conclude that theoretical metallism is consistent with real analysis, but the “classical dichotomy” may be understood

in such a way that real analysis encompasses theoretical antimetallism. The question is: what way?

The second difficulty concerns the conception of money as a "technical device." After section 1 ("Real Analysis and Monetary Analysis"), the section on "Fundamentals" starts as follows: "We now turn to the theory of money in the narrower and still more usual sense—let us say, briefly though imperfectly—the theory of money as a technical device" (288). So it seems that, at this point of his argument, Schumpeter is writing from the point of view of real analysis, where by definition "money enters the picture only in the modest role of a technical device that has been adopted in order to facilitate transactions" (277).

Subsection (c) of "Fundamentals," however, deals with the "Survival of the Antimetallist Tradition" in the seventeenth and eighteenth centuries. Here Schumpeter considers authors (like Potter, Law, Boisguillebert, and Ortes) introduced in section 1 to illustrate monetary analysis. The case of Boisguillebert is interesting: he is called in section 1 "the most noteworthy example of all" of the defenders of "Bechers Principle" (284), and he is credited in section 2 with a "correct" combination between theoretical antimetallism and practical metallism (293–4, n. 11). How may antimetallism consider money as a technical device—and hence belong to real analysis—and at the same time be part of monetary analysis, which "spells denial of the proposition that the element of money is of secondary importance" (277)?

A third difficulty lies in the relation between "theory" and "practice." The distinction made by Schumpeter between them seems to be sharp: on one side "pure logic" or "pure theory," on the other side "the historical origin of money" or "circumstances and individual or group standpoints and interests" (289–90, n. 5). Schumpeter confesses that it is not always easy to distinguish them in particular authors (such as Aristotle or Galiani), and he praises the eighteenth-century author Joseph Harris for having avoided confusion and illustrated that "any satisfactory theory of money implies a theory of the economic process in its entirety" (291–2, n. 9). This is precisely what economic analysis—whether real or monetary—is supposed to offer.

These three difficulties may be examined in terms of two problems: the relation between real or monetary analysis and metallism or antimetallism; the relation between theoretical metallism or antimetallism and practical policy. The sixteenth-century French monetary debate provides an opportunity to study these problems in the light of Schumpeter's approach.

## **THE "QUANTITY THEOREM" AND THE DEBATE BETWEEN NOMINALISTS AND METALLISTS**

### **Schumpeter on Bodin**

In section 4 ("The Quantity Theory") of the chapter under discussion, Schumpeter evokes debates about the price revolutions of the fifteenth, sixteenth, and

seventeenth centuries. Surprisingly, he observes that these debates concern the *effects* of those revolutions and not their *causes*, which, according to him, are obvious: “For debasement of the currency—devaluations by governments as well as fraudulent clipping of coins by individuals—and the torrent of American gold and especially silver were before everyone’s eyes” (311). This does not mean that a theory sustains this obvious diagnosis, at least until Bodin (1568), who “is universally voted the ‘discoverer’ of the Quantity Theory of Money” (311).

Concerning Bodin, Schumpeter comes to an ambivalent evaluation. On the one hand, Bodin stresses the increase in the supply of gold and silver among several causes of the inflation, and “this analysis needs but little readjustment or generosity of interpretation to be a correct diagnosis of the historical case as it presented itself in 1568” (312). On the other hand, “recognition of the relevance of ‘quantity’ [of gold and silver] to the value of money in this sense and for this reason has no more to do with the Quantity Theory of Money than that the word quantity occurs in both arguments” (312). The reason is simple, but often overlooked in the literature. For Bodin, the increase in the supply of precious metal, in comparison with other commodities, makes its relative price fall. As the value of money is linked to the relative price of the metal, the monetary prices of all the commodities increase. Inflation is then a consequence of an increase in the quantity of metal, not of money. This is what Schumpeter labels “simple metallism.”

The “quantity theorem”<sup>5</sup> implies something else: that inflation is linked “not [to] the fall in the commodity value of the gold...but [to] the increase of the quantity of coins per se” (313). The two explanations do not have the same implications. In the first case, the total increase in the quantity of metal is relevant, and the rise in monetary prices will depend on the demand schedule for it “in the *commodity* use” (Schumpeter’s italics); in the second case, only the increase in the quantity of metal “in the *monetary* use” (313) will determine a rise in the general price level, which is exactly proportional to it. The conclusion is of the utmost importance for the theory of money: “The mechanism that determines the value of gold in circulation is different from the mechanism that determines the value of the industrial gold or of any other commodity” (312). Only the usual reference to perfect gold monometallism—“such that gold may move freely in and out of the monetary system” (311)—may obscure that distinction, because in that case

the two different mechanisms must, of course, produce the same values of gold in the monetary and in the industrial sphere; and the influences of an increase in gold production upon the commodity value and upon the monetary value of gold so intertwine that we do not see either quite clearly.  
(313)

As is well known, at least since Patinkin (1964), this uniformity produced by “two different mechanisms” is the central issue in the general equilibrium theory of money.

One could dispute Schumpeter's interpretation of Bodin, which implies the determination of the relative price system by a definite supply-and-demand theory of value. But the important point here is the clear distinction between metallism and the quantity theorem. Metallism, for Schumpeter, is "the theory of 'simple metallism,' i.e., theoretical metallism without the specifically quantity-theorem element in it" (314, n.2); the quantity theorem, which, although it may be combined with metallism, does not logically imply it, is another matter:

It is one of the strong points of the quantity theory that it can be applied to the case of paper money without any auxiliary construction. And in this case—when there is no commodity value of the material to cause ambiguity about what quantity we mean and what *modus operandi* we attribute to it—all becomes perfectly clear. This logical affinity of the quantity theorem with theoretical cartalism should be borne in mind: the theorem essentially amounts to treating money not as a commodity but as a voucher for buying goods.

(313)

This quotation makes another point "perfectly clear:" it is the adherence of Schumpeter to the quantity theorem, which provides the link between his method of real analysis and his antimetallist position. The "ticket analogy," for the paternity of which he credits Berkeley ("Whether the true Idea of Money, as such, be not altogether that of a Ticket or Counter?" quoted on 296), is an illustration of the quantity theorem, which provides the logical basis for the integration of antimetallism into real analysis and monetary analysis as well. Then the choice between the two methods is not a monetary question; it depends on the relevance of each one for the analysis of "the economic process as a whole."

### **Nominalists and metallists on the unit of account**

Concentrating on Bodin and the quantity theorem, Schumpeter overlooks what is in fact the true issue of the sixteenth-century French monetary debate. That debate<sup>6</sup> concerns the separation of the unit of account and the means of circulation. This separation of function was then the *rule* in France, as elsewhere: one *counted money* in "*livre tournois*" (which was an "imaginary money") and *paid out money* in golden *écus* or silver *testons* (which constituted "real money").

When dealing with the debates that led to the currency reform of 1577, historians of economic thought have given particular prominence to the names of Malestroit and Bodin, but a treatment of these two "spokesmen" hardly does justice to the rich intellectual climate prevailing at the time. All the participants in these debates criticized the separation between unit of account and means of circulation. The *livre tournois*, as the money of account, was

blamed for making buyers and debtors set coins at a price greater than what they were legally worth, and thus settle prices and debts stipulated in the unit of account with a smaller number of coins. If this separation were abolished, it was argued, all voluntary values of coins would be definitely eliminated. This criticism arose from two different grounds, corresponding with two opposite conceptions of money.

One view of money was based on a nominalist approach. This approach gradually led to an abandonment of the medieval conception of royal money as a sign of sovereignty, in which it was argued that the coin was the prince's thing (it even had his portrait engraved on it), that it was part of his domain, and that its "kingly" character manifested itself by the seigniorage levied on the coinage. The development of trade and the substitution of the tax system for crown estate revenues little by little shifted attention toward "public interest" (i.e. the need for a means of circulation) and "finance" (i.e. the totality of crown revenues). From having been a sign of sovereignty, royal money became a sign of sociality, a means of measuring the value of everything exchanged in the society. The function of the prince, then, was to unify this measure for all the subjects of his realm, and to authenticate the referent chosen as the standard for the value of things. But there had to be ways to make sure that the prince did not misuse this function to increase his own resources—as, for example, by engraving the referent on the coins themselves, which would then bear both the mark of the sovereign and the indication of their value. This approach did not challenge the necessity for a unit of account (in other words, of a specifically *monetary* unit of measure), but it advocated strict correspondence between the measuring unit and the means of circulation.

A corollary view was to reject the idea that the value of a coin depended on the metal contained in it. As Dumoulin stated, "the intrinsic value, the substance and essence of money is its current value by public ordinance or institution, not its material"; a "signed coin" is not a weight of metal.<sup>7</sup> From this point of view, the weight and fineness of coins merely symbolize the power and credibility of the princes ruling over various sovereign areas, and that is why their legal value must not exceed the value of the metal they contain (aside from manufacturing fees).

This argument was turned back by the *Cour des monnaies*: the credibility of the prince, they declared, was jeopardized by people who accepted deteriorated, light, or worthless coins, and both giving and taking such coins ought to be stopped. The introduction of the *écu* as the unit of account would make everyone concerned with the intrinsic value of coins, so that no one would accept just anything: "this is the best way to keep a rein on people, and on the prince himself, to stop him from raising the price of coins."<sup>8</sup> In its final remonstrance of 1577, the *Cour des monnaies* advocated this policy by maintaining that gold and silver were the measure of all things, and that in a well-ordered republic, measures were not changed, even if the price of goods came to be changed.

The underlying conception of money was evidently opposed to the nominalist approach. It implied that if the foundation of money was precious metal, counting in gold amounted to counting in money, and there was no need for an imaginary unit of account. Defined as it was by its weight in fine gold, the *écu au soleil* itself could be the unit of account, as it had been among the exchange bankers in the Lyons fairs since 1575. Starting in 1578, the homogeneity of the accounting system was thus achieved in France through this reference to the *écu*. One could, of course, pay in other gold or silver coins; their legal value in *écu* was calculated on the basis of their weight of fine metal and, in the case of silver coins, by then using the official monetary ratio for adjustment. Moreover, since the value of each coin stemmed entirely from the weight of metal it contained (and not from the power of the issuer), it was vigorously asserted that all coins had to circulate strictly at their weight in metal, under penalty of confiscation for the person who accepted them and a fine of twice their value for the person who proposed them.

The importance attributed to metal in the debates leading up to the reform must not make us lose sight of the fact that no one proposed to adopt *counting by weight*, including systematic weighing and assaying the metal in the course of every exchange. It was the *count by coins* that was introduced in 1577, and this required the sovereign to determine the system of coins that were to circulate—specifically, the relation between the central coin chosen as unit of account and the other coins. Besides, the nominalist approach, which advocated the maintenance of the *numeraire account*, did not call into question the circulation of specie (as against a generalized cancellation of private claims and debts operated through bank money), which would require fixing the relationship between the unit of account and each of the coins allowed to circulate.

In both cases, monetary stability was expected to be achieved through the establishment of a *strict correspondence between the unit of account and the means of circulation*. The subject of the debate was whether the sovereign should *arbitrarily* determine this correspondence (its inviolability being ensured, even against the sovereign himself, by the inscription of a number in the unit of account on each coin), or whether the royal authority should be made to apply a *rule*: the proportionality to the weight of metal contained in the coin (“equipollation”). In a way, this debate was an early version of the modern debate of “rules versus discretion,” as illustrated by today’s controversy between monetarists and Keynesians.

The thought of adjusting monetary circulation to the functioning of the metal market, an idea that is usually associated with the gold standard today, did not even enter into the debate; this is hardly surprising, since there existed neither a market theory nor a proper international gold market. So if the “metallists” can by no means be said to have upheld the concept of commodity-money, the “nominalists” were equally far from believing in an omnipotent state. In a monetary regime where the sovereign managed the unit of account by fixing the legal values at which metallic coins were to circulate, there was the risk of



a private contestation of money, which means that the political definition of the unit of account would be called into question by private evaluation. The common objective was not so much to force a discipline on the sovereign as it was to suppress the tendency to establish “voluntary” values of coins differing from the legal values.

The conclusion one may draw from a quick look at the French debate is that the main issue was not so much the effect of “the torrent of American gold and especially silver” but the influence of the separation between the unit of account and the means of circulation on the debasement of the currency. It is surprising that Schumpeter overlooked that issue, although the debate stresses the opposition between metallism and antimetallism. But his approach to these earlier debates may be explained, once again, by his commitment to real analysis.

### REAL ANALYSIS, NUMERAIRE, AND MONEY

In the chapter under discussion, Schumpeter mentions the concept of the unit of account but does not show a particular interest in it. He observes that it may be “defined by quantities of metal” and used as “a bookkeeping device”: “in this sense the money of account also entered monetary theory of the metallist type” (296), as in Galiani.

The case of Steuart is most perplexing. Schumpeter observes that he *defines* (Schumpeter’s italics) money as “‘the universal measure of what is called value ...’—a faulty way of defining a pure *numeraire* of which he thus may be called the discoverer” (297); and that this money of account is “devoid of any commodity connotation” (297); but that he “does not succeed in explaining how such a unit can be theoretically constructed and how it might function in practice” (297). In *extremis*, Steuart is rescued by the fact that “he had the idea [of the money of account] and he also saw metallic money in its true light, namely, in the light of a very special case” (297).

This treatment of Steuart (presented earlier as an unfortunate defender of monetary analysis) shows that the only aspect of the unit of account which interests Schumpeter is that it may be used as a weapon against metallism. But the idea that the definition of money as a unit of account may provide the foundation of a genuine approach—monetary analysis—does not appear in Schumpeter’s treatment of this approach.

Retrospectively, the adherence of Schumpeter to real analysis explains that blindness. In general equilibrium theory, the function of the measure of prices is devoted to a mere *numéraire*, which, in contrast with Steuart’s supposed theory, may be any commodity; this function is *not* a monetary one. Then money is *defined* as a medium of exchange, as it is generally in the real approach. By contrast, the monetary approach starts with money defined as a unit of account and explores how circulation may be organized on that basis in systems of payments.<sup>9</sup> The sixteenth-century French monetary debate between nominalists and metallists appears enlightening from the perspective of

monetary analysis, but a defender of real analysis like Schumpeter is concerned only with the treatment of the quantity of the medium of exchange.

Drawing heavily on the quantity theorem to make his antimetallist position consistent with his real approach, Schumpeter exposes himself today to the consequences of the recognized failure to integrate money—whether commodity money or fiat money—in general equilibrium theory. Until now, a conception of money as “voucher for buying goods” provides no answer to

the most serious challenge that the existence of money poses to the theorist [which] is this: the best developed model of the economy cannot find room for it. The best developed model is, of course, the Arrow-Debreu version of a Walrasian general equilibrium.<sup>10</sup>

The choice between the real approach and the monetary approach does depend on their respective capacity to deal with money, and not only, as Schumpeter stated, on their ability to model the economic process as a whole.

### NOTES

- 1 Unless otherwise marked, all references in this chapter are to Schumpeter (1954).
- 2 The editor of *History of Economic Analysis* (Elizabeth Boody Schumpeter) mentions that the author had suggested “Ground Theory” for the title of section 2 in chapter 6; but she prefers to adopt the title used for the corresponding sections in Parts III and IV of the volume (288, n. 1).
- 3 On the “circulation approach,” cf. Deleplace and Nell (1996).
- 4 There are no fewer than three footnotes referring to Keynes in the first six pages of the chapter, where the methodological opposition between real analysis and monetary analysis is stressed.
- 5 “We shall henceforth speak, instead of the quantity *theory*, of the quantity *theorem*, because it is not a complete theory of money but merely a proposition about the exchange value of money” (312).
- 6 For an exposition of the monetary and exchange regime in sixteenth-century western Europe, and of the debates about it, cf. Boyer, Deleplace, and Gillard (1994).
- 7 Cf. Dumoulin (1547:198).
- 8 *Remonstrance of the Cour des Monnaies*, published in Le Blanc (1690:349–50).
- 9 Cf. Deleplace and Nell (1996).
- 10 Hahn (1981:1).

### REFERENCES

- Bodin, J. (1568) “Le discours sur le réhaussement et la diminution des monnaies tant d’or que d’argent et le moyen d’y remédier et réponse aux paradoxes de Monsieur de Malestroit,” Paris: Le Jeune, translated in A.E.Monroe, *Early Economic Thought*, Cambridge, MA: Harvard University Press, pp. 121–41.
- Boyer, M.T., Deleplace, G., and Gillard, L. (1994) *Private Money and Public Currencies. The 16th Century Challenge*, Armonk, NY: Sharpe.
- Deleplace, G. and Nell, E.J. (eds.) (1996) *Money in Motion: the Post Keynesian and Circulation Approaches*, London: Macmillan.

- Dumoulin, C. (1586) [1547] *Sommaire du livre analytique des contrats, usures, rentes constituées, intérêts et monnaies*, 3rd edn., Paris: Jean Houze.
- Hahn, F. (1981) *Money and Inflation*, Cambridge, MA: The MIT Press.
- Knapp, G.F. (1924) [1905] *The State Theory of Money*, London: Macmillan.
- Le Blanc, F. (1690) *Traité historique des monnaies de France depuis le commencement de la monarchie jusqu'à présent*, Paris: Robustel.
- Patinkin, D. (1965) *Money, Interest and Prices*, 2nd edn., New York: Harper & Row.
- Schumpeter, J.A. (1936) "Review of *The General Theory of Employment, Interest and Money*," *Journal of the American Statistical Association* December: 791–5.
- (1946) "John Maynard Keynes, 1883–1946," *The American Economic Review* XXXVI, 4, reprinted in J.A.Schumpeter, *Ten Great Economists from Marx to Keynes*, New York:Oxford University Press, 1951 (1977 edition, pp. 260–91).
- (1954) *History of Economic Analysis*, New York:Oxford University Press.

# BANKS, CREDIT, AND THE FINANCIAL SYSTEM IN SCHUMPETER

An interpretation

*Richard Arena and Agnès Festré*

Recent advances in economic theory contributed to the reconsideration of a former analytical problem which had been neglected after World War II; that is, the relation between economic dynamics and financial structures. The introduction of the assumption of asymmetric information into macrodynamics provided the foundations for this re-examination. This hypothesis indeed explains the emergence of banks and banking institutions which fundamentally differ from financial markets since they prevent economic agents from settling contracts among themselves, which would typically permit an optimal allocation of resources. Because of informational asymmetries, banks cannot be characterized as pure intermediaries, as “brokers,” helping the workings of the market. They appear rather to be “social accountants” who substitute a set of asymmetric relations among firms for an auction market ruled by the usual law of supply and demand (Stiglitz and Weiss 1988). This conception of financial structures will obviously exert strong effects on macrodynamics especially in the realm of the business cycles theory.

Surprisingly, this problem is not a new one at all. It was, for instance, an issue that Joseph Schumpeter considered as crucial to his characterization of capitalist development. The literature, however, scarcely stressed this fact and too often interpreted Schumpeter’s theory as one in which real factors—such as technology—play the main role. This chapter adopts a different attitude: We claim that Schumpeter’s approach afforded some flexibility to both monetary and financial factors in the workings of the economic system. Moreover, Schumpeter assumed that banks play a dominant role in determining what those factors will be.

This view might seem to contrast with what Schumpeter himself sometimes asserted, that is, that he faithfully followed Walras’s ideas (Arena 1992). However, it is the *finance* side of Schumpeter’s writings that demonstrates his break with Walras, especially in light of the history of economic dynamics and of monetary theory.

For Schumpeter, the meaning attributed to the static or the stationary economic state is not indeed the one suggested by Walras but rather the one suggested by Wicksell. Schumpeter does not consider economics as a set of successive generalizations of static exchange between two commodities in which dynamics appear to be merely complications implied by the change of “fundamentals.” On the contrary, and in compliance with Wicksell’s approach, the stationary state is interpreted as a pure pedagogic device which allows the theoretician to define and characterize the main tools of economic inquiry, before focusing on and analyzing the dynamics.

Furthermore, according to Schumpeter, and here again, in the Wicksellian tradition, real and monetary factors are not considered to be independent. Instead, monetary factors strongly influence real economic phenomena. Schumpeter’s critiques of the quantity theory of money and of the notion of “*encaisse désirée*” (Graziani 1978; Messori 1983, 1984; Arena 1985), and his insistence on the “capitalistic function of money”—in contrast with its “market economy function” (Schumpeter 1917:206)—show how implausible it is that Schumpeter was a follower of Walras in the realm of monetary theory.

These views will, however, be confirmed by the following arguments taken from Schumpeter’s writings, that take into account and throw new light on Schumpeter’s ideas about money, banking, and finance. Thus, in the first section of this chapter, we shall investigate the fundamental role played by banks in creating the credit system and how credit affects that economic system. In the second section, we shall consider financial activities. This inquiry also stresses the predominance of the banks in the financial system. Moreover, the result of this inquiry shows a perspective of economic life which does not rely on the usual tools of analysis provided by auction markets.

### **CREDIT AND BANKS IN SCHUMPETER’S THEORY OF THE “COMMODITY SPHERE”**

Schumpeter renewed the Wicksellian tradition and focused on dynamics, that is, the framework of economic development. Within this framework, Schumpeter defines two “spheres.” The first one is the “business sphere” (1939: I, 124), also referred to as the “commodity sphere” or “sphere of circulation” (1917:176). It is here that the national product circulates among social groups with the help of bank money creation or credit. Therefore, the circulation in the “business sphere” is related to what Thomas Tooke called the “reflux principle,” as Schumpeter noticed explicitly:

The practically unlimited demand for credit is matched by a practically unlimited supply of credit. That this is repeatedly overlooked is due only to the prejudice which regards the resources of banks as determined by objective conditions, particularly saving, and which ignores the factor of money creation. Neither the demand for credit nor the supply of it are

unlimited in terms of goods. But what is involved here is the monetary expression of these goods. The banks can always grant further loans, since the larger amounts going out are then matched by larger amounts coming in. The demand for credit makes possible not only itself, but also a corresponding supply; and every supply makes possible a corresponding demand, so that supply and demand in this case do not confront each other as independent forces.

(Schumpeter 1917:207)

The second sphere is what Schumpeter calls “the money market,” which includes both “spheres of hoards and reserves” and “of capital” (1917:176). The common characteristic of these spheres and therefore the distinctive feature of the money market is that they both permit the working of stock markets. The money market is indeed the place in which “hoards and reserves”—or “cash reserves,” defined as “idle,” noncirculating money—and “income-yielding assets”—or “capital,” which includes the real estate market, mortgages, the stock market, and so on—are exchanged (Schumpeter 1917:176). In the “commodity sphere,” credit creation by banks is considered, by Schumpeter, as the main source of financing the economic development process. More precisely, this category of credit considered in economic activity consists of “new means of payment created ad hoc, since the entrepreneurs have no means of their own and since there are—so far—no savings” (Schumpeter 1939: II, 111). Those means are requested by entrepreneurs in order to finance their innovations. They do not only include money as such. Thus, Schumpeter enumerates them, referring not only to “commodities which in fact circulate as money,” “money made of a material the market price of which is less than the purchasing power of the monetary unit made of it,” “bank notes” but also to “current accounts and clearing accounts,” “the amount of all payments which are disbursements out of income and are handled exclusively by compensation,” and, finally, “credit instruments and claim titles of all kinds, to the extent that they in fact perform the role of money” (Schumpeter 1917).

Therefore money, strictly defined, no longer plays the role it was afforded within the circular flow: “Not only a part but the whole of the exchange process can be settled by...credit media” (Schumpeter 1934:53).

This fact implies the definition of the Schumpeterian entrepreneur as a typical debtor:

The entrepreneurial function is not, in principle, connected with the possession of wealth, as analysis and experience equally teach, even though the accidental fact of the possession of wealth constitutes a practical advantage....

[An agent] can only become an entrepreneur by previously becoming a debtor.... [The entrepreneur] is the typical debtor in capitalist society.

The argument must now be completed by the negative proof that the

same cannot be said of any other type and that no one else is a debtor by the nature of his economic function.

(Schumpeter 1934:101–3)

This feature of the category of entrepreneur and the fact that Schumpeter attributes to credit the role of reorienting financing from routine activities to innovative ones could lead to the conclusion that Schumpeter's contributions are within the realm of Banking School tradition. However, this impression quickly dissipates. On one hand, he accepts the possibility of money quantity autonomously affecting inflation and pricing and, therefore, seems to welcome a synthesis of both Banking and Currency traditions:

In any case, however, we cannot here consider quantity of “existing” or “circulating” or “available” money as an independent variable, because, although it varies in function of some elements that may, in the sense of the old quantity theory, be looked upon as data, it also varies in response to other variables of our process, entrepreneurial activity in particular.

(Schumpeter 1939: II, 546–7)

On the other hand, Schumpeter explicitly denies a complete allegiance to the tradition of the Banking School:

This should be sufficient to destroy the superstition that bank money reaching the market by way of credits granted for production cannot exert any independent effect on the price level, and, when issued in accordance with sound banking principles, cannot bring about inflation; that the role of the banks is only that of a conductor and medium of passive adjustment to commodity processes, and that the banks merely help the flow of commodities by creating its monetary complement.

(Schumpeter 1917:209)

In fact, Schumpeter's view on the endogeneity of bank money supply is far more complex. Let us reread one of the passages which might be the more complete description of his position:

[T]here is always no matter how great the amount of credit in circulation, some demand for credit which remains unsatisfied even though it is able to pay the current rate of interest. The productive demand for any commodity, e.g., wool, is limited, at constant quantity of money, by the falling probability of processing continually increasing quantities; by contrast, demand for credit is self-propagating, in that the consequences of its expansion and increasing satisfaction go on creating the economic conditions for even more credit demand. The more bank money is issued, the more credit is necessary for the purchase of one and the same quantity

of means of production, and the more, also, can economically be invested in their acquisition.

This demand for credit makes possible not only itself, but also a corresponding supply; and every supply makes possible a corresponding demand, so that supply and demand in this case do not confront each other as independent forces. To this extent, therefore, the banks determine not only to whom they will grant credit but also how much credit as a whole they wish to grant and what demand to call forth.

(Schumpeter 1917:207)

These passages highlight important indications about the respective roles of entrepreneurs and bankers in determining the volume of credit. It first shows that this determination results from an interaction between both agents. In this prospect, the initiative of the process comes from firms, but banks can decide to ration them, especially in compliance with the expectations banks can form as to whether or not the borrowed funds will be repaid:

We know already by what forces this supply is regulated: first with regard to possible failures by entrepreneurs, and secondly with regard to the possible depreciation of the credit means of payment.

(Schumpeter 1917:195)

Schumpeter is obviously aware of the fact that credit cannot be considered as the only means of financing firms and, especially, innovations.

Empirically, other possibilities do exist. For instance, Schumpeter mentions interfirm credit or “government fiat” (1939: I, 114).

Moreover, even if, strictly speaking, the circular flow scheme does not admit the existence of saving or investment and assumes that the firm finances itself on its current receipts, it is, however, possible to focus on what Schumpeter calls “steady growth”:

We will envisage a society, stationary in every respect except in that it displays a positive rate of saving. Production functions are invariant and external disturbances are absent....

The result would, in fact, be a steady growth of the systems industrial outfit by the steady addition to it of new units of plant and machinery, which, however, must be of the same types as those which are already in use or would otherwise intrude.

(Schumpeter 1939: I, 79–80)

This “steady growth” is an interesting point. It is not considered by Schumpeter as a true dynamic situation. However, it offers speculations about financing firms in the absence of banks and banking situations. In this case, we are



confronted with a usual saving/investment mechanism: investment is financed through accumulated saving. However, Schumpeter's definitions of saving and investment are original:

By Saving we mean the earmarking, by a household, of an element of its current receipts—as distinguished from “capital gains”—for the acquisition of titles to income or for the repayment of debt. If a firm does the same thing with the element of its net receipts from the sales of products and services, we shall speak of Accumulation. The distinction between Saving and Accumulation also applies, although it may be difficult to carry out, in cases in which, as in the case of many farmers, “firm” and “household” are one. We confine both concepts to decisions about monetary funds and we neglect, for convenience's sake, any similar decision that may be taken with respect to commodities. Saving and Accumulation will thus be treated as elements of a monetary process: the complementary processes in the world of goods constitute a distinct problem.”

(Schumpeter 1939: I, 75)

Saving and investment are not only defined as monetary magnitudes; they are also characterized in relation to their orientation toward productive ends. Thus, investment includes the acquisition of shares and bonds and of land or buildings, provided they are dedicated to business purposes (Schumpeter 1939: I, 76). Saving implies “intention to acquire titles to income, the decision to save is taken with reference to given or expected investment opportunities and the prospect of income they offer” (1939:1, 77).

Therefore, Schumpeter's conception of the saving/investment mechanism is not so drastically different from Keynes's *Treatise* theory of financial markets: this analogy, and its limits, will become clearer later, in the last part of this chapter. Now it is only necessary to notice that, in the steady growth case, the saving/investment can replace the credit mechanism that appears in the development scheme. Although this succession is different from the distinction between natural and monetary economies, it, however, presents a clear Wicksellian flavor. It corresponds to the case, investigated in *Business Cycles*, in which the analysis

excludes bank credit and assumes that savers offer their additional savings to firms which, having been in competitive equilibrium at the previous point of time, have no use for them at the previous rate of interest and, at a suitably reduced rate, no other use than to add new units to their existing stock of machinery.

(Schumpeter 1939: I, 81)

In this situation, the saving and investment sides imply a confrontation between capitalists on the supply side and entrepreneurs on the demand side. The former must withdraw their reserves from the circular flow since there is no creation

of credit means of payment. The entrepreneur's demand is determined by expected profits on investment:

we shall imagine that the entrepreneur is able to attach determined quantities of entrepreneurial profit to the individual monetary units from zero to the limit for practical purposes, in the same way as every individual attaches certain values to the successive units of any good.

(Schumpeter 1934:192).

The capitalist's supply takes prospective gains into account. However,

Il est clair que le marché des prêts, non seulement fonctionne avec une perfection aussi relative que tous les autres marchés, mais encore souffre de ce que le fournisseur habituel—c'est-à-dire sans couverture et sans garantie—ne consent de prêt qu'aux entrepreneurs qui lui sont connus et dont, en une certaine mesure, il comprend et approuve les plans.

(Schumpeter 1935:281)

Supply and demand then interact in order to determine the level of the rate of interest.

The introduction of credit, in the development case, sensibly changes this scenario. The entrepreneur's demand does not change drastically if we refer to the steady growth situation. Things are, however, different if we focus on the supply side. Bankers replace capitalists and we enter into the famous Schumpeterian scheme of financing economic development by bank credit.

Credit implies the emergence of a nonzero interest. This emergence leads, in turn, to a strong increase of saving since capitalists are confronted with the introduction of a new source of income. From this, as Schumpeter also notices, it follows that the actual saving is, in part, a consequence of the existing interest. In other words, development creates new opportunities for the investment of saving. These opportunities are provided by the money market, as we defined it previously. Simultaneously, "on the surface...credit creation tends to lose its relation to innovation and...becomes an instrument for financing business in general" (Schumpeter 1939:1, 159).

### **BANKS AND THE FINANCIAL SYSTEM IN SCHUMPETER'S THEORY OF THE MONEY MARKET**

Some passages of Schumpeter's writings seem to describe banks as purely neutral financial intermediaries (see, for instance, Schumpeter 1990:188). However, this view cannot be seriously developed. As we already saw, banks play a major role in determining the volume of credit. Therefore, they exert permanent and asymmetric effects on the money market. Their influence is not, however, limited to the control of credit.

The most cursory glance at money market processes shows that the banks regulate both stock market speculation and the pulse-beat of industrial and commercial life, now restraining, now stimulating them.

(Schumpeter 1917:206).

Such an assertion implies that banks strongly influence economic life. This influence is related to two main circumstances: on the one hand, Schumpeter perceives the money market as the interaction of two independent spheres; on the other, this market is dominated by the banks. To understand those circumstances, let us enter into details.

We must first notice that, in the normal course of development, entrepreneurs appear to be both credit manufacturers and financial intermediaries. On one side, they indeed first create “from nothing” credit means of payment which strongly contribute to the emergence of interest. On the other side, it is true, however, that

the banker...is not so much primarily a middleman in the commodity “purchasing power” as a producer of this commodity. However, since all reserve funds and savings to-day usually flow to him, and the total demand for free purchasing power, whether existing or to be created, concentrates on him, he has either replaced private capitalists or become their agent; he has himself become the capitalist par excellence.

(Schumpeter 1934:74)

It is then interesting to analyze how Schumpeter copes with the money market.

As we already noticed, the first sphere of this market is the “sphere of hoards and reserves.” The existence of this sphere points out two different forms of money. One is the “circulating money,” which “enters into money income and confronts the flow of consumer goods for the purposes of establishing the value of money.” The other form of money corresponds to “noncirculating money.” To this category belongs, above all:

- 1 hoards;
- 2 the sums that at any given time serve as a basis for the issue of other types of money and are therefore temporarily immobilized;
- 3 unemployed sums waiting to be used; and
- 4 the true cash reserves of banks, firms and private persons (Schumpeter 1917:176).

The volume of this type of money “is a matter of business conditions and the rate of interest” (1917:176).

The second sphere included within the money market refers to “capital” or to “income-yielding assets.” This capital market is “what the businessman calls the money market...that about which every newspaper reports daily under this title....

In any case, the capital market is the same as the phenomenon that practice describes as the money market. There is no other capital market” (Schumpeter 1917:124). The capital market, therefore, includes the stock market but also the real estate market, the mortgage market, and even the land market (1917:124).

The distinction between the sphere of hoards and reserves and the sphere of capital is, however, rather secondary to Schumpeter. A footnote in the *Theory of Economic Development* centered upon this problem and gave a clear indication, asserting that “at the most one may with Spiethoff distinguish the capital market as the market for long-term purchasing power from the money market as the market for short loans. But purchasing power is the commodity in each” (Schumpeter 1934:124n.). Therefore, the two markets are not independent at all. For reasons which we shall now discuss and which express a Wicksellian view, the working of financial markets is submitted to the working of money markets and, therefore, to the choices of the banking system. Two main arguments might be used here.

Schumpeter first insists on the idea that the short term rate of interest is essentially a “monetary phenomenon” (Schumpeter 1939: I, 128). This is the consequence of the definition of saving and investment as monetary magnitudes. In this prospect, the notion of real rate of interest is not so relevant:

Nominal and real rates in this sense are only different measurements of the same thing or, if we prefer to speak of different things even in this case, it is the monetary rate which represents the fundamental phenomenon and the real rate which represents the derived phenomenon.

(Schumpeter 1939: I, 127)

Obviously, this conception resembles Keynes’s approach to the financial circulation in the *Treatise*. We, however, know that Schumpeter rejected the theory of liquidity preference, considered as contradictory with the assumption of banks’ asymmetric influence. He noticed, however, that “the reader should be on his guard against both surface similarities and surface differences” between Keynes’s theory and his own (Schumpeter 1939: I, 127, n. 2). From this prospect, it is impossible to include among these similarities the treatment of speculative behavior. The sole form of speculation to which Schumpeter refers indeed concerns short-term loans and, from the authors view, it is often beneficial for new firms (Schumpeter 1934:125).

Second, the capital sphere does not appear to be independent from the sphere of hoards and reserves. The usual dichotomy between short-term loans and long-term assets is therefore inadequate for Schumpeter:

In capitalist society...all equities and claims can normally be sold at will, *irrespective of the purposes that the sums originally paid in may serve*—irrespectively also of the purposes any good serve that may correspond to them—hence bought by the means of short-term funds. Bonds, for

instance, thus become a vehicle of the shifting of balances, which only technically and by degree differs from short-term instruments. As soon as this is realized, doubts arise about the very existence of a distinct thing to be called the long-term interest rate. The contractual rate on long-time instruments has, of course, a certain right to that name.... Braving some danger of misunderstanding, we may hence go so far as to say that there exists no such thing as the long-term rate and that, if we nevertheless wish to use the concept, the thing we ought to mean is some kind of “trend value” of short rates.

(Schumpeter 1939: II, 614)

This quotation is based on two distinct arguments. On one hand, Schumpeter does not consider that there is a difference of nature between short-term loans and long-term assets. He is indeed concerned that the tendency of capitalist evolution is to create the conditions of a “perfect negotiability of all instruments of credit whatever their legal form may be” (Schumpeter 1939: II, 613). Therefore, bonds or shares only differ from short-term instruments “technically and by degree” (1939: II, 614). This assertion results from the fact that financial speculation implies withdrawal of existing balances or use of the facilities of creating money or credit creation. A fundamental link exists between credit and finance, hence, between banks and financial markets.

It is then easy to understand, on the other hand, the conditions involved in determining the so-called long-term rate of interest are nothing else than those, including risk, which prevail in the short-term funds market. Now those conditions are clearly expressed by the short rates. From both arguments, it is then clear why the long-term rate of interest is considered by Schumpeter as a “trend value” of short rates. This quantitative relation between short- and long-term rates embodies the major influence exerted by banks on the long-term financial markets.

Finally, three main features capture the originality of Schumpeter’s contributions and their differences from standard analyses. First, Schumpeter introduces economic activity as a combination of two unavoidable circulations which express two irreducible forms of activity—that is, industry and finance. This view sensibly contrasts with the orthodox conception, according to which industrial and financial activities are only specific real exchanges.

Second, Schumpeter attributes a fundamental role to the banking system in the regulation of the economy. As we saw, banks rule both the process of credit creation and the necessity of financial intermediation.

Finally, this predominance of banks permits them to exert a strong influence on the formation of the rate of interest. Creating credit from nothing, banks are indeed able to control the rate of interest on short loans and, thanks to their role as financial intermediaries between saving and investment, to extend this predominance to the whole structure of interest rates. Far from neglecting the monetary dimension of economic life in a purely real approach, Schumpeter

therefore appears to be one of the main builders of a possible alternative tradition to mainstream monetary analysis.

## REFERENCES

- Arena, R. (1985) "Circulations, revenu et capital: théorie monétaire et tradition non quantitative" in R.Arena, A.Graziani, and J.Kregel (eds.) *Production, Circulation et Monnaie*, Paris: P.U.F.
- (1992) "Schumpeter after Walras: 'Economie pure or stylised facts?,'" in T.Lowry (ed.) *Perspectives on the History of Economic Thought*, Aldershot: Edward Elgar.
- Graziani, A. (1978) "Il Trattato della moneta di J.A.Schumpeter," in *Scritti in onore di Giuseppe De Meo*, Bari: Laterza, pp. 457–66.
- Messori, M. (1983) "Storia e teoria economica: Schumpeter, Keynes e il ciclo del capital", in M.Messori (ed.) *Il mondo contemporaneo. Questioni di metodo*, Florence: Florence University.
- (1984) "Il credito nel modello di Schumpeter," in M.Messori (ed.), *Atti del convegno: Società sviluppo, impresa. Nel centenario della nascita di J.A.Schumpeter*, Milan: Franco Angeli.
- Schumpeter, J.A. (1908) *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*; 1982 Italian translation: *L'essenza e i principi della economia teorica*, edited by G.Calzoni, Bari: Laterza.
- (1917) "Money and the social product" (translated from German by A.W. Marget), *International Economic Papers* No. 6, London: Macmillan.
- (1934) *The Theory of Economic Development*, Cambridge, MA: Harvard University Press.
- (1935) *Théorie de l'Evolution Economique*, Paris: Dalloz.
- (1939) *Business Cycles*, 2 vols., New York: McGraw-Hill.
- (1990) *Das Wesen des Geldes*; Italian translation: *L'essenza della moneta*, edited by G.Nardozi, Turin: Cassa di Risparmio di Torino.
- Stiglitz, J.E. and Weiss, A. (1988) "Banks as Social Accountants," NBER Working Paper, 2710.



## Part IV

# THEMES OF THE CLASSICAL SCHOOL





# ADAM SMITH'S INVISIBLE/VISIBLE HAND/CHAIN/CHAOS

*Spencer J. Pack*

## INTRODUCTION

I believe it is fair to say that Schumpeter had only grudging praise for Adam Smith.<sup>1</sup> However, two extensive student notebooks, one from Smith's course on rhetoric, the other from Smith's course on jurisprudence, were discovered in 1958, eight years after Schumpeter's death. These notebooks display a breadth and depth of knowledge by Smith which surely would have impressed Schumpeter. I suspect that had Schumpeter been aware of them, his appreciation of Smith's intellect would have been keener.<sup>2</sup> Indeed, it is now quite clear that Smith was such a polymath that it is difficult for modern relatively narrowly trained scholars to do full justice and fully appreciate Smith's encyclopedic thought.

This chapter argues that Adam Smith's "invisible hand," which Smith mentions only once in the *Wealth of Nations* (and once in the *Theory of Moral Sentiments*), was a metaphor consciously made up by Smith for his theory of unintended results. Smith coined it because he thought it would be persuasive: it was. Smith's invisible hand was not a call for extreme laissez-faire economic policies. Smith was only against government rules and regulations which were antiquated or were made by and for the rich and powerful.<sup>3</sup>

The next section of this chapter supports this interpretation through a brief consideration of some of the less well-known parts of Smith's corpus: *Lectures on Jurisprudence* (particularly the "Report of 1762–3"), the *Correspondence of Adam Smith*, and *Lectures on Rhetoric and Belles Lettres*. A third section involves a more extensive consideration of relevant parts of Smith's "The Principles Which Lead and Direct Philosophical Enquiries." The reading of Smith offers a coherent, unified interpretation to Smith's thought in general and to the invisible hand in particular. There are no two (or more) Adam Smith's, or changes in mind between the "young Smith" and the "old Smith" in this interpretation; rather Smith is seen to be quite a consistent thinker.<sup>4</sup> The chapter ends with a brief conclusion.

## LESS WELL-KNOWN WRITINGS OF SMITH

Smith may be viewed as basically developing a theory of evolution of human institutions and society: a precursor to Darwin's theory of the evolution of species. In this sense, Smith's invisible hand is similar to Marx's "laws of motion of the capitalist mode of production": it is an explanation of human history. Of course, Marx was not totally against everything that the laws of motion of the capitalist mode of production brought forth.<sup>5</sup> Similarly, Smith should not be seen as necessarily favoring everything that an invisible hand might bring forth. One needs to make the distinction between Smith's invisible hand metaphor, which seems to be the same as the theory of unintended results, and the economic theory (or policy) of *laissez-faire*.

This distinction is frequently not made.<sup>6</sup> Careful scholars of Smith have long known that Smith was not in favor of complete *laissez-faire* policies.<sup>7</sup> Consider Smith's attitude toward long apprenticeships and fraud:

The institution of long apprenticeships can give no security that insufficient workmanship shall not frequently be exposed to publick [*sic*] sale. When this is done it is generally the effect of fraud, and not of inability; and the longest apprenticeship can give no security against fraud. Quite different regulations are necessary to prevent this abuse. The sterling mark upon plate, and the stamps upon linen and woollen cloth, give the purchaser much greater security than any statute of apprenticeship.

(1976: I.x.c. 13)<sup>8</sup>

In the above paragraph, Smith simultaneously argues against government "intervention" in the form of instituting long apprenticeships and apparently argues in favor of government "interventions" in the form of inspecting goods for fraud. What determines Smith's attitudes toward government as "intervention"? Which interventions does Smith favor and which does he oppose? And precisely how does this fit into Smith's invisible hand?

Smith's arguments in *Lectures on Jurisprudence*, especially the 1762–3 report, clearly demonstrate that Smith could not have been blindly in favor of *laissez-faire* economic policies. Those lectures display an almost Marxist quality. For Smith, there is a dialectical interplay between the level of economic development of a society which he divides into the age of hunters, the age of shepherds, the age of farmers, and the commercial age; and a society's legal and political institutions. In these lectures Smith rarely refers to the "progress" of society; he seems to have an evolutionary, nonteleological view of human history.<sup>9</sup> Moreover, Smith is barely able to say a thing about a law or legal right without first specifying the level of socioeconomic development of that society.<sup>10</sup> Rights, laws, and government are all dependent upon the level of the material development of society. These institutions in turn affect the material side of that society.

So, for example, for Smith, a couple of deleterious institutions for economic

growth are polygamy and slavery. Moreover, according to Smith, it is only by rather peculiar and fortuitous events that Europe managed to end slavery (1978:185ff). Smith doubts that most parts of the world will be able to rid themselves of the institution of slavery.<sup>11</sup> For Smith, polygamy and slavery may be viewed to be legal laws or institutions which have a harmful impact upon a society's ability to produce goods and services. They may also be viewed to be laws and institutions regulating personal relationships which are themselves dependent upon the level of a society's material development.<sup>12</sup>

These lectures progress from questions of justice, to defense, to what Smith calls "police" or economic policy. For Smith, justice depends upon the sentiment resentment;<sup>13</sup> the proper control of resentment—hence the development of justice—is under the eye of the impartial spectator. We are still quite near Smith's *Theory of Moral Sentiments*.<sup>14</sup> In fact, this part of Smith's story basically begins where *Theory of Moral Sentiments ends*. As the *Lectures on Jurisprudence proceeds* to questions of defense and economic policy, there is a diminution for the role of the impartial spectator. Moreover, with the beginning of the discussion of economic policy, we are basically in the land of *The Wealth of Nations*.

From *Lectures on Jurisprudence* it is clear that *The Wealth of Nations* is socially specific to the commercial (or one might say the capitalist)<sup>15</sup> stage of society. Hence, any invisible hands in *The Wealth of Nations* are also socially specific to a society at a definite level of socioeconomic development. Also, the *Lectures on Jurisprudence* describe Smith's contemporary commercial society as arising from the feudal, largely farming society of Europe. A close reading of *LJP* shows that there are two basic types of rules and regulations which Smith argues should be eliminated: those that are antiquated and outmoded and those which were basically made by and for the interest of the rich and powerful. It is these two particular sets of rules and regulations which Smith argues should be repealed, not any and all government rules and regulations.<sup>16</sup>

Smith's *Correspondence* reveals that he was a close friend of David Hume. Hume, of course, was the great theological as well as epistemological skeptic. From their correspondence, it is not so clear that there were *any* major theological or epistemological disagreements between Hume and Smith.

For Hume, simple impressions in the mind came from unknown and ultimately unknowable causes; any agreement between the mind and the world was not known.<sup>17</sup> Occasionally, in his nonphilosophical writings, Hume wrote as if he had veritable access to the truth. So, for example, in *History of England* Hume wrote "We shall hasten through the obscure and uninteresting period of Saxon annals: and shall reserve a more full narration for those times, when the *truth* is both so well ascertained and so complete as to promise entertainment and instruction to the reader" (1938, vol. I: 4, emphasis added). Nonetheless in spite of this passage, Hume's commentators agree that Hume was still ultimately an epistemological skeptic.<sup>18</sup> It seems that Smith, largely following Hume, was also an epistemological skeptic.

That Hume was also a theological skeptic seems indisputable; however, Hume

was nonetheless capable of writing as if he had certain access to God's design. In an economics essay Hume wrote against international trade barriers and seemed to invoke God's will on his side: "But this general ill effect, however, results from them [international trade barriers], that they deprive neighbouring nations of that free communication and exchange which the *Author* of the world has intended, by giving them soils, climates, and geniuses, so different from each other."<sup>19</sup> What kind of rhetorical strategy is this, coming from the noted skeptic?<sup>20</sup> Quite possibly a highly effective one, which his great friend Adam Smith would wield with even greater dexterity.

I suspect that Smith was also rather skeptical toward the claims of revealed religion.<sup>21</sup> Certainly, Smith felt no qualms in writing to a friend, Alexander Wedderburn, concerning Hume's impending death: "Poor David Hume is dying very fast, but with great cheerfulness and good humour and with more real resignation to the necessary course of things, than any *Whining Christian* ever dyed [*sic*] with pretended resignation to the will of God" (1977:203, emphasis added).<sup>22</sup>

Smith had to be very careful of the established religious authorities in Scotland. This same friend, Wedderburn, had earlier launched and edited "the short-lived *Edinburgh Review* of 1755–6." Smith made two noteworthy contributions to this journal.<sup>23</sup> Unfortunately, "the early demise of the journal has been variously explained: most plausibly... due to a violent outcry from narrow churchmen over the theological views contained in notices of religious works."<sup>24</sup>

The first year Smith attended Glasgow College as a student, Smith's great teacher, "the never-to-be-forgotten Hutcheson," was prosecuted by "the local Presbytery" for his theological teachings (Rae 1965:11–13).

When Smith gave up his chair in Logic at Glasgow to accept the chair in Moral Philosophy, he felt unable to write a letter of recommendation for Hume to be his replacement: "I should prefer David Hume to any man for a colleague; but I am afraid the public would not be of my opinion; and the interest of the society will oblige us to have some regard to the opinion of the public" (Smith 1977:5).

If, as I suspect, and as appears likely from the closeness of the relationship between Hume and Smith, Smith entertained Humean-like doubts concerning the veracity of Christian revealed religion, then Smith had more than ample grounds to keep these "blasphemous" and "heretical" opinions out of the public domain. James Boswell, who studied rhetoric and ethics under Smith, did make several disparaging references to Smith's religious beliefs in his private diaries: "[Samuel] Johnson said Adam Smith was as dull a dog as he had ever met with. I said it was strange to me to find my old professor in London, a professed *infidel* with a bag-wig" (1963:337, emphasis added). "Gibbon alone stickled for Smith, because he is a brother *infidel*" (1977:298, emphasis added).

Smith's friend, David Hume, was also a skeptic toward the claims of "natural religion." A close reading of Smith's "The Principles Which Lead and Direct Philosophical Enquiries" suggests that Smith's views concerning natural religion were quite similar to those of David Hume, especially as expressed in Hume's essay, "The Natural History of Religion" (Pack 1995a).

The positive side to Hume's epistemological skepticism is that people do act as if they have access to the truth. They must; people do the best they can. They muddle through. For Smith, following through the implications of Hume's skepticism, logic then becomes rhetoric.

Smith's first teaching position at Glasgow was as a professor of logic. Instead of traditional logic, he taught "rhetoric and belles lettres."<sup>25</sup> In a surprisingly "modern"—or perhaps one might say "postmodern"—move, logic for Smith becomes the study of rhetoric, the study of how people actually persuade each other.<sup>26</sup> Smith demonstrates an interest in language. He becomes concerned with, among other things, the origins of language and how language itself structures our thought processes.<sup>27</sup> Here Smith's work is reminiscent of French structuralist work in linguistics, such as that of Saussure,<sup>28</sup> yet, it also resembles the work of the later Wittgenstein. It will be recalled that Wittgenstein, under the prodding of Piero Sraffa (Malcolm 1984:14–15; Wittgenstein 1968:x), gave up the idea that humans can arrive at pure truth. Wittgenstein turned to the formulation of "language games" in an attempt to discover how knowledge is possible at all.<sup>29</sup>

For both Sraffa and Wittgenstein—Sraffa in his study of economics and Wittgenstein in his work on language—everything depends upon everything else; *ceteris* is never *paribus*.<sup>30</sup> Similarly, one sees the idea that generally *ceteris* is not *paribus* also in the work of Smith—both in Smith's study of language<sup>31</sup> and in his economics. Hence, in a sense Smith can be viewed to be a "general equilibrium" theorist.<sup>32</sup> Yet, here one must beware of the impoverishment of the traditional discourse of economists. Verily, for Smith, both language and economics need to be studied "in general." Yet, for Smith, neither language nor economic society is ever in some kind of total, ahistorical equilibrium. They both change, "grow," and "develop," though they do not necessarily "progress."<sup>33</sup>

Moreover, in contradistinction to Sraffa and Wittgenstein, the profound skepticism of Hume and Smith did not lead to literary constipation.<sup>34</sup> No indeed! Hume's literary output in particular flowed freely. Yet, Smith was also able to produce relatively copious output. He was able to do this partly because he knew and felt comfortable creating stories or theories, e.g. he knew he was creating "the invisible hand." To support this assertion let us now take a closer look at Smith's "Principles Which Lead and Direct Philosophical Enquiries": this is where Smith's epistemological skepticism appears most evident, and is where Smith first discussed "the invisible hand."<sup>35</sup>

### SMITH AS A CONSISTENT THINKER

"The Principles Which Lead and Direct Philosophical Enquiries" was first published in 1795, five years after Smith's death; however, they were written apparently many years earlier.<sup>36</sup> They are divided into three parts: the "History of Astronomy," "The History of the Ancient Physics," and "The History of the Ancient Logics and Metaphysics." The longest and most developed of these parts is the one on astronomy.<sup>37</sup> It has four sections. Section I is entitled "Of the

Effect of Unexpectedness, or of Surprise”; II is “Of Wonder, or of the Effects of Novelty”; III is “Of the Origin of Philosophy”; IV is “The History of Astronomy.”

Smith begins his discussion of the principles that lead and direct philosophical enquiries by considering various distinct yet related sentiments: surprise, wonder, and admiration. For Smith, the goal of philosophy or science is to connect phenomena that induce in us surprise and/or wonder, into a coherent theoretical system. Smith does not distinguish between philosophy and science. The person who creates the most soothing theoretical system is the one who wins the world’s applause.<sup>38</sup> For Smith, surprising or wonderful events may be contrasted with normal events:

When objects succeed each other in the same train in which the ideas of the *imagination* have thus been accustomed to move, and in which though not conducted by that *chain* of events presented to the senses [i.e. they are “invisible” to the senses], they have acquired a tendency to go on of their own accord, such objects appear all closely *connected with* one another, and the thought glides easily along them.... There is no break, no stop, no gap, no interval. The ideas excited by so *coherent* a *chain* of things seem, as it were, to float through the mind of their own accord, without obliging it to exert itself, or to make any effort in order to pass from one of them to another.

(Smith 1980:4, emphasis added)

Here we find in Smith a chain, which is almost a “hand,” made up and created by the mind. The chain is not accessible to the senses, i.e., it is “invisible.” The goal of the aspiring scientist, philosopher, or theoretician is to create chains to link together various parts of a system. Hence for Smith (following Hume’s epistemology): “The supposition of a *chain* of intermediate, though *invisible* events, which succeed each other in a train similar to that in which the imagination has been accustomed to move, and which link together those two disjointed appearances, is the only bridge which, if one may say so, can smooth its passage from the one object to the other” (1980:42, emphasis added). Discordant phenomena bother, upset, irritate the human imagination (1980:58).

Enter the budding philosopher: “it is the end of Philosophy, to allay that wonder, which either the unusual or seemingly *disjointed appearances* of nature excite” (1980:75, emphasis added). “Philosophy is the science of the *connecting principles of nature*” (1980:45, emphasis added).<sup>39</sup>

Philosophy provides an order which is introduced by the mind to calm the mind.<sup>40</sup> The relationship between the ensuing order in the mind’s conception of the world, and the world itself is problematic. It is the role of philosophy to “introduce *order* and *coherence* into the mind’s conception of this *seeming chaos* of dissimilar and disjointed appearances” (1980:107, emphasis added).<sup>41</sup>

Before a philosophical explanation there is disorder in the human mind; after the (successful) philosophical explanation there is order in the human mind.

Smith, the incipient “Newton” of the moral sciences, may have studied the history of astronomy up to Newton to help prepare himself for his future endeavors. Was he thinking of his own possible future when he wrote,

Let us examine, therefore, all the differing *systems* of nature... and content ourselves with inquiring how far each of them was fitted to soothe the imagination, and to render the theatre of nature a more *coherent*, and therefore a more *magnificent* spectacle, than otherwise it would have appeared to be. According as they have failed or succeeded in this, they have constantly failed or succeeded in gaining reputation and renown to their authors; and this will be found to be the clew that is most capable of conducting us through all the labyrinths of philosophical history.

(1980:46, emphasis added)

For Smith, the history of theoretical systems demonstrates that the first systems “are always the most complex, and a particular *connecting chain or principle*, is generally thought necessary to unite every two seemingly disjointed appearances; but it often happens that one great *connecting principle* is afterwards found to be sufficient to *bind* together all the discordant phaenomena” (1980:66, emphasis added).

Note that here a connecting chain is the same thing as a connecting principle. Moreover, since it is a theoretical principle, it is an “invisible” principle; that is, it is not directly available to the senses. Thus, for Smith, philosophy creates the connecting principles. It fills in the gaps, introduces order into the mind in place of chaos, etc. Yet, so far we have only seen Smith discuss invisible chains; where does the invisible hand creep in?

The invisible hand creeps in with Smith’s view of the history of natural theology.<sup>42</sup> “In the first ages of the world, the *seeming incoherence* of the appearances of nature, so confounded mankind, that they despaired of discovering in her operations any regular system. Their ignorance, and confusion of thought, necessarily gave birth to that pusillanimous superstition, which ascribes almost every unexpected event, to the arbitrary will of some designing though *invisible beings who* produce it for some private and particular purpose” (1980:112–13, emphasis added).

Ignorance begot superstition. In those days, people lived a precarious existence, often in terror and consternation. For Smith, human passions lead to human opinions which justify those passions. Of things that terrify him, “That they proceed from some intelligent, though *invisible* causes, of whose vengeance and displeasure they are either the signs or the effects, is the notion of all others most capable of enhancing this passion, and is that, therefore, which he is most apt to entertain” (1980:48, emphasis added).

Unprotected by the laws of society, the humans are exposed and defenseless.



In these circumstances, the particular workings of nature are ascribed to an intelligent cause: “With him, therefore, every object of nature, which by its beauty or greatness, its utility or hurtfulness, is considerable enough to attract his attention, and whose operations are not perfectly regular, is supposed to act by the direction of some *invisible* and designing power” (1980:49, emphasis added).

Here is an invisible power. It is not a chain necessarily linking things together. It operates by the will of gods.<sup>43</sup>

Enter Smith’s first invisible hand, one that “naturally” arises, or is created at a certain level of socioeconomic development: “it is the irregular events of nature only that are ascribed to the agency and power of their gods. Fire burns, and water refreshes; heavy bodies descend, and lighter substances fly upwards, by the necessity of their own nature; nor was the *invisible hand of Jupiter* ever apprehended to be employed in those matters” (1980:49, emphasis added).

The invisible hand of Jupiter was created by an early people as an explanatory device to help calm their minds.

With the onset of civilization, a change takes place. Fears and insecurity decrease. According to Smith, the curiosity of humankind increases. In looking at nature, people become “more desirous to know what is the *chain* which links them all together. That some such *chain* subsists betwixt all her *seemingly disjointed phenomena*, they are necessarily led to conceive” (1980:50, emphasis added).

People move away from polytheism for their explanatory mechanism. They become “less disposed to employ, for this connecting *chain*, those *invisible beings* whom the fear and ignorance of their rude forefathers had engendered” (1980:50, emphasis added).

So much for Smith’s account of the rise of polytheism. What did people use in Smith’s time for their explanatory mechanism? Why, science studied nature, which was seen to be the work of God, whose actual hand was invisible. Consider, for example, Colin MacLaurin’s popular yet sophisticated *An Account of Sir Isaac Newton’s Philosophical Discoveries*: “But natural philosophy is subservient to purposes of a higher kind, and is chiefly to be valued as it lays a sure foundation for natural religion and moral philosophy; by leading us, in a satisfactory manner, to the knowledge of the Author and Governor of the universe. To study nature is to search into his *workmanship*: every new discovery opens to us a new part of his scheme” (1980:2, emphasis added).<sup>44</sup> In Smith’s time, the chains explaining nature were seen (at least by some) as created by the hands of one invisible monotheistic God. “Logical,” or “rhetorical,” according to Smith, arguments that catered to this predilection might be particularly persuasive.

Newton presented his conclusions as if they were the indisputable “truths.”<sup>45</sup> Smith, following Hume, felt that this of course, was not so. Yet Smith understood why the followers of Newton would make the mistake of considering the work of Newton as the discovery of truths. Here Smith’s epistemological skepticism is particularly evident:

And even we, while we have been endeavouring to represent all philosophical systems as mere inventions of the *imagination*, to *connect* together the otherwise *disjointed* and *discordant* phaenomena of nature, have insensibly been drawn in, to make use of language expressing the *connecting principles* of this one, as if they were the *real chains* which Nature makes use of to bind together her several operations. Can we wonder then, that it should have gained the general and complete approbation of mankind, and that it should now be considered not as an attempt to *connect* in the *imagination* the phaenomena of the Heavens, but as the greatest discovery that ever was made by man, the discovery of an immense *chain* of the most important and sublime truths, all closely *connected* together, by one capital fact, of the reality of which we have daily experience.

(Smith 1980:105, emphasis added)

People think that Newton's theories are "the truth"; yet, Smith seems to hold that they are not. Newton's theoretical system is only a particularly persuasive story, which calms our sense of surprise and wonder and turns these sentiments into admiration of nature.

## CONCLUSION

I do not want to go so far as to agree with Rothschild that "Smith did not particularly esteem the invisible hand and thought of it as an ironic but useful joke" (1994:319). It was no joke; it was a rhetorical device which Smith made up and which he knew he made up.<sup>46</sup>

The key to understanding Smith's thought in general and his invisible hand in particular may lie in his epistemology.<sup>47</sup> Smith's work in general and the "Principles Which Lead and Direct Philosophical Enquiries" in particular suggest that Smith was an epistemological skeptic. The invisible hand was a metaphor for Smith's theory of unintended results. It was not a call for extreme laissez-faire economic policies. Smith was against many of the governmental rules and regulations of his day because they were either antiquated or made by and for the rich and powerful. Smith did not necessarily have faith in God; the invisible hand was not a theological underpinning for Smith's social and/or economic theory.

Smith only used the invisible hand metaphor once in the *Wealth of Nations* (and once in *The Theory of Moral Sentiments*). The fact that it is such a powerful metaphor today, and that it is so popular today, probably says more about contemporary theology and economic theory than it does about Smith's theology and economic theory.

## NOTES

I would like to thank Jolane Solomon, Chris Nyland, Lester Reiss, Jerry Winter and John Kenneth Galbraith for their comments on an earlier version of this paper.

- 1 See especially Schumpeter (1954:185).
- 2 In particular, study of Smith's work on rhetoric could possibly have induced Schumpeter to change his own writing style. Consider, for example, Schumpeter's famous query "Can capitalism survive? No. I do not think it can" (1950:61). Here is the kind of abrupt, sharp writing style which Smith consciously sought to avoid on the grounds that this style would disjoint the reader, particularly readers favorable to the capitalist system. In turn, this intellectual disjointedness would tend to lead to misunderstanding Schumpeter's intent—which, of course, is what happened to Schumpeter, to his chagrin. (See 1950:11.)
- 3 This chapter is one of a series of papers I am writing on Smith's methodology and world view. For a textual analysis of Smith's invisible hand as found in *The Wealth of Nations*, see Pack (1991a: 34–5). For Smith's position on laissez-faire policies, see Pack (1991a: Chapter 4; or 1991 b).
- 4 I do not mean to argue that there is only one "true," "correct" reading or interpretation of Smith's thought.
- 5 See, e.g., passages in *The Communist Manifesto* where Marx gets excited and laudatory over what he perceives to be capitalism's breaking down of previous modes of productions.
- 6 See, e.g., Allais (1992), especially pp. 31, 33, 38.
- 7 See, e.g., Viner (1928); also Rosenberg (1979).
- 8 See also, Pack (1991 b).
- 9 An exception to this generalization is found, for example, on p. 107, where Smith is recorded to have spoken of the "progression of society." Even today, in a post-Darwin era, it is difficult to give an evolutionary, nonteleological discourse without occasionally, almost against one's will, slipping in the word "progress." It was doubtlessly even more difficult in Smith's time. On a similar problem, the difficulty of writing positively about a contemporary scientific theory without seeming to accept its "truth," see Smith's discussion of Newtonian physics, elaborated later in this chapter.
- 10 The links between Smith's and Marx's sociology have been emphasized by Meek; see, e.g., "Smith, Turgot, and the 'Four Stages' Theory," "The Development of Adam Smith's Ideas on the Division of Labour," and "New Light on Adam Smith's Glasgow Lectures on Jurisprudence," in *Smith, Marx and After*, and *Social Science and the Ignoble Savage*. As a general rule, the insights put forth by Meek have not been followed up by more recent commentators. One exception includes Maurice Brown (1988), who emphasizes the dialectical nature of Smith's work. Also, Chris Nyland (1993) stresses the materialist basis of Smith's social theory; see especially n. 13. I cannot help but suspect that some commentators may fear intellectual contamination and miscegenation by seeing what we would now call "Marxist" elements in Smith. Perhaps a dosage of Schumpeter might be helpful here: "Things economic and social move by their own momentum and the ensuing situations compel individuals and groups to behave in certain ways whatever they may wish to do...by shaping the choosing mentalities and by narrowing the list of possibilities from which to choose. If this is the quintessence of Marxism then we all of us have got to be Marxists" (1950:129–30). In this sense Smith was, as can be clearly seen in *LJP*, a Marxist.  
 Nyland's insightful essay on the role of women in Smith's thought is the sort of theoretical unpacking of Smith's dense *Jurisprudence Lectures* which should serve as an exemplar to future commentators.
- 11 I discussed the theoretical implications of Smith's pessimism toward the eradication of the institution of slavery at the Winter 1995 AEA meetings, "Slavery and Adam Smith's Economic Vision," with an appendix by Robert Dimand, "Adam Smith and the Late Resolution of the Quakers of Pennsylvania: A Response to a False Report."
- 12 Smith discusses both polygamy and slavery most extensively under the general category of rights of "man" as a member of a family (1978:141ff). The former he subcategorizes under a "person as being husband or wife"; the latter "as master or servant" (see, e.g., 1978:175).

- 13 See, e.g., p. 129. For Smith the proper control of the sentiment resentment is the key to the development of justice. Here there is a curious similarity to Nietzsche's stress on the role of "resentment"; see *On the Genealogy of Morals*.
- 14 See, e.g., Kleer (1993).
- 15 See, e.g., Heilbroner (1985:31–2).
- 16 See Pack (1991a: Chapter 7, especially 120–2).
- 17 See Hume (1888); also (1955).
- 18 See, e.g., the classic study of Hume by N.Kemp Smith (1949).
- 19 "Of the Balance of Trade," in Hume (1987:324).
- 20 For Hume's skepticism regarding revealed theology, see, e.g., "Of Miracles" in Hume (1955). For his skepticism regarding the claims of natural theology see Hume (1976). For an excellent study of Hume's attitude toward natural theology, see Hurlbutt (1965).
- 21 See the interpretation given by the historian Emma Rothschild (1992:74–96). The philosopher Charles Griswold baldly claims that "almost everything in his [Smith's] written works suggests that he believed that the divine—certainly the divine understood as a personal God—lives only in the human imagination" (1991a: 58).
- 22 When Smith later published a version of this letter describing Hume's death, he deleted this remark. Smith was, after all, a prudent man—a very prudent man.
- 23 "Review of Johnson's Dictionary" and "Letter to the *Edinburgh Review*" reprinted in Smith (1980:232–56).
- 24 Smith (1980:229–30), Editor's "Introduction" to "Contributions to the *Edinburgh Review* of 1755–56."
- 25 For introductions to Smith as a rhetorician, see Lothian (1963); Bryce (1983); Howell (1975).
- 26 People's attempts to persuade one another became the foundation for the urge to truck and barter, hence the development of the division of labor. Here, indeed, is another key link between Smith's rhetoric and his economics.
- 27 See "Considerations Concerning the First Formation of Languages" reprinted at the end of *Lectures on Rhetoric and Belles Lettres*, Glasgow edition.
- 28 See, e.g., (1986).
- 29 See Wittgenstein (1960, 1968). The second edition of *The Blue and Brown Books* contains "a few alterations, taken from a text of the Blue Book in the possession of Mr. P.Sraffa" (title page, emphasis added).
- 30 The idea that "ceteris is never paribus" is a key link between Sraffa's early work criticizing the long-run Marshallian supply curve (e.g., "The Laws of Returns under Competitive Conditions"), and his later work developing a so-called Ricardian critique of capital; see *Production of Commodities by Means of Commodities*. An economist exploring the profound links between Wittgenstein and Sraffa is John B.Davis (1988, 1993).  
The story of Sraffa's role in Wittgenstein's conversion to the contextual meaning of human language (both sign and verbal) is told in Malcolm (1984:57–8).
- 31 See, e.g., his review of Johnson's Dictionary where the various meanings of the words "but" and "humour" are ascertained by how they are actually used in concrete, particular discourses.
- 32 See, e.g., Hollander (1973).
- 33 See, e.g., Smith's criticism of the "prolixness, constraint, and monotony of modern languages" in "Considerations Concerning the First Formation of Languages" (1983:226).  
For those who think that Smith unambiguously believed in progress, I would like to know how progress can be unambiguously measured. That Smith and Sraffa were both concerned with measurement problems, see *WN*, Book I, Chapter 5; and *Production of Commodities by Means of Commodities*. To paraphrase what Sraffa might say about "capital": if you cannot measure it, how do you know it is there? Or, perhaps more accurately, is not there something wrong with your conception of it? The same criticism holds for the conception of progress.

- 34 Both Sraffa and Wittgenstein had difficulty in writing their mature work. Compare the “Prefaces” to *Production of Commodities by Means of Commodities* and *Philosophical Investigations*. Wittgenstein’s “Preface” seems particularly tortured and painful.
- 35 See Macfie (1971).
- 36 See the “General Introduction” to Smith (1980) by D.D.Raphael and A.S.Skinner; and the specific “Introduction” to works edited and introduced by W.P.D. Wightman in Smith (1980).
- 37 Schumpeter: “six essays, some of which are the crystallized fragments of the grandiose plan of a ‘history of the liberal sciences and elegant arts’ which he [Smith] abandoned ‘as far too extensive.’ The pearl of the collection is the first essay on the ‘Principles Which Lead and Direct Philosophical Enquiries: Illustrated by the History of Astronomy.’ Nobody, I venture to say, can have an adequate idea of Smith’s intellectual stature who does not know these essays. I also venture to say that, were it not for the undeniable fact, nobody would credit the author of the *Wealth of Nations* with the power to write them” (1954:182).
- 38 See Smith (1980:40, 51).
- 39 See also Smith (1980:45–6, 119).
- 40 Hence by my reading, Hayek makes a telling mistake when he conflates Smith’s theory of unintended results with a theory of spontaneous order. Any order that takes place for Smith occurs in the mind, not necessarily in the world outside the mind.
- 41 See also pp. 61–2.
- 42 The following is dealt with more fully in Pack (1995a).
- 43 See p. 49: “Hence the origin of Polytheism, and of that vulgar superstition which ascribes all the irregular events of nature to the favour or displeasure of intelligent, though invisible beings, to gods, demons, witches, genii, fairies, etc.”
- 44 See also MacLaurin (1968:22).
- 45 See, e.g., L.L.Laudan, “Introduction” to MacLaurin (1968).
- 46 This, of course, is one of the main things that separate Smith’s invisible hand from Hegel’s “cunning of reason.” As Kierkegaard remarked, “If Hegel had written the whole of his *Logic*, and had written in the Foreword that it was only a thought-experiment, in which he had avoided various things at many points, then he would certainly have been the greatest thinker who ever lived. As it is, he is merely comical” (1968: entry A29).  
Partly because of his deep skepticism, no one ever thinks that Smith was “merely comic.” On the relationship between Smith and Hegel, see, e.g., Henderson and Davis (1991).  
That Smith did not necessarily approve of that which he called “natural,” see Pack (1995b).
- 47 See Pack (1993).

## REFERENCES

- Allais, Maurice (1992) “The General Theory of Surpluses as a Formalization of the Underlying Theoretical Thought of Adam Smith, His Predecessors and His Contemporaries,” in M.Fry (ed.) *Adam Smith’s Legacy: His Place in the Development of Modern Economics*, New York: Routledge.
- Bazerman, Charles (1994) “Money Talks: The Rhetorical Project of the *Wealth of Nations*,” in Willie Henderson, Tony Dudley-Evans and Roger Backhouse (eds.) *Economics and Language*, New York: Routledge.
- Boswell, James (1963) *Boswell: The Ominous Years 1774–1776*, Charles Ryskamp and Frederick A.Pottle (eds.), New York: McGraw-Hill.
- (1977) *Boswell: Laird of Auchinleck 1778–1782*, Joseph W.Reed and Frederick Pottle (eds.), New York: McGraw-Hill.

- Brown, Maurice (1988) *Adam Smith's Economics: Its Place in the Development of Economic Thought*, London and New York: Groom Helm.
- Bryce, J.C. (1983) "Introduction," in Adam Smith, *Lectures on Rhetoric and Belles Lettres*, Glasgow Edition, Oxford: Oxford University Press.
- Clark, Charles M.A. (1989) "Natural Law Influences on Adam Smith," *Quaderni di Storia dell'Economia Politica* 6 (Winter): 59–86.
- (1990) "Adam Smith and Society as an Evolutionary Process," *Journal of Economic Issues* 24(3): 825–44.
- (1992) *Economic Theory and Natural Philosophy*, Aldershot: Edward Elgar Publishing.
- Cremachi, Sergio (1981) "Adam Smith, Newtonianism and Political Economy," *Manuscripto* 5(1): 117–34.
- (1988) "The Newtonian Heritage in Eighteenth Century Political Economy," paper prepared for the Conference: "After Newton: Science and Society in the First Industrial Revolution (1727–1850)," Madrid.
- (1989) "Adam Smith: Skeptical Newtonianism, Disenchanted Republicanism, and the Birth of Social Science," in Marcelo Dascal and Ora Gruendard (eds.) *Knowledge and Politics: Case Studies in the Relationship Between Epistemology and Political Philosophy*, Boulder, CO: Westview Press.
- Davis, John B. (1988) "Sraffa, Wittgenstein and Neoclassical Economics," *Cambridge Journal of Economics* 12:29–36.
- (1993) "Sraffa, Interdependence and Demand: the Gramscian Influence," *Review of Political Economy* 5(1): 22–39.
- Evensky, Jerry (1987) "The Two Voices of Adam Smith: Moral Philosopher and Social Critic," *History of Political Economy* 19(3): 447–68.
- (1989) "The Evolution of Adam Smith's Views on Political Economy," *History of Political Economy* 21(1) 123–45.
- (1993a) "Ethics and the Invisible Hand," *Journal of Economic Perspectives* 7(2): 197–205.
- (1993b) "Adam Smith on the Human Foundation of a Successful Liberal Society," *History of Political Economy* 25(3): 395–412.
- Fry, Michael (ed.) (1992) *Adam Smith's Legacy: His Place in the Development of Modern Economics*, New York: Routledge.
- Galbraith, John Kenneth (1987) *Economics in Perspective: A Critical History*, Boston: Houghton Mifflin.
- Griswold, Charles L., Jr. (1991a) "Adam Smith: Conscience of Capitalism," *The Wilson Quarterly Summer*: 53–61.
- (1991b) "Rhetoric and Ethics: Adam Smith on Theorizing about the Moral Sentiments," *Philosophy and Rhetoric* 24(3): 213–37.
- Hayek, Friedrich A. (1984) *The Essence of Hayek*, C.Nishiyama and K.R.Leube (eds.) Stanford: Hoover Institution Press.
- Heilbroner, Robert L (1985) *The Nature and Logic of Capitalism*, New York: W.W. Norton.
- Henderson, James P. and Davis, John B. (1991) "Adam Smith's Influence on Hegel's Philosophical Writings," *Journal of the History of Economic Thought* 13(2): 184–204.
- Hollander, Samuel (1973) *The Economics of Adam Smith*, Toronto: University of Toronto Press.
- Howell, W.S. (1975) "Adam Smith's Lectures on Rhetoric: An Historical Assessment," in Andrew Skinner and Thomas Wilson (eds.) *Essays on Adam Smith*, Oxford: Clarendon Press.
- Hume, David (1888) *A Treatise of Human Nature*, L.A.Selby-Bigge (ed.), Oxford: Clarendon Press.
- (1955) *An Inquiry Concerning Human Understanding*, New York: Liberal Arts Press.
- (1976) *The Natural History of Religion and Dialogues Concerning Natural Religion*, A.W.Colver and J.V.Price (eds.), Oxford: Clarendon Press.

- (1983) *The History of England, Vol. I*, Indianapolis: Liberty Classics.
- (1987) *Essays: Moral Political and Literary*, Indianapolis: Liberty Classics.
- Hurlbutt, Robert H. (1965) *Hume, Newton, and the Design Argument*, Lincoln: University of Nebraska Press.
- Kierkegaard, Soren (1968) *Soren Kierkegaard's Papirer, Vol. V* [The Papers of Soren Kierkegaard], 2nd edn., Copenhagen: Gyldendal.
- Kleer, Richard Arlen (1993) "Adam Smith on the Morality of the Pursuit of Fortune," *Economics and Philosophy* 9:289–95.
- Lothian, John M. (1963) "Introduction," in Adam Smith, *Lectures on Rhetoric and Belles Lettres*, New York: Thomas Nelson and Sons.
- Macfie, Alec (1971) "The Invisible Hand of Jupiter," *Journal of the History of Ideas* 32(4) (Oct.–Dec.): 595–9.
- MacLaurin, Colin (1968) *An Account of Sir Isaac Newton's Philosophical Discoveries*, a facsimile of the first edition with a new introduction and index of names by L.L.Laudan, New York: Johnson Reprint Corporation.
- Malcolm, Norman (1984) *Ludwig Wittgenstein: A Memoir*, 2nd edn., New York: Oxford University Press.
- Marx, Karl (1969) *Communist Manifesto*, Chicago: Henry Regnery Company.
- Meek, Ronald (1976) *Social Science and the Ignoble Savage*, New York: Cambridge University Press.
- (1977) *Smith, Marx, and After*, New York: John Wiley and Sons.
- Nietzsche, Friedrich (1969) *On the Genealogy of Morals*, New York: Vintage Press.
- Nyland, Chris (1993) "Adam Smith, Stage Theory, and the Status of Women," *History of Political Economy* 25(4): 617–40.
- Pack, Spencer J. (199 la) *Capitalism as a Moral System: Adam Smith's Critique of the Free Market Economy*, Aldershot: Edward Elgar.
- (1991b) "Reglementation, Intervention et Impot Regressif dans La Richesse Des Nations," *Cahiers d'Economie Politique* 19:55–68.
- (1993) "Adam Smith on the Limits to Human Reason," in Robert Hebert (ed.) *Perspectives on the History of Economic Thought, Volume IX: Themes on Economic Discourse Method, Money and Trade*, Aldershot: Edward Elgar.
- (1995a) "Theological and Hence Economic Implications of Adam Smith's 'The Principles Which Lead and Direct Philosophical Enquiries,'" *History of Political Economy* 27(2):289–307.
- (1995b) "Adam Smith's Unnaturally Natural (Yet Naturally Unnatural) Use of the Word Natural," in Ingrid Rima (ed.) *Perspectives on the History of Economic Thought, Vol. XI*, Aldershot: Edward Elgar.
- Rae, John (1965) *Life of Adam Smith*, New York: Augustus M. Kelley.
- Raphael, D.D. and Skinner, A.S. (1980) "General Introduction," in Adam Smith, *Essays on Philosophical Subjects*, Glasgow Edition, Oxford: Oxford University Press.
- Rosenberg, Nathan (1979) "Adam Smith and Laissez-Faire Revisited" in Gerald O'Driscoll (ed.) *Adam Smith and Modern Political Economy*, Ames, IA: Iowa State University Press.
- Rothschild, Emma (1992) "Adam Smith and Conservative Economics," *Economic History Review* XLV (1): 74–96.
- (1994) "Adam Smith and the Invisible Hand," *The American Economic Review* 84(2):319–22.
- Saussure, Ferdinand de (1986) *Course in General Linguistics*, Charles Bally and Albert Sechehaye (eds.), La Salle, IL: Open Court.
- Schumpeter, Joseph A. (1950) *Capitalism Socialism and Democracy*, 3rd edn., New York: Harper and Brothers.
- (1954) *History of Economic Analysis*, New York: Oxford University Press.
- Smith, Adam (1976) *An Inquiry into the Nature and Causes of the Wealth of Nations*,

- R.H.Campbell and A.S.Skinner (eds.),vol. II, "The Glasgow Edition of the Works and Correspondence of Adam Smith," Oxford: Clarendon Press.
- (1977) *The Correspondence of Adam Smith*, E.C.Mossner and I.S.Ross (eds.), vol. VI, "The Glasgow Edition of the Works and Correspondence of Adam Smith," Oxford: Clarendon Press.
- (1978) *Lectures on Jurisprudence*, R.L.Meek, D.D.Raphael, and P.G.Stein (eds.), vol. V, "The Glasgow Edition of the Works and Correspondence of Adam Smith," Oxford: Clarendon Press.
- (1980) *Essays on Philosophical Subjects*, W.P. D.Wightman and J.C.Bryce (eds.), vol. III, "The Glasgow Edition of the Works and Correspondence of Adam Smith," Oxford: Clarendon Press.
- (1983) *Lectures on Rhetoric and Belles Lettres*, J.C.Bryce (ed.), vol. IV, "The Glasgow Edition of the Works and Correspondence of Adam Smith," Oxford: Clarendon Press.
- Smith, N.Kemp (1949) *The Philosophy of David Hume*, London: Macmillan.
- Sraffa, Piero (1960) *Production of Commodities by Means of Commodities*, Cambridge: Cambridge University Press.
- Stone, Richard (1992) "Public Economic Policy: Adam Smith on What the State and Other Public Institutions Should and Should Not Do," in M.Fry (ed.) *Adam Smith's Legacy: His Place in the Development of Modern Economics*, New York: Routledge.
- Tobin, James (1992) "The Invisible Hand in Modern Macroeconomics," in M.Fry (ed.) *Adam Smith's Legacy: His Place in the Development of Modern Economics*, New York: Routledge.
- Viner, Jacob (1928) "Adam Smith and Laissez Faire," in John Maurice Clark (ed.) *Adam Smith 1776–1926*, Chicago: University of Chicago Press.
- Wightman, W.P. D. (1980) "Introduction," in Adam Smith, *Essays on Philosophical Subjects*, Glasgow Edition, Oxford: Oxford University Press.
- Wittgenstein, Ludwig (1960) *The Blue and Brown Books*, 2nd edn., New York: Harper & Row.
- (1968) *Philosophical Investigations*, Oxford: Basil Blackwell.
- Young, Jeffrey (1986) "The Impartial Spectator and Natural Jurisprudence: An Interpretation of Adam Smith's Theory of the Natural Price," *History of Political Economy* 18(3): 365–82.
- (1992) "Natural Morality and the Ideal Impartial Spectator in Adam Smith," *International Journal of Social Economics* 19 (10/11/12): 71–82.



# JEREMY BENTHAM ON PRIVATE AND PUBLIC WAGES AND EMPLOYMENT

The civil servants, the poor, and the indigent

*Nathalie Sigot*

## INTRODUCTION<sup>1</sup>

The *History of Economic Analysis* was published in 1954, eight years after the appearance of the Stark edition of Bentham's economic writings.<sup>2</sup> Schumpeter never quoted from the Stark edition. Schumpeter's ideas about Bentham were probably formed before this publication, and did not really change between the *Economic Doctrine and Method* (1914) and the *History of Economic Analysis*. It was not the details of Bentham's economic thought that concerned Schumpeter. Rather, Schumpeter was interested in Bentham's doctrine of utilitarianism. Schumpeter referred to it as "boisterous and vulgar utilitarianism" (Schumpeter 1954:66) for which he admitted harboring a "strong personal aversion" (1954:1153). He concentrated on utilitarianism's alleged influence on classical economic thought, an influence that seemed to him to be barely perceptible. If "economics is that branch of knowledge in which the utilitarian conception is relatively most useful...its actual influence was—extremely small" (Schumpeter 1914:88).<sup>3</sup> The extracts that Schumpeter quoted from Bentham seem indeed aimed to support that hypothesis. Not only did Bentham's utilitarianism have no apparent relation whatsoever with the classical economic system but, according to Schumpeter, it was never applied by Bentham in his own strictly economic writings. In this way, the *Letters on Usury* just as much as Bentham's *Manual of Political Economy* were, according to Schumpeter, the expression of "purely economic thought—the economic analysis of facts as contrasted with the cloud of dust surrounding it—...independent of [the] philosophy [of utilitarianism]" (Schumpeter 1914). Nevertheless, there are some places in Bentham's economic thought where he did attempt to apply utilitarian principles and it was the combination of his economics with utilitarian principles that guided him in the field of legislation. His wage theory, for example, bears witness to this attempt because it explicitly adopted the logic of the *felicific calculus*.

The principles that should guide the determination of wages are set out by Bentham in a treatise on law.<sup>4</sup> Through an analysis that at first sight seems to concern only civil servants and their salaries, we can understand the whole logic of Bentham's economic reasoning in terms of pain and reward. For Bentham, in the same way as for the field of legislation, it is a question of establishing a system of equivalence between the pain of labor—labor can only inspire aversion<sup>5</sup>—and the pleasure associated with remuneration.

If indeed the evaluation of pleasure and pain constituted a logic for establishing wages in both the private and the public sector, then the availability of a wages fund in the private sector constituted a constraint that explained the emergence of still a third category of workers, the indigent and the unemployed poor. This last group must be remunerated according to a completely different logic. In this case, we are mainly dealing with individuals excluded from the labor market due to a wages fund that is insufficient to guarantee full employment at the prevailing wage rates. Rounded up in industry-houses, these individuals constitute a segregated society and the excess labor supply from the private market is absorbed in that way. The adjustment between this particular sector, on the one hand, and the private and public sectors, on the other, no longer took place through the price of labor, but merely through quantity changes instead. However, its internal workings maintain sufficiently close linkages with the *felicific calculus* to appear in Bentham as the expression of the ideal utilitarian society.

It is presumed that private labor market wage rates adjust spontaneously according to the kind of employment under consideration. As a result, the government must take into account the situation in this private sector when fixing the level of remuneration of its civil servants. However, wages established on the private labor market should serve merely as a point of reference. The difficulty of comparing qualitatively and quantitatively different kinds of pain linked to various types of work means that, in the public sector, certain additional mechanisms should be set up in order to bring about the desired relation between work and wages.

The application of the *felicific calculus* suggests two such devices. Their juncture sheds light on the formation of wages. First, we have the principle of exchange, which applies to the employment relationship the results of the individuals calculation of pleasure and pain. Second, we have a principle of intervention on the part of the legislator, according to which the latter is presumed to be guided by the results of the same calculation in a domain where they do not automatically apply.

According to Bentham, wages can only be properly understood in the context of a complex economic system, composed of a private sector and a public sector directly administered by the State. With the help of this distinction, Bentham pointed toward the more general question of the difference between productive and unproductive labor. No doubt, the reason why Bentham did not limit himself solely to the analysis of the private labor market was because the wage rates of civil servants have a direct impact on the happiness of all, that is,

on aggregate social wealth. Bentham never considered the economy as completely autonomous with regard to legislation: the two domains are linked together by the common goal of security. According to Bentham, security is a necessary prerequisite for any industry.<sup>6</sup> In view of this fact, civil servants, who through their work contribute to the security of the nation become for Bentham a category of productive labor. Their wages should thus follow the same rules—that is, the same calculations—as those which govern wages in the private sector. Therefore, Bentham's theory of wages puts into play adjustment mechanisms which combine elements of spontaneous regulation, direct control, and incentives.<sup>7</sup>

The understanding of wages and employment that emerges in this way from Bentham's work is based in the main on works which succeed each other over a period of twenty-seven years, starting from 1774, when Bentham started to write the *Commonplace Book*, until *The True Alarm*, in 1801. It is through these contributions comprising responses to various questions that we grasp an overall logic in Bentham's work. From this point of view, four groups of works can be discerned:

- 1 the presentation of a general framework of economic analysis which limits state intervention, an aspect of Bentham's thought which he sets out most systematically in the *Manual of Political Economy*, put together during the years 1793–5;<sup>8</sup>
- 2 the analysis of wages, which started off with the situation of civil servants, and is to be found in *The Rationale of Reward*, conceived between 1782 and 1787;
- 3 the influence of demand on wages and employment constituted one of the results of Bentham's reflexions, in *The True Alarm* (1801), on the causes and consequences of increase of prices or depreciation of money; and finally
- 4 the ensemble of Bentham's contributions to the Poor Law debate, which lead to the elaboration of his proposals for industry-houses. Bentham's studies on this question, which he began in 1774–5, with the *Commonplace Book*, culminated in the years 1796–8, with several unpublished manuscripts, kept at the D.M. S. Watson Library in London (UCL) along with his *Observations on the Poor Bill* and the *Outline of a Work entitled Pauper Management Improved*.

Considered separately, each of these groups of works demonstrated innovative reflection. However, their principal interest lies in the way they fit together. Even if certain parts of the analysis remain obscure, his basic ideas about wages, employment, and related policies can be subjected to a consistent theoretical treatment which is, in the end, based upon the calculation of pleasure and pain.<sup>9</sup> This treatment concerns, first, the wages of civil servants and private workers and, second, the quantity adjustments between the different employment sectors.

## **THE WAGES OF CIVIL SERVANTS AND PRIVATE WORKERS**

Bentham developed his analysis of wages in the context of what we would consider today a two-sector economic system. In the public sphere, what constituted “correct proportionality” between the work to be done and the remuneration received had no a priori reason to be respected since it is a purely administrative decision that fixes the wage rate. In order to restore this proportion, Bentham therefore clarified the legislator’s behavior in this matter by identifying seven rules in all, of which only the first three are directly relevant to us here.<sup>10</sup> On the other hand, Bentham seemed to allow that, in the private sector, the balance between pain and reward emerged spontaneously through the relation established by each individual between his work and the wages he earns. If, for Bentham, the obvious conclusion to be drawn is that no direct intervention in wage setting is justifiable since it would bring about additional pain with no compensation, neither does this mean that the total labor force is rejected, nor that any form of intervention is a priori rejected.

### **Pain and reward: the salary of the civil servant**

The first two rules set out by Bentham in his analysis of the way in which wages are fixed in the public sector established a double link between, on the one hand, the remuneration of civil servants and their own interests and, on the other hand, between this remuneration and the specific aims of the administration. Bentham’s first rule stipulated therefore that “emoluments ought in such manner to be attached to offices, as to produce the most intimate connexion between the duty and the interest of the person employed” (1782–7:237). It is thus a question of finding a system of remuneration which will ensure the assiduity of civil servants and the efficiency of their labor. Hence, the second rule specifies further that “Emoluments ought in such manner to be attached to office, as to produce the greatest possible degree of excellence in the service rendered” (1782–7:239).

Bentham seemed to have been aware that workers’ efforts within the framework of the labor contract are barely observable to their employers. He responded to this in two ways: on the one hand, he proposed a modification of the terms of contract, daily payment of wages (1782–7:239) allowing the employer to react faster to information reaching him on the execution of the contract.<sup>11</sup> This provided the additional advantage of closely associating work with its reward in the mind of the worker: “when reward, instead of being bestowed in a lump, follows each successive portion of labour, the idea of labour becomes associated with pleasure instead of pain” (1782–7:239). On the other hand, Bentham proposed a system of variable remuneration which would induce each worker to maximize his effort, contributing, in this way, to the fulfillment of his employers aims even when the latter is not able to observe it directly.<sup>12</sup>

In addition to this double mechanism, Bentham also proposed the payment of retirement pensions. In this way, the cost of losing his job would be such that the worker would have a real interest in avoiding it. Bentham wrote:

In all employments from which the individuals are removable at pleasure, the pension of retreat...will add an increasing value to the salary, and augment the responsibility of the individual employed. Should he be tempted to malversation, it will be necessary that the profit derivable from his malversation should compensate with certainty, not only for the loss of his annual salary, but also for the value of his future pension of retreat.

(1782–7:246)

This last measure constituted an additional incentive to work, the compensation of which is not just the present value of future income, but also a form of insurance for the future. Therefore, labor represents for each individual not just a means of assuring his subsistence over time, but a means of guarding against the uncertain future: for Bentham, these risks concerned not only the time when the individual will no longer be capable of working, but also his future needs or the purchasing power of his income. To summarize, work effort results both from the perception of a present known with certainty, and from a risk-averse behavior about the future. Bentham explained that the “present need and fear of the future motivate[d] work [drove] the economy” (1785–6:314). In view of this double objective, not only should the remuneration of the agent provide at least for the necessities of life, but a certain number of mechanisms should be set up to reduce this sort of risk. The institution of a system of pensions for retirement responds directly to this second objective. According to Bentham,

we ought not to forget the happiness insured to the persons employed, resulting from the security given to them by the provision thus made against that period of life which is most menaced with weakness and neglect. Hence an habitual disposition to perform the duties of their office with alacrity will arise; they will consider themselves as permanently provided for, and fixed in a situation in which all their faculties may be applied to the discharge of its duties, without being turned aside by vague apprehensions of future distress, and the desire of improving their condition, which so often leads individuals successively to try different stations.

(1782–7:246)<sup>13</sup>

The third rule is economic, and is set out as follows. “The amount of the salary, or other emoluments, attached to every office, ought to be the least that the individuals qualified to execute its duties are willing to accept for their performance” (1782–7:241). Two implications follow. First, the total remuneration granted to the civil servant should include “everything necessary to enable the individual to perform, and to continue to perform the service”

(1782–7: 241) and, second, the wages should compensate for the opportunity cost that accepting such a job entails. They should thus be sufficient so as to include “whatever is necessary on account...of the chance which may be given up of the advantages that might be expected from other services” (1782–7:241).<sup>14</sup> Two wage rates, a minimum wage rate and a “fair and proper price” (1782–7: 241–2) of labor, are then defined, to establish the foundational ideas out of which Bentham constructed his theory of wages.

The idea of a minimum market wage is not an original one, but the way Bentham justified it in his work was quite unusual. It had nothing to do with the effect of an adjustment between the wage rate and the size of the population, that we find, for instance, in David Ricardo’s later thought. Rather, the minimum wage is much more a measure to be applied to employment as a whole, both in the public as well as in the private sector. The objective of the minimum wage is to maintain the security that all industry requires. Although Bentham’s minimum wage does correspond, in the private sector, to a physiological minimum, the impossibility to maintain it would have social more than demographic consequences. It is a level of remuneration beneath which security would be threatened, as it would entail famine leading to a radical revolt and massive discontent (Bentham 1793–5:267). The same goes for civil servants who enjoy some power. In this case, the minimum wage corresponds to a sort of sociological class minimum. In order to avoid corruption and fraud, their salary must free them from need—that is, not in an absolute sense but relative to the constraints imposed upon them by their position in the hierarchy. According to Bentham,

public opinion assigns to every public functionary a certain relative rank; and, whether reasonably or not, expects from him an expenditure nearly equal to that of persons in a similar rank. If he be compelled to act in defiance of public opinion, he degrades and exposes himself to contempt—a punishment so much the more effective, in proportion as his rank is elevated.

(1782–7:245)

Above this lower bound, Bentham brings in the notion of the “fair and proper price” of labor, which assumes the existence of differential wages in the economy, and corresponds to the level of remuneration necessary to attract skilled labor into a given branch. It seems that this fair price is to be understood as an “administrated price”—which is consequently relevant only to the public sector. Its control ensures that positions in public service will be filled first, possibly at the expense of jobs in the private sector which require similar qualifications. The case of judges’ salaries which should be compared to the remuneration of lawyers constitutes, for Bentham, an example *a contrario*: indeed, if “in France, before the Revolution, scarcely any salaries were paid to the judges,” it was because “they were not drafted from the class of advocates, and no sacrifice were required of them when they entered upon their duties; it was not necessary that they should

be possessed of much experience, and their reward consisted principally in the honour and respect attached to their station” (1782:245).

The mechanism by which this price is fixed in the public domain consists in a *pseudo-tâtonnement*. Bentham wrote:

At the first establishment of an office, it may be difficult accurately to determinate what ought to be the amount of its emoluments in this, as in the case with every commodity when carried to market for the first time, we can only be guided by chance. The number and character of the candidates will, however, soon determine whether the amount offered be too large or too small.

(1782–7:242)

The information necessary in order to determine this price is given by exchanges, and this constitutes the link between the public and the private sector. Acceptance of a proposed job resulted from a calculation carried out by the worker, in which he compares the wages he is being offered with those he could have earned had he accepted another job, requiring the same qualifications.

The theory of wages which Bentham developed with regard to the public sector is closely linked to analysis that he carried out elsewhere regarding the manner in which wages are fixed in the private sector. On the one hand the minimum wage, which has a normative dimension in the context of public service, is analyzed as a positive variable in the private sector. Wage rates, determined in accordance with the level of affluence of the society under consideration (1793–5:247), and more precisely according to the relation between the quantity of capital and the population (1793–5:247),<sup>15</sup> cannot dip beneath Bentham's minimum wage without both threatening security and generating unemployment. On the other hand, the fair price of labor, as defined for civil servants, is linked to its market price in the private sector, which is used as a point of reference. Finally, the labor market is presumed to balance pain and reward spontaneously. In the public domain institutional mechanisms are required to implement such a balance.

### **The positive analysis of the private sector: the supply and demand for labor**

Although Bentham's analysis of wages in the public sector is linked quite closely to his analysis of wages that he carries out in the private domain, the two bodies of analysis pursue different aims. While, in the public sector, it was essentially a matter of determining the rules which would allow the pain of labor to be proportioned to the reward of wages, in the private sphere, it is essentially the determinants of the supply and demand for labor that are examined. In the latter sphere, the government cannot directly intervene to set the level of remuneration received by the worker, without threatening employment. According to Bentham,

a regulation fixing the rate of wages so as to prevent its falling below a certain rate is...a regulation of the prohibitive kind, excluding from employment all such hands the value of whose labour does not rise to a *level* with that rate.

(1797:442)

Bentham's analysis presents the classical argument that the rate of remuneration is determined by labor supply and demand.<sup>17</sup> According to the type of employment under consideration, this rate will vary in keeping with a certain number of circumstances that Bentham lists, notably the intensity of labor, and the dangers or discredit which are associated with it (1782–7:213).<sup>18</sup> The minimum of this level is a physiological minimum defined, not in relation to the individual, but to his family.<sup>19</sup> At first sight, we are dealing with a notion that greatly resembles the minimum wage rate, as conceived in the public sector. However, in the latter context, its implications were directly normative. The legislator knew that if he were to fix the remuneration of the civil servant below this minimum wage, he would threaten the end of security. In the private sector, in which the legislator does not intervene directly, the situation is more complex. It would be quite possible for wages to fall beneath this minimum level.<sup>20</sup>

In this regrettable case, the characteristics of the labor market would find themselves fundamentally altered. Not only would insecurity rise, provoking a reaction of revolt that it is difficult to see as an adjustment of the labor supply, but, of special concern here is that an increasing number of workers would be deterred from seeking to provide for their needs through work. Therefore, from an analytical point of view, this minimum wage should not be seen as a lower limit, but rather as the value below which unemployment appears and security is compromised.

At the other extreme, although there is no upper limit to wage rates, psychological considerations are what lead Bentham to criticize the establishment of a high rate of wages. On the one hand, indeed, "the sort of mental intoxication produced in a vacant and uncultivated mind by the sudden accession of the high rate of wages drives him [the wage earner] into the sensual sort of intoxication of which it affords him the means" (Mss. [151:024]). The misgivings that Bentham displays here about high wages seem to be the expression of a more general fear that can be found throughout his analysis. Sudden increases in wealth encourage the agent to increase his consumption of leisure goods rather than savings. This is explained in terms of time-preference for present—that is a preference for the present that is characteristic of every individual in a Benthamite universe. In Bentham's view, many errors in the individuals' calculations of pain and pleasure result from this psychological characteristic—and thus justify legislative intervention.<sup>21</sup> Present consumption needs constitute the most powerful motive which induce men to work.<sup>22</sup> Poverty, "the state of everyone who, in order to obtain subsistence, is forced to have recourse to labour" (Mss. [153a: 001]), is a necessary condition for the production of wealth.<sup>23</sup> Bentham's analysis therefore presupposes at first an increasing labor supply—wage increases create new



consumption needs that, in order to be satisfied, require an increase in the labor supply.<sup>24</sup> But after some point, the labor supply begins to decrease. According to Bentham, once their wages rise above a certain level, individuals prefer to reduce their labor supply, acquiring the habit of idleness, “[the] source of uneasiness, and in one who has no property of indigence and wretchedness” (Mss. [152a: 232]).<sup>25</sup> On the other hand, an individual earning high wages acquires habits of consumption the loss of which—in the event of his wages returning to a medium level—would cause considerable pain (Mss. [153a:002]). Thus, the pain of losing income is imagined to be as comparatively more intense than the initial pleasure occasioned by the initial wage increase. It is indeed true that, in the Benthamist universe, “the pleasure of gaining is not equal to the evil of losing” (1785–6:331). It is equally comprehensible that, for Bentham, considerable fluctuations in workers’ wage rates should constitute a threat to the security of the nation, allowing the individual to become aware of his wretched condition.<sup>26</sup> Such fluctuations are thus in direct opposition to the objective that Bentham had in mind for the education of the poor, that is, the preservation of social peace. According to Bentham:

the grand object of the instruction to be delivered on [the poor] should be the practical one of disposing them to peace and quietness. Two propositions to be inculcated: 1. That the condition they are doomed to is as good as one, i.e. as favourable to happiness as any others; 2. That if it were not, no efforts which they could use by their collective force would have any tendency to improve it.

(Mss. [153a:132])

In his study of the factors determining wage rates in the private sector, Bentham distinguished between two types of worker: wage earners on the one hand and independent workers on the other.

The problem is most easily resolved for independent workers. Bentham analyzed their level of remuneration as a price which depended solely on the supply and demand for labor. Bentham wrote:

with regard to the professions the emoluments of which depend on a free contact between individual and individual, between him who renders the service and him who receives it—service in the law, in medicine, in teaching and in the various careers of amusement...in a word, the price of these services, from those which presuppose most education down to those which demand only physical force, will always be in direct ratio to the demand for these articles and in inverse ratio to the quantity of them offered.

(1801:197)

The case of the wage earners creates more considerable difficulties. Although the level of their earnings is also determined by supply of and demand for

labor, the latter become themselves the object of a more complex process. If the labor supply were to depend on the volume of population and the wage rate, the demand for workers, on the other hand, is bounded by the available quantity of capital. Here Bentham adhered to the wages fund doctrine. However, this quantity is not the only factor to play a part, since production, the result of the use of capital, can only increase under the influence of a rise in consumer demand.<sup>27</sup> Bentham considered in turn the specific demand for agricultural products and aggregate demand as a whole. Whereas the study of the consequences of variation in agricultural demand allows investigation into the details of a mechanism of adjustment, the conclusions arrived at can be extended to the effects of variations on “the demand for the produce of that labor” as a whole (Mss. [017:061]).<sup>28</sup> In this perspective, agriculture simply performs part of a striking illustration of a still more general market process.

The starting point is an increase in the market demand for agricultural goods. As a result, prices rise, increasing profits in the agricultural sector. Agricultural production is thus encouraged, which leads to greater demand for agricultural labor (1801:196).<sup>29</sup> At first sight, the partial conclusion drawn by Bentham seems curious. He suggests that the wage increase that results from this process is proportionately less than the increase in agricultural prices (1801:196), which should lead us to conclude that the real rate of wage *goes down* following any sudden increase in the demand for labor. After attempting to avoid this difficulty by remarking that “this presents a problem which is as interesting as it is difficult to solve. As it is foreign to the subject treated here, I shall not pursue this investigation” (1801:196)—Bentham nevertheless goes on to provide an explanation. He assumes that increase in the demand for agricultural goods generates labor-saving technical progress. As a result, Bentham concludes that “in consequence of this [technological] progress, double the labour has not been necessary to obtain double the produce, and this is one of the causes for which the price of this kind of labour has not risen in proportion to that of the products which spring from it” (1801:196). In the absence of this kind of technical progress, “double the produce” would imply “double the labour,” and the rate of variation of nominal wages would be equal to the rate of variation in price.<sup>30</sup> Bentham conceded that here, the real rate of wages remained constant.

Similarly Bentham envisaged the effects of decrease in the demand for agricultural products in just as paradoxical a manner. The beginning of the process is simply the opposite of what happened in the case of an increase in demand—that is, agricultural prices dip and profits follow. However, Bentham obviously does not explain the subsequent *rise* in the real rate of wage by a “technical regression.” This true, his explanation is based on the downwards rigidity of nominal wages. Bentham speaks of a “power of inertia” (1801:196) which does not decrease nominal wages to the same extent as the fall in the price of agricultural goods.

Bentham does not explicitly describe the link between the analysis of the effects of demand and the wages fund theory. This raises the question of their

mutual consistency. It is certainly not absurd to allow that profit variations, induced by price variations, have repercussions on the wage funds and in this way on the demand for labor. Similarly, we can accept the idea that the inertia of wages prevents them from adjusting to a reduction in wage funds. More difficult to reconcile with the wages fund theory is the process, described above, that follows from a rise in the demand for agricultural goods. Indeed, Bentham claims that the demand for labor could rise while at the same time the real rate of wage remained constant or even fell. It is not clear how he managed to arrive at this conclusion, especially if we assume that the labor supply is on the increase, full employment has been achieved and the workers are free from any monetary illusion. Perhaps this is the aspect of his research that Bentham was reluctant to pursue in *The True Alarm*. We can thus draw the guarded conclusion that, in Bentham's system, workers adjust their labor supply only imperfectly to fluctuation in real wages.<sup>31</sup>

To summarize, it is a complex process—involving technical progress and monetary illusion of wage earners—that accounts for the effects of a rise in agricultural demand but this does not challenge the idea of a spontaneous adjustment between wages and labor in the private sector. It is, however, no longer true in the case of a fall in agricultural demand. In that case, the power of inertia of wages, obviously stronger the closer one gets to the minimum wage, seems to prevent any adjustment other than by means of employment levels.

### **SPONTANEOUS MECHANISMS AND EMPLOYMENT ADMINISTRATION**

A two-sector, as opposed to an aggregated, vision of the economy, is of special interest here. It provides a different analysis of the response to readjustments depending on whether the readjustments originate in either the private or the public sector. The observed differences are due to the presence of a predetermined wages fund in the private sector and the absence of one in the public sector. In the private sector the wages fund is a constraint on employment and wages. Nevertheless, the functioning of this constraint is far from simple. In particular, the “power of inertia” of the wage rate prevents it from being, in every case, the determined variable and neither could labor supply be the determining variable. According to Bentham, the sum of wages in the private sector is equal to the accumulated wage fund. Unfortunately, this equality does not always entail the full employment of the available work force. In the public sector, unlike the private sector, the wage rate is an instrument of political economy that the legislator will establish according to the level of remuneration that prevails in the private sector. This is the imperative that then determines the “public sector wage fund” required to finance any level of public-sector employment.

An excess labor supply is therefore to be analyzed differently depending on whether we are dealing with the private or the public sector. In both cases, the intervention of the State, or some other tutelary authority, is needed. It is needed

either directly to manage the labor surplus in the private sector, or manage wages when the labor surplus occurs in the public sector.

### **The poor and the indigent: the regulation of labor**

In the private sector, it is conceivable that inertia of wages, the existence of a minimum wage rate and, to a certain extent, the character of technical progress could explain unemployment. However, Bentham's analysis does not end here and, in his work, he leaves room for other explanations. According to Bentham, the spontaneous development of the private sector induces unemployment.<sup>32</sup> Some of these explanations demand a specific response. Consider the case of an insufficient mobility of labor. This means that unemployment in some segments of the market coexists with a shortage of labor in others. This problem can be solved with a two-pronged response. First, deregulation—in particular the abolition of the “Laws of Settlement” of 1662<sup>33</sup>—would free up labor and make it become more mobile. The second response is an institutional response—provision of training for the workers. Another response is required to make the distribution of information about jobs less imperfect. Bentham declared that the lack of perfect information was a factor in unemployment:

Demand for labour might as well not *exist*, as not be *known* to those who have the labour to bestow: in as far then as, under the existing order of things, this demand fails of being thus known, thus to *cause it* to be *known* is as much as to *create it*.

(1797–8:398)

In these circumstances, Bentham recommended the institution of a device “almost identical with our present technique” (according to Zagday 1948:65)—combining also a proposed “Employment Gazette,” designed to publish advertisements for job vacancies and requests for employment in general terms, with an “Employment-Register and Intelligence-Offices” (Bentham 1797–8: 398),<sup>34</sup> which specifies the qualifications corresponding to the various advertisements. In Bentham's opinion, numerous advantages should emerge from such a device: in particular, the circulation of information should allow part of the unemployment to be absorbed, discrepancy of wages to be reduced, and the labor to be directed toward the best-paid jobs (1797–8:399). At the same time, in order to avoid the unwanted development of a buyers' market for laborers, Bentham suggested charging for the publication of advertisements. This would create an opportunity cost higher for the unemployed worker than for the employer: “if it were known that employment-lacking hands might make known their offers without any check from the expense, master-employers would holdout in expectation of such offers, partly to save the fees, partly to get hands on the cheaper terms, by receiving offers, instead of making them” (1797–8:398). From Bentham's point of view, an asymmetry of information on the

market in the employers favour would contribute toward lowering the wage rate below the market rate.

In these two cases, the responses suggested by Bentham avoid direct intervention to set wages, which would falsify individual calculations. Bentham favored mechanisms that enabled individuals to become better calculators. We meet this same concern when it comes to instituting, rather than specific responses, a general response to unemployment resulting from a wages fund insufficient to ensure full employment at the prevailing wage rate—such a situation typically results from inertia in wage rates and, moreover, from the existence of a minimum wage rate. Facing this, Bentham’s imaginative solution consisted in a Pauper Plan which would lead to the institution of a kind of buffer sector designed in part to absorb the excess labor supply of the private sector.

Instead of the notorious workhouses in existence at that time, Bentham proposed the creation of industry-houses to shelter the indigent. By “indigent” Bentham meant those

who, being destitute of property (or at least destitute of the species of property necessary to the immediate satisfaction of the particular want by which he happens to be pressed) is at the same time either unable to labour, or unable, even for labour, to procure the supply of which he happens thus to be in want.

(Mss. [153a:001])

The indigent also included the unemployed poor. These “residents” of the proposed industry-houses would only find refuge here in exchange for work, acquiring in this way the habit of effort which itself is a “source of plenty and happiness” (Mss. [152a:232]), which generally comes with “(bodily) health, strength, the faculty of self-maintenance, and moral health” (1797–8:395).

Through these institutions, Bentham conceived nothing less than the realization of a utilitarian society,<sup>35</sup> in which each individual would work according to his needs. “[T]his plan [for industry-houses],” he explained, “might be accomplished—and that in a degree little short of perfection—upon an all comprehensive scale...what at a vast expense, and with inadequate powers, a most respectable Society have so long striving at, upon a comparatively minute scale” (1797–8:405). Indeed, it is no longer a question of the level of remuneration that allowed the individual to act according to his conscious interests, as was the case in the labor market. Industry houses are designed to correct the failures of society, and we are therefore rather dealing with an ensemble of coercive devices which aim to perfect the capacity of the individual for calculation.

Bentham’s analysis is related to that which he developed regarding the establishment of the wage rates for civil servants. It is indeed based on the institution of incentive schemes, intended to induce the poor to carry out the tasks within their capabilities. For example, the wages paid to the worker should

be in proportion to the effort actually carried out (1797–8:381), and team work should be avoided as far as possible, in order to ascertain the respective contribution of each individual (1797–8:384); also, in work for self-supply, each should receive the product of his own work, so that he might be rewarded or punished “according to the goodness or badness of his work” (1797–8:384). The different mechanisms recommended suggest that the industry-houses are meant to constitute an economy of small producers rather than of wage earners. Even though his analysis is unclear on this matter, we can nonetheless suppose that part of each individual’s working day is to be allocated to production responding directly to his own needs, and the rest of the time set aside for production to be exchanged for wages, some of which serves to reimburse the maintenance costs incurred on his account by the Company giving him assistance. This implies of course that no assistance will be provided within the industry-houses if no work were carried out in return.<sup>36</sup> Aware of the fact that indigent status is a private piece of information, Bentham proposed a solution to reveal it. In an attempt to render the condition of the state-supported indigent more difficult than that of the independent worker, the indigent would be required to wear a uniform (1797–8:389), or even a badge (Mss. [154b: 602–3]).<sup>37</sup> In addition, there would be a lack of comfort, and the indigent would be paid a wage lower than that paid to independent workers (1797–8:398).

Seen as a vast reserve of labor (1797–8:365), Bentham’s industry-houses rest upon the twofold principle of the minimization of the maintenance costs of the individual being supported, and the maximization of his production.<sup>38</sup> This would result in maximizing the profits of the establishment. Indeed, one of the advantages of this system lies in its capacity to generate profits. This would reduce if not eliminate the need for poor rate taxes (1797–8:391). The resulting increase in income could eventually give rise to additional capital which, when productively employed, increases the demand for private labor. The low-cost production realised within these industry-houses should not, however, seek an outlet on the market, for fear of creating a glut and generating additional unemployment. According to Bentham, “working for sale, unless laid under restraints by superior authority, expose individual competitors to universal ruin: self-supply injures nobody—affords ground of complaint to nobody” (1797–8: 383).<sup>39</sup> Consequently, industry-houses should function in autarchy or else specialise in certain types of production for which the private labor supply is insufficient.

This autarchic society, consuming or accumulating its own production, nevertheless keeps up its links with the outside world through the labor market. First, it allows the absorption of that segment of the labor supply that is in excess in the private sector. In Bentham’s words:

the keeping them up under the Company’s management [the Company which is to manage these] on the Company’s farms in a situation where they can do no work but for the account of the Company, and for their own maintenance, creates a proportionate *vacuum* in that supply [of labor]:

that vacuum must therefore be, and therefore will be supplied from the stock [of] the self-maintening Poor.

(Mss. [154b: 534–5])<sup>40</sup>

However, the industry-houses also serve other purposes. Bentham sees them as allowing wage regulation and contributing directly to the security of the nation. In the first case, Bentham discusses the effects of the presence of industry-houses in branches of activity where wages are too high—not in the sense that they bring about an excess labor supply, but because they constitute an excessive reward if compared to the pain endured by the worker: “with regard to the pouring in hands into over-paid employments, whether in the view of taking the benefit of the excess, or (what would be the necessary consequence) for the propose of reducing it, this advantage would be open to the Company, as well as to private masters, and private hands” (1797–8:390).<sup>41</sup> This possibility of course requires a many-sided training program for workers, to be provided for all by the education system within the industry-houses. Finally, the industry-houses can constitute an half-way house between the unemployed poor, and the army in which many amongst them may be enlisted.<sup>42</sup> Besides this, all indigent and poor residing in industry-houses are to receive military training or, in the case of the disabled, will learn to assemble armaments. The effects of this measure will thus concern not only the unemployed themselves, but the whole community which will benefit from greater security: since wealth is an increasing function of security,<sup>43</sup> this will contribute to the realisation of the greatest happiness of the greatest number.

### **Qualification and effort**

We have seen how, in the public sector, one of the functions of the fair and proper price of labor was to ensure that priority be given to the qualified workers most suitable for the job in question. A level of remuneration corresponding to that of the most highly qualified workers in similar private-sector jobs should have the effect of attracting the most qualified workers to the public sector. Thus, it could be argued that Bentham's fair price of labor produces a permanent excess labor supply as far as public employment is concerned. However, the discrepancy in remuneration between the public and private sectors should be narrow enough to ensure that workers will spill their labor supply over the private sector. A persistent excess in the labor supply is thus to be understood as an indication of wages that are too high when compared with the fair and proper price—and, to an even greater extent, with the market rate. While, in the private sector, the legislator does not intervene directly to set wage rates in order to reduce unemployment, the reverse applies in the public sector, where he will reduce the proposed wage until any excess labor supply has been eliminated.

Three levels of remuneration thus emerge from Bentham's analysis. First, the fair price of labor is defined solely for civil servants, and is designed to

ensure both equilibrium in the public labor market and the intensity of the effort for this category of workers. The fair price of labor will naturally exceed the current wage rate observed on the private labor market reflecting the higher qualifications demanded from civil service employees. Second, we have a rate of remuneration applying to the private labor market. Within the limits of the “minimum” wage that can be granted without disturbing security and the “maximum” wage, beyond which this security can no longer be guaranteed, this rate will adjust according to possible variations in the reserve of labor contained within the industry-houses. Finally, we come across a wage that is inferior to that of private workers, granted to the “residents” of the industry-houses. From Bentham’s point of view, this discrepancy is justifiable in that these institutions allow the indigent, and equally the temporarily unemployed poor, to avoid the pain of unemployment. In this way, the assistance provided legitimizes the sacrifice of part of their wages.<sup>44</sup>

Generally speaking, the pains and pleasures that issued out of the system of laws established by the legislator in the political and social domains here take the form of a law of exchange, which requires that the individual must be remunerated in accordance with his efforts. Wages thus become the reward that the legislator, in the context of public-sector employment, must use in order to induce individuals to achieve the goal he has in view. However, the means at his disposal consist, not merely of the wages proposed, but also, in a more general sense, of the terms of the labor contract itself. If, indeed, the proposed level of remuneration will attract the most qualified workers, the specifications of the labor contract allow the administration to exert a degree of influence upon their efforts. Although this kind of reflection constituted one of the most original aspects of Bentham’s economic thought, it nevertheless proceeded from principles established in the field of legislation. In a similar way as in this case, Bentham relies mainly on the idea of greater weight being accorded to loss as opposed to gain and to fear as opposed to hope. When he wrote that “the pleasure of gaining is not equal to the evil of losing,” Bentham had more in mind than the so-called phenomenon of decreasing marginal utility. Bentham presumed that, where the perspective of gain is not sufficient to stimulate the effort required, the perspective of loss will succeed: “[I]t is by fear only, and not by hope, that [the individual] is impelled to the discharge of his duty—by the fear of receiving less than he would otherwise receive, not by the hope of receiving more” (1782–7:236).

If we accept this argument, we are better placed to understand the type of labor contract that Bentham required the legislator to formulate. Rather than a reduced basic wage to be supplemented by premiums rewarding the worker for his effort, Bentham favored a contract that provided for a high basic wage accompanied by penalties if the required effort is not put in. While the prospective bonus is unable to persuade the worker to give up the pleasure of relative idleness, the penalty with which he is threatened constituted a more powerful incentive for effort.<sup>45</sup>



### SOME CONCLUDING REMARKS

Benthams writings on wages and employment illustrate the wide range of applications of utilitarian principles and above all they show the way in which the economy is embedded within the more general field of legislation. At first sight, one might observe that the link between them is of a hierarchical kind. In Benthams words, the economy appears as a “branch of legislation” (1820:375), in the sense that its particular ends—subsistence and abundance—are subordinated to the foremost good of legislation—that is, security. On several occasions, indeed, this legislative goal lends a specific turn to Benthams argument. This holds true for the interpretation of the minimum wage, for instance. It is also in evidence in the consideration of the way in which the civil servant’s wages are established, wages that should enable their own interests to merge with those of the community. Finally, the primacy of the end of security is also manifest in the industry-houses which Bentham expected to contribute both to internal as well as external peace.

Of course, the distinction between legislation and economy could be no more than academic, a Benthamian style, lending a specific flavor to a presentation of economic activities. However, I think it is more. Had this end of security not influenced economic behaviour, things could have turned out differently. More precisely, Schumpeter’s claim about the similarities between Smith’s—or, generally, the classical economists’—and Benthams basic assumptions would be more easily acceptable. If individuals were sufficiently informed, if they were good lightning calculators, if they were not anxious about their future, if no externalities occurred to them, then it could be argued so long as economics activities are concerned, the Benthamian individual, guided by the *felicific calculus*, is close to the standard picture of the Smithian individual, guided by self-interest. The result of their interaction would have given birth to the same social optimum—no matter how they respectively called it. Obviously, this picture is false. While Bentham did admit the possibility that individual interests could coordinate spontaneously, he believed that individuals are badly informed, poorly trained as calculators, and this justifies the legislators intervention in the name of the greatest happiness principle. It also explained how the legislator should intervene. According to Bentham, men’s capacities for pleasure and pain are not like pieces of a puzzle that have to be unscrambled, but these last are already governed by autonomous forces which lead them into special configurations. And it is always more preferable for Bentham to take these automatic forces into account, to domesticate them, rather than to fight them.

This juncture between individual calculations, economic forces, direct control and incentives defined the outstanding place of Jeremy Bentham in the economic thought of the end of the eighteenth and the beginning of the nineteenth century. From a certain point of view, his economic positions are rooted in nascent classical economics. But, with some reason, it has also been argued that Bentham

could be viewed as a follower of the physiocrats (Lutfalla 1981:104; Stark 1954:38, 47) or as a forerunner of both neoclassical economists (Schumpeter 1954:408; Collison Black 1988:31–5; Stark 1946:595–605) and Keynes (Cordebas 1960:190). Because he is claimed by so many varying traditions, we might suspect that Bentham does not belong to any single one of them. After all is said and done, this might indicate that Bentham was simply a “Benthamian.”

## NOTES

- 1 I am indebted to Michael Quinn (Bentham Project, UCL), who enabled me to gain access to some of Bentham’s yet unpublished manuscripts, which he is preparing for publication. I wish to thank Andre Lapidus, Ivo Macs, and the participants in the E.P.E.E. seminar at the University of Evry, in particular Daniel and Helene Kontzler, for helpful suggestions and discussions on a first draft of this chapter. The remaining errors are, of course, my own responsibility.
- 2 Bentham, Jeremy (1954) *Jeremy Bentham’s Economic Writings*, 3 vols., W.Stark (ed.), London: George Allen.
- 3 See also Schumpeter (1954:447): “though a province of the Benthamite empire, the economics of the utilitarians was a self-governing province that could have lived equally well if severed from the empire.” In taking this line, Schumpeter can be distinguished principally from E.Halevy (1901–4: vol. II, 216–17), J.Bonar (1893:216, 218) and W.C.Mitchell (1934–5: vol. I, 90–1): indeed, all three defend the idea that utilitarianism strongly influenced classical economic thought. For the rest, Schumpeter accepts an opinion that was widely approved at the time: that Bentham could, without the shadow of a doubt, be considered as a classical economist. It was only with T.W.Hutchinson’s article (“Bentham as an Economist”), which appeared in 1956, that this opinion would be seriously challenged.
- 4 These principles are taken from the *Theory of Pain and Reward*, published in French by E.Dumont, in 1811. They are reproduced in J.Bowring’s edition of *The Works of Jeremy Bentham*, Part VII. This is the translation that I will make use of here.
- 5 “*Love of labour* is a contradiction in terms,” writes Bentham (1814–31:104).
- 6 “The Law...says to [a man] ‘*Work*, and by stopping the hand that would take them from you, *I will ensure to you the fruits of your labour*; its natural *and sufficient reward*, which, *without me, you could not preserve*’ If industry creates, it is the law which preserves” (Bentham 1785–6:308). I have developed this point in N.Sigot (1993).
- 7 Some of these incentives are so specific that we cannot avoid the question of their consistency: see note 45, below.
- 8 The Stark edition of the *Manual of Political Economy* is based on Bowring’s. But W. Stark showed that in this last, there were two different writings Bentham wrote at different periods: the *Manual* (1793–5) and the *Institute of Political Economy* (1801–4). Here, the date cited specifies the edition of the *Manual* we used: (1793–5) for the Stark edition or (1793–1804) for the Bowring (when the quotation we give was not in the *Institute*).
- 9 In particular, although in the *Manual of Political Economy*, Bentham recommends minimal State intervention, nothing prevents him from acknowledging that a tutelary body (see note 34)—that in charge of the administration of the industry-houses—should have the power to intervene directly in the market in order to regulate it (see note 39): there is nothing contradictory in this since; for Bentham, it is simply a matter of finding a response to the problems faced by individuals when they carry out their calculation of pleasure and pain.

- 10 The *Theory of Pain and Reward* in fact sets out six—not seven—rules, as the first two are combined in one. The first three rules will be analysed later. The following rules stipulate that the “nominal and real amount of salaries ought to correspond” (1782–7:242–3); “the expenses of an office ought to be defrayed by those who enjoy the benefit of the services rendered by the office” (1782–7:243–4)—for this rule which, he says, “seems scarcely to stand in need of proof,” Bentham refers to Book V of Smith’s *Wealth of Nations*, “in employments which expose the public functionary to peculiar temptations, the emoluments ought to be sufficient to preserve him from corruption” (1782–7:244–5); finally, the last rule sets out that “pensions of retreat ought to be provided, especially when the emoluments allowed are not more than sufficient to meet the absolute wants of the functionary” (1782–7:245–6).
- 11 The transmission of information by a mechanism such as delation is considered inefficient by Bentham, for psychological reasons. He writes that “the love of gain has seldom proved a motive sufficiently strong to induce an endeavour to obtain this reward; whose value, not to mention the expenses of pursuit, is destroyed by infamy. Till this motive be reinforced by personal animosity, which bursts the bonds of infamy, these laws are powerless” (1782–7:238).
- 12 “Instead of appointing a fixed salary...it would be well to make the emoluments ...in some measure depend upon the care with which their duties have been performed, as evidenced by their success” (1782–7:239). This measure could be applied, for instance, in the context of the Panopticon, with the establishment of a system of “penalties” for every prisoner’s life that is lost.
- 13 When Bentham considers that the institution of retirement pensions can entail a reduction in wages (1782–7:246), he assumes first that the worker
  - (a) makes an intertemporal choice in which future income is substitute for present income, and
  - (b) sacrifices a fraction of his present income in order to reduce the uncertainty that the future implies—a sacrifice of income which resembles an insurance premium,

and second that the employer will substitute these future payments for present wage payments. However, I have found nothing in Bentham’s work to indicate the source of these future payments. In particular, we remain unaware of whether it is strictly a question of delayed payment, or of revenues coming from capital funds set up by the employer. Conversely, in the private sector where the institution of a similar system of retirement pensions is not envisaged, Bentham recommends the establishment, by the State, of a vast life-insurance system, through capitalisation (1794–5:131–6).

- 14 See also Bentham (1801:202).
- 15 See also Mss. [153a: 237]; all the manuscripts quoted here, devoted to the question of the needy, were drafted by Bentham during the years 1780–90.
- 16 See also: Mss. [051:288], in Stark (1954, vol. III: 539–40) and Bentham (1793–1804:66).
- 17 Mss. [151:185; 6]; Bentham (1793–5:247–8).
- 18 On this subject, Bentham refers once more to Smith, whom he calls the “father of political economy” (1782–7:213).
- 19 “In the attribution of the epithets *living and less than living* [wages] the demand [for wages] is considered with reference not to *individuals* but to *families*” (Mss. [151:188]).
- 20 Bentham himself considered this a possibility (Mss. [151:188]).
- 21 See, for example, Bentham (1814–31:128–9).
- 22 Misgivings concerning the future, and to a lesser extent, love of power and search for good reputation, are equally motives for labor: see Bentham (1782–7:194).
- 23 “As labour is the source of wealth, so is poverty of labour. Banish poverty, you banish wealth” (Mss. [153a:002]).

- 24 “The leisure [individuals] possess increases their wants. Ennui, the scourge of life, is no less the enemy of economy” (Bentham 1782–7:242).
- 25 See also Bentham (1797–8:396 and note). According to Bentham, idleness constitutes an offence against the wealth of the nation: see Bentham (1789:28n).
- 26 The creation of grain stocks by the State, in order to limit variations in grain prices, undoubtedly constitutes a principle analogous to that which requires a limited degree of fluctuation in wages (see Bentham 1801–4:339).
- 27 Here we will restrict ourselves to an analysis of the effects of variation in demand. It is nevertheless relevant to recall that Bentham sees this in the context of a study of the causes and consequences of a general rise in prices, the demand for goods varying along with the quantity of money in circulation. As we will see, in Bentham’s analysis, variations in demand are far from having a merely nominal effect. We can thus conclude with no problem, that for Bentham, variations in the money supply have a real effect on the functioning of the economy. (See, on this point, Hutchison 1956:295–300.)
- 28 Reprinted in Stark (1954, vol. III: 502). Should this demand be insufficient, Bentham suggests that a program of “public works” be set up, under the administration of parishes and the government: see “Employment for Pauper Manufacturers” (1774–5: 85).
- 29 It must be noted that if wages increase, this is due to the effect of increased competition between farmers on the labor market; the pressure of demand for agricultural products has apparently no effect on rent, which is not even mentioned. It is thus through a mechanism other than, for example, Ricardo’s, that wages rise when the demand for grain or the volume of population (which amounts to the same thing) increases.
- 30 This means that the rates of variations of goods supply and labor demand, weighted by their respective prices-elasticities, are equal.
- 31 In support of this hypothesis, it can be observed that, for Bentham, economic agents fall victim to monetary illusion in their saving behavior: “Every penny saved and laid by, diminished in fact the value of every other penny, as well as its own to boot. But although this effect of frugality were to be universally known and borne in mind, the inducement to lay up money would not be in the smallest degree diminished” (Bentham 1800:308).
- 32 Bentham also considers the situation contrary to that of an excess labor supply. We will not go into this analysis here, since it comprises in the main measures aiming to lift the institutional constraints which are imposed on the labor supply: Bentham recommends for instance a longer working day or a lowering of the minimum legal age of employment (Bentham 1801:143n).
- 33 Bentham’s critique of these laws bears a close resemblance to that of Smith (1776, vol. I: 153).
- 34 This system should be managed not by the State but by a joint-stock company—the “National Charity Company”—a centralized body independent of the authority in charge of the administration of the poor aid system conceived by Bentham. He discards the idea of a State administration mainly in view of the carelessness and corruption rife in government (Bentham 1797–8:267n); on this subject, see Roberts (1979:35).
- 35 “The pauper Plan became, in the end, a pattern for a new society, to exist within a free capitalist economy” (Poynter 1969:69). Bentham himself spoke of “my utopia” concerning this matter (quoted by Semple 1993:300).
- 36 “The law which offers to poverty an assistance independent of industry, is, so to speak, a law against industry itself; or, at least, against frugality...the law which takes away [present pressure], and [fear of the future], must be an encouragement to idleness and dissipation” [1785–6]. See also Bentham (1797:440–61) and on Bentham’s recommendations, 1797–8:369–439.
- 37 Quoted by Poynter (1969:124).

- 38 At the foundations of the organization of economic activity within these institutions is the principle of the division of labor, see Bentham (1797–8:382).
- 39 See Bentham (1797–8:390).
- 40 Quoted by Bahmueller (1981:54).
- 41 In the same way, Bentham conceives the possibility of transferring the poor and destitute to branches of food production in which the prices are lowest, not only in order to reduce the cost of their upkeep, but also so as to raise prices (1797–8: 417): therefore, Bentham implicitly assumes that part of the production realized in the industry-houses will be sold on the market.
- 42 Mss. [132:012], quoted by Bahmueller (1981:53). See also Bentham (1797–8:420).
- 43 In Bentham’s opinion, once security, especially that of property, is guaranteed, there is sufficient incentive to work so as to allow the accumulation of wealth, in an individual just as much as in a collective sense: “It is this right [of property] which has overcome the natural aversion to labour—which has bestowed on man the empire of the earth—which has led nations to give up their wandering habits—which has created a love of country and of prosperity. To enjoy quickly—to enjoy without punishment—this is the universal desire of man” (1785–6:309).
- 44 This idea of sacrifice is particularly well illustrated by Bentham when he discusses the possibility of forming a military corps drawn from the labor force of the industry-houses “were even the service ever so irksome, and the dangers ever so serious, there are none, surely, on whom the lot could fall with equal justice, as upon those who, indebted to public charity” (1797–8:420).
- 45 It is to be emphasized that the kind of behavior leading to an optimal labor contract raises an important theoretical problem. Bentham effectively supposes that the civil servant is given two choices: either a reduced wage accompanied by correspondingly reduced effort, or a higher wage accompanied by greater effort. The two forms of labor contract mean that these two situations can be compared. When he claims that only the contract based on penalty is liable to bring the worker to favor the second situation—a higher wage and greater effort—Bentham assumes that the preferences of the worker in question depend on his initial situation: when the labor contract is formulated in such a way as to place initially the worker in one or the other of these two positions, he will always prefer it. Therefore, if he is granted a low wage, and promised a bonus according to the effort he puts in, he will be satisfied with this low wage and will not put in the requisite effort. On the contrary, if he is accorded high wages, and threatened with penalty if he does not put in the required effort, he will devote to his task the effort that is expected of him. Unless we have to account for something like transaction costs—which would be of little relevance here—this means that the agent’s preferences are inverted when he passes from a low wage/low effort to a high wage/ high effort situation.

## REFERENCES

**Note** As far as Bentham’s works are concerned, the date in parentheses specifies the time at which they were written. Such an indication is necessary in these particular cases because, very often, there is a considerable discrepancy between this date and the date at which they were first published and a close reading of this chapter relies on an understanding of the development of Bentham’s views.

- Bahmueller, C.F. (1981) *The National Charity Company: Jeremy Bentham’s Silent Revolution*, Berkeley, Los Angeles, London: University of California Press.
- Bentham, J. (1774–5) *Commonplace Book* (extracts), in J.Bowring (ed.) *The Works of Jeremy Bentham*, part XIX, Edinburgh.

- (1782–7) *The Rationale of Reward*, in J.Bowring (ed.) *The Works of Jeremy Bentham*, part VII, Edinburgh.
- (1785–6) *Principles of the Civil Code*, in J.Bowring (ed.) *The Works of Jeremy Bentham*, part II, Edinburgh.
- (1789) *The Principles of Morals and Legislation*, New York: Hafner Press, 1948.
- (1793–5) *Manual of Political Economy*, in W.Stark (ed.) *Jeremy Bentham's Economic Writings*, vol. I, London: George Allen & Unwin, 1954.
- (1793–1804) *Manual of Political Economy*, in J.Bowring (ed.) *The Works of Jeremy Bentham*, part IX, Edinburgh.
- (1794–5) *A Plan for Augmentation of the Revenue by the Establishment of a Traffic on Government Account in Life Annuities and Every Other Branch of Money Dealing where Adequate Security can be Obtained upon a Plan Adapted to Every Modification of Demand*, in W.Stark (ed.) *Jeremy Bentham's Economic Writings*, vol. II, London.
- (1797) *Observations on the Poor Bill Introduced by Mr Pitt*, in J.Bowring (ed.) *The Works of Jeremy Bentham*, part XVI, Edinburgh.
- (1797–8) *Outline of a Work entitled Pauper Management Improved*, in J.Bowring (ed.) *The Works of Jeremy Bentham*, part XVI, Edinburgh.
- (1800) *Abstract or Compressed View of a Tract Intituled Circulating Annuities*, in W.Stark (ed.) *Jeremy Bentham's Economic Writings*, vol. II, London.
- (1801) *The True Alarm*, in W.Stark (ed.) *Jeremy Bentham's Economic Writings*, vol. III, London.
- (1801–4) *Institute of Political Economy*, in W.Stark (ed.) *Jeremy Bentham's Economic Writings*, vol. III, London.
- (1814–31) *Deontology together with A Table of the Springs of Action and Article on Utilitarianism*, in *The Collected Works of Jeremy Bentham*, Oxford: Clarendon Press, 1992.
- (1820) *Traité de législation civile et pénale*, 2nd edn., Paris: Bossange, Rey et Gravier.
- (1831) *Pannomial Fragments*, in J.Bowring (ed.) *The Works of Jeremy Bentham*, part III, Edinburgh.
- Bonar, J. (1893) *Philosophy and Political Economy in some of their Historical Relations*, 3rd. edn., London: George Allen & Unwin, 1922.
- Collison Black, R.D. (1988) "Bentham and the political economists of the nineteenth century," *Bentham Newsletter* 12.
- Cordebas, C. (1960) "Jeremy Bentham économiste," *Revue d'histoire économique et sociale* 38.
- Halevy, E. (1901) *La formation du radicalisme philosophique*, 3 vols., Paris: Felix Alcan.
- Hutchison, T.W. (1956) "Bentham as an Economist," *The Economic Journal* 66, 2 (June).
- Lutfalla, M. (1981) *Aux origines de la pensée économique*, Paris: Economica.
- Mitchell, W.C. (1934–5) *Lecture Notes on Types of Economic Theory*, 2 vols., New York: Augustus M.Kelley, 1949.
- Poynter, J.R. (1969) *Society and Pauperism: English Ideas on Poor Relief 1795–1834*, London: Routledge & Kegan Paul.
- Roberts, W. (1979) "Bentham's Poor Law Proposals," *The Bentham Newsletter* 3, December: 28–45.
- Schumpeter, J.A. (1914) *Economic Doctrine and Method: An Historical Sketch*, London: George Allen & Unwin, 1954.
- (1954) *History of Economic Analysis*, London: George Allen & Unwin, 2nd edn., 1955.
- Semple, J. (1993) *Bentham's Prison: A Study of the Panopticon Penitentiary*, Oxford: Clarendon Press.
- Sigot, N. (1993) "'Be Quiet', mais modérément: le rôle de l'État dans la pensée économique de Jeremy Bentham," *Revue Économique* 44, 1 (January).

- Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*, 2 vols., Indianapolis: Liberty Classics, 1981.
- Stark, W. (1946) "Jeremy Bentham as an Economist," *The Economic Journal*, December.
- (1954) "Introduction" to *Jeremy Bentham's Economic Writings*, vol. I., London.
- Zagday, M.I. (1948) "Bentham and the Poor Law," in G.W.Keeton and G.Schwarzenberger (eds.) *Jeremy Bentham and the Law: a Symposium*, London: Stevens & Sons.

## WHAT SCHUMPETER SAW IN QUESNAY'S MODEL

How the *Tableau Économique* is not a general equilibrium or input-output model

*Steven Pressman*

### INTRODUCTION

In his *History of Economic Analysis*, Joseph Schumpeter (1954:241ff) identified three features of the *Tableau Économique* that he felt merited special attention. Schumpeter seems to have singled out these aspects of the *Tableau* because of the fact that they foreshadowed or anticipated contemporary modes of economic analysis and thought. As such, these characteristics of the *Tableau* are those which have withstood the test of time.

First, Schumpeter noted that the *Tableau* separated the production process from the way that produced goods get distributed. Production, and the theory of output which identified why economies grew and why they stagnated, was thus analyzed apart from the theory of how that output gets distributed to those producing it and apart from the theory of how much output goes to each producer.

Second, Schumpeter argued that the *Tableau* opened the door for numerical or quantitative economic analysis. Moreover, Schumpeter praises Quesnay's empirical or quantitative economics on a number of counts—Quesnay attempted to measure the value of output and other economic variables, and he sought to measure their relationships to one another. In this respect, according to Schumpeter, the *Tableau* should be seen as a precursor to the input-output analysis of Leontief.

Finally, the *Tableau* was singled out by Schumpeter for providing an explicit conception of the notion of economic equilibrium. This was a notion not of partial equilibrium, or of equilibrium in one market, but a vision of general equilibrium throughout the entire economy.

But despite some important resemblances, Schumpeter also notes several important differences between Walrasian general equilibrium theory and the conception of equilibrium that is contained in the *Tableau*. The conception of



equilibrium in the *Tableau*, according to Schumpeter, was “more primitive” and was lacking in the precision and rigor of more contemporary theories of general equilibrium (1954:243), which represented the economy not as a series of zigzag diagrams but as a system of simultaneous equations. Nonetheless, Schumpeter felt the *Tableau* “was superior to the logically more satisfactory method; it visualized the (stationary) economic process as a circuit flow that in each period returns upon itself” (1954:243). Also, the *Tableau* was superior to the Walrasian system of simultaneous equations, according to Schumpeter, because it recognized the importance of time in the economic processes of production and distribution. In particular, the *Tableau* required that production and distribution take place in a certain sequence, and that the importance of this sequence is not made clear in a system of simultaneous equations.

The next section of this chapter provides a simple reconstruction of the static version of the *Tableau*. The purpose of this section is to demonstrate that the *Tableau* is not “more primitive” than contemporary models, but was a rather sophisticated model that attempted to show how real world economies can reproduce and grow over time. Moreover, much like contemporary economic analysis, Quesnay’s model relied upon an explicit set of assumptions and attempted to demonstrate how the reproduction process followed from this set of assumptions. The third and fourth sections then examine the differences between the *Tableau* and two contemporary forms of analysis that are frequently regarded as more advanced and sophisticated versions of the *Tableau*. The third contrasts the salient features of Quesnay’s model with the salient features of input-output models. The fourth contrasts Quesnay’s model with Walrasian general equilibrium models. The chapter concludes with a brief assessment of Schumpeter’s perceptions of the *Tableau*.

## **A RECONSTRUCTION OF THE TABLEAU**

The overarching assumptions upon which the construction and operation of the *Tableau* are based can be grouped under five headings.

### *Class assumptions*

- 1 Society is composed of three classes: a productive class of agricultural workers, a class of proprietors or landlords, and a manufacturing class. The productive class produces food and raw materials; the manufacturing class, manufactured goods; and the proprietors produce nothing—at least, nothing of economic significance.
- 2 The productive class is the only class that generates a surplus. The manufacturing class is thus “sterile.”
- 3 The productive class must pay a rent every year to the proprietors. This rent is the price equivalent of the surplus generated by the productive class for the year.

*Population assumption*

- 4 The proprietors constitute one quarter of the entire population; the manufacturing class comprises another one quarter of the population; and the productive class consists of the remaining one half of the population.

*Consumption assumptions*

- 5 The rent payments received by the proprietors are all used for consumption. Likewise, incomes of productive and manufacturing class workers are all spent. Thus there are no savings.<sup>1</sup>
- 6 All classes divide their consumption equally between food and manufactured goods. These are the only goods consumed by members of society.
- 7 Per capita consumption for the manufacturing class is equal to per capita consumption for the productive class which is equal to one half per capita consumption of the proprietors.<sup>2</sup>

*Input-output assumptions*

- 8  $\$X$  of inputs yield  $\$2X$  worth of outputs in the agricultural sector. In addition, in the productive sector, food and manufactured goods are the only inputs, and they are to be used in equal amounts. In the manufacturing sector three inputs are required—food, raw materials, and manufactured goods. These are needed as means of consumption for the worker (clothing, shelter, etc.) and as means of production (tools and equipment). Following Quesnay, we suppose that  $\$X$  of food,  $\$X$  of manufactured goods, and  $\$2X$  of raw materials are needed to produce  $\$4X$  of manufactured goods.

*Endowments assumption*

- 9 The original holdings of each class following production by both the agricultural and manufacturing sectors are as follows:

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$2,000 money	(\$2,000 in rent claims)	\$2,000 mfd goods
\$1,000 raw materials		
\$3,000 food		

Reproduction requires the following six steps.

**Step 1** The productive class pays \$2,000 to the proprietors as rent.

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$3,000 food	\$2,000 money	\$2,000 mfd goods
\$1,000 raw materials		

**Step 2** The proprietors purchase \$1,000 food from the productive class and \$1,000 manufactured goods from the manufacturing class. This will enable the proprietors to consume equal amounts of food and manufactured goods as required by assumption (6). They also spend all their rental receipts, as stipulated by assumption (5). The situation now becomes:

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$2,000 food	\$1,000 food	\$1,000 mfd goods
\$1,000 raw materials	\$1,000 mfd goods	\$1,000 money
\$1,000 money		

**Step 3** The manufacturing class buys \$1000 raw materials from the productive class, which results in:

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$2,000 food	\$1,000 food	\$1,000 mfd goods
\$2,000 money	\$1,000 mfd goods	\$1,000 raw materials

**Step 4** The manufacturing class sells \$1,000 of manufactured goods to the productive class, and buys \$1,000 of food. This represents the sum total of all the zigzag transactions in the *Tableau*, and gives us:

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$1,000 food	\$1,000 food	\$1,000 food
\$2,000 money	\$1,000 mfd goods	\$1,000 raw materials
\$1,000 mfd goods		

**Step 5** The manufacturing class exports \$500 food and imports \$500 foreign manufactured goods. This is needed because by assumptions (4), (6), and (7) total food consumption of the manufacturing class must be one half the total food consumption of the productive class. Such trade is also consistent with Quesnay’s calls for exporting agricultural goods and for balanced trade.<sup>3</sup> Since trade is a sterile economic activity it must take place within the manufacturing sector. Foreign trade leads to the position shown below:

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$1,000 food	\$1,000 food	\$500 food
\$2,000 money	\$1,000 mfd goods	\$1,000 raw materials
\$1,000 mfd goods		\$500 mfd goods

**Step 6** Production and consumption take place in accord with assumption (8), and, by assumption (3), the proprietors receive \$2,000 in rent claims. We have now returned to our original situation:

<i>Productive Class</i>	<i>Proprietors</i>	<i>Manufacturing Class</i>
\$2,000 money	(\$2,000 in rent claims)	\$2,000 mfd goods
\$1,000 raw materials		
\$3,000 food		

The above reconstruction does not fall prey to the ambiguities of Quesnay's famous zigzags. Foreign trade, class holdings, the exchange of money for commodities, and commodity input requirements are all clearly shown. None of the assumptions made by Quesnay is violated, and all the mechanisms of the *Tableau* are laid out in a coherent and easily understood fashion. We next examine how this model differs from input-output models and Walrasian general equilibrium models.

### THE TABLEAU VERSUS INPUT-OUTPUT MODELS

Leontief opens *The Structure of the American Economy 1919–1929* by acknowledging his indebtedness to Quesnay and asserting that a close relationship exists between input-output analysis and Quesnay's *Tableau*. Leontief (1941:2) in fact goes even further, claiming that he is constructing "a *Tableau Économique* of the United States for 1919 and 1929." George Shackle (1967), following this line of argument, devotes an entire chapter of *The Years of High Theory* to "Leontief's *Tableau Économique*." His emphasis here is on Leontief's input-output framework and how the *Tableau* can be represented as an input-output model. In a similar vein, Joseph Schumpeter (1954:241–2) has remarked that "the great work of Leontief, which, entirely different though it is from Quesnay's in purpose and technique, nevertheless revived the fundamental principle of the *Tableau* method."

Over the years, beginning with Almarin Phillips's 1955 paper, numerous scholars have attempted to reconstruct the *Tableau* as an input-output model. The purpose here is not to critique these individual reconstructions of the *Tableau* (those interested in this should see Pressman 1994: Chapter 5). Rather, it is to examine whether or not these attempts to represent the *Tableau Économique* as an input-output model remain faithful to Quesnay and his vision of economic reproduction.

The argument of this section is that several crucial characteristics of the *Tableau* cannot be captured in input-output reconstructions, and that these characteristics of the *Tableau* fundamentally contradict the principles of input-output analysis. First, input-output analysis fails to take account of the role of money in an economic system; consequently, input-output reconstructions of the *Tableau* cannot account for how money functions in the exchange relations necessary for reproduction. A second and related point is that input-output models are all models which take place in logical time. In input-output analysis everything happens simultaneously. In contrast, the *Tableau* is a sequential model, where order and time both matter, and where one step in the reproduction process requires that

another step had taken place previously. Third, input-output models are incapable in principle of showing a surplus; yet the heart of the *Tableau*, and Quesnay's policy proposals that follow from it, is the idea that agriculture and only agriculture generates a surplus. Finally, the *Tableau* was designed by Quesnay to explain the level of output in France and to devise policies that would improve the economic growth of France. In contrast, input-output models do not attempt to explain the level of output prevailing at any time. Rather, these models are designed to explain the interrelationships among different economic sectors. Although they provide information about how expansion in one economic sector would require expansion in other sectors, in no instance do input-output models attempt to explain the level of output that prevails. More importantly, input-output models are not concerned with the question of economic growth, which was a major concern of Quesnay and a major impetus for his developing the *Tableau*. Below, these arguments are expanded upon.

### Money versus barter

Quesnay was not interested in describing a barter economy. The *Tableau* describes an economy in which buying and selling is always done with money. This is why all numbers in the *Tableau* are given in monetary figures rather than in quantities. If an economy possessed no money, or if it had an insufficient quantity of money, then despite the fact that the economy *could* reproduce, it *would not* do so. In addition, if money were hoarded or saved, economic production would decline, according to Quesnay (Meek 1963:109–12). This result is impossible in a barter economy or an input-output model where only quantity relations are described and where it is assumed that as long as the input-output equations are consistent the economy will reproduce.

Let us consider an economy with a base of \$2,000, as described in the *Tableau* presented in the previous section. However, let the supply of money be \$1,000 rather than \$2,000. This creates an immediate problem in the *Tableau's* reproduction process. If the proprietors begin with only \$ 1,000 and spend half of this sum on food and the other half on manufactured goods (as Quesnay assumes), when all the zigzag transactions have been completed, the output in both producing sectors will be half as great as before. From the vantage point of the input-output analysis, however, there is no problem here; nor does output decline when considering this situation. The old output—a *Tableau* with a base of \$2,000—is still a possible solution. The old inputs still exist, and it is assumed in constructing an input-output model that they are all capable of being used in the next production period.

In essence, money does not matter for an input-output table. But money did matter to Quesnay. He did try to estimate the quantity of money in the economy and show that this quantity was sufficient to enable reproduction to take place (Kuczynski and Meek 1972:x). It was not enough for Quesnay that the manufacturing sector needed agricultural goods and the agricultural sector

needed manufactured goods. In a barter economy the two sectors could swap for the necessary inputs that each needed. But in a monetary economy if one sector wants goods produced by another sector it must have the wherewithal to purchase these goods. At the outset, when we begin our analysis, it is arbitrary who holds the money. But the money must be sufficient for this sector to purchase the inputs it needs. And this transaction must put sufficient money into the hands of the other sectors so that they too may purchase the commodities they require. Only if every sector has the money to purchase the inputs it requires will the economy be able to reproduce last years output. This crucial role of money was recognized by Quesnay, and he realized that money and money flows had to be represented in his model. This, of course, was the whole point of the zigzags. Input-output reconstructions of the *Tableau* unfortunately abstract from this salient feature of Quesnay's model. As a consequence, it is not clear how much illumination they can really throw on Quesnay's model. Similarly, it should be clear that while the *Tableau* contains input-output or production relations, it is *not* an input-output model.

### Sequential versus simultaneous models

Barna (1975:495) has argued that the simultaneous solution to the *Tableau* provided by input-output analysis is superior to the "iterative solution" of Quesnay's zigzags and the Meekian tables like those used in the second section of this chapter. While both the simultaneous equation method and the iterative algorithm method provide solutions to Quesnay's system of economic circulation and production, according to Barna there are two difficulties with the iterative solution. An iterative process of computations may be confused with a dynamic process through time. But the two, Barna argues, are not the same since an iterative process of computations may converge toward a solution in diminishing steps. In addition, the order of the steps in the iterative process may suggest the existence of time lags, or that some of the steps may be ordered in a certain way. But, Barna (1975:495) continues, "the order of the steps is arbitrary since the starting point of the computations is arbitrary."

Neither of these arguments is very good. An explanation of the *Tableau* should be capable of showing a dynamic process through time. For this is what the *Tableau* is really about (for more on this point see Pressman 1994: Chapter 4). Barna's second argument, that the order of the sequence is arbitrary (since the starting point of the computation is arbitrary), is a fallacious one. A simple mathematical example can perhaps best make this point. Consider the sequence 1, 2, 3, 4, 5, 1, 2, 3, 4, 5, 1, 2, 3, 4, 5.... Any place that we break into or begin the sequence is arbitrary. But not so the order of the sequence. If we break in at 3, the next step must be 4. Then the step after 4 must be 5. There is nothing arbitrary about 4 following 3 and 5 following 4.

The same holds true of the exchange relations in Quesnay's *Tableau*. We can begin anywhere in the circular flow process. But once we have chosen a

starting point it does not follow that the next step is arbitrary. Only certain steps will be possible. Consider again the first step involved in reconstructing the static *Tableau* earlier in the chapter. The manufacturing sector holds \$2,000 manufactured goods, and the agricultural sector holds \$2,000 in money, \$1,000 raw materials, and \$3,000 food. The proprietors have \$2,000 in rent claims, equal to the surplus of the just completed production period. At this point the next step is not arbitrary. It *cannot* be proprietor spending, since the proprietors have no money to spend. Nor can it be the purchase of raw material by the manufacturing sector. For artisans, too, have no money. The productive class can buy \$1,000 manufactured goods at this point, but this will affect the entire sequence, since only \$1,000 will be left to pay rent to the proprietors. And less income for the proprietors, as we have seen, means less demand for agricultural goods, and less production in succeeding years.

The steps involved in the *Tableau* are not arbitrary. They have a certain order and logic that must be adhered to. Circulation must occur in a definite sequence if production is to be maintained at the same level. If something goes wrong, and if the required sequence is disturbed, lags and bottlenecks are potential economic problems. Since input-output analysis provides a simultaneous solution, it cannot take any required sequence in the circulation process into account. As such, iterative solutions to the *Tableau* must be preferred to the simultaneous ones. They have greater expository power, showing more clearly and in greater detail the actual circulation process.

This point was recognized by Schumpeter. In contradistinction to Barba, Schumpeter saw that there was something crucial in the *Tableau*—a demonstration of how exchange must take place. This feature is conspicuously absent in input-output tables. Schumpeter (1954:243) writes: “in one respect [the *Tableau* is] superior to the logically more satisfactory method; it visualized the (stationary) economic process as a circuit flow that in each period returns upon itself.... [I]t is also a method of conveying features of the [economic process]—definite sequences in particular—that do not stand out equally well in a system of simultaneous equations.”

In a similar vein, E.K.Hunt has maintained that the money and exchange relations of the *Tableau* provide an explanation for economic crises. “The Physiocrats anticipated T.R.Malthus, Karl Marx and J.M.Keynes, and many other subsequent economists who showed how the hoarding of money or the development of bottlenecks or imbalances in the process of monetary circulation could disrupt the allocation of inputs and commodity outputs and create economic crises or depressions” (Hunt 1979:32). Input-output analysis, by abstracting from the process of monetary circulation, thus cuts itself off from an explanation of economic decline or economic growth.

### **The notion of a surplus**

A final problem with input-output reconstructions of the *Tableau* has to do

with the notion of surpluses. It is well known that one of the most fundamental tenets of Physiocracy was that only the productive sector could generate a net product. The manufacturing sector was regarded by the Physiocrats as “sterile”; the value of its inputs is equal to the value of manufactured goods produced. This principle—that surpluses arise exclusively in the agricultural sector—can be demonstrated by noninput-output reconstructions of the *Tableau* (as was done earlier in the chapter). But how can a surplus be shown in an input-output table where by definition inputs must equal outputs for each industry (Leontief 1941:158ff.)? Phillips (1955:143ff.) shows the agricultural surplus by means of the proprietors' rent. “Only agriculture appears to produce a net produce since, by assumption, only farmers pay rent.” But these rent payments are also remuneration for “rental services” according to Phillips (1955:141). They are as such factor payments, which constitute inputs used to produce agricultural goods. On this interpretation there is no surplus, the value of the inputs and the value of agricultural output being identical. Quesnay represented agricultural surpluses in the *Tableau* since he did not consider “rental services” as an input. Moreover, he held landowners provided few inputs into the production process. Thus, the surplus was a real surplus for Quesnay; it represented output in excess of inputs in the agricultural sector.

To summarize, by considering rent payments as inputs into agricultural production, input-output reconstructions pervert Quesnay's intentions. In addition, because input-output analysis cannot adequately represent the notion of a surplus, input-output analysis is incapable in principle of providing a reliable reconstruction of the *Tableau*. Thus, again, the *Tableau* needs to be considered something other than an input-output model.

### **THE TABLEAU VERSUS GENERAL EQUILIBRIUM MODELS**

As is well known, Walrasian general equilibrium theory begins by assuming individual endowments, individual preferences, and a production technology for converting factor endowments into output which individuals, as consumers, desire to possess. From these givens, the model demonstrates that a set of relative prices exists that can clear all markets, and that free exchange is necessary for such market clearing.

Many of the arguments made in the previous section about how the *Tableau* differs from input-output analysis hold as well for general equilibrium models. Walrasian general equilibrium theory describes a barter economy where time does not matter and where the notion of a surplus is without possible meaning. In addition, the *Tableau* differs from Walrasian models because it is a classical model and because it is concerned with understanding the process of economic growth rather than with the determination of relative prices.



### **Time in economic theory**

Walrasian models are timeless models where everything happens simultaneously. Exchange is assumed to take place at the relative prices ground out by the set of supply and demand equations for each good and factor of production. There is no recognition in these models that production takes time, or that certain steps of the production process must take place before others. There is also no recognition that labor must be paid before production takes place and before goods are sold. Thus there is no possibility in these models that bottlenecks can create economic problems, or that labor is not paid a sufficient amount to buy the goods that they produce. As we have seen previously, the *Tableau* is a model in which time matters. Production and distribution were separate processes, and production and exchange had to take place in a certain sequence of steps. If these steps were not followed in the right order, money and goods would not flow to the right sectors and reproduction could not take place.

### **Money in economic models**

In a similar vein, unlike Walrasian general equilibrium models, the *Tableau* recognizes that money is important in the production and redistribution process. In general equilibrium models money is neutral, and cannot affect the relative equilibrium values of the system. As such, money is irrelevant, since it affects neither relative prices nor the level of output.

Quesnay, on the other hand, recognized that money was important in production and that production and exchange in real economics do not take place via barter. Moreover, the *Tableau* cannot represent a barter economy because the proprietors have nothing to barter with. The proprietors provide no inputs into the production process. Nor do they provide “rental services” for which they may be entitled to monetary payments. Rather, rent payments to the proprietors are habitual payments based upon feudal economic relationships.

### **Classical versus neoclassical economic models**

As Walsh and Gram (1980) point out there are major differences between classical and neoclassical theories of general equilibrium. In neoclassical theory production takes place when factors of production (land, labor, and capital) produce goods. In classical theories production occurs when goods are produced using other goods as inputs. As was shown earlier, Quesnay’s *Tableau* is a classical model of the production of commodities by means of commodities.

### **A theory of output versus a theory of relative prices**

A last major difference between the *Tableau* and general equilibrium models concerns their major goals or intentions. This is a point missed by Schumpeter and by most other commentators on the *Tableau*.

Walrasian general equilibrium theory is essentially a theory of relative pricing. There is nothing in the theory that concerns either economic growth or under-employment, two major concerns of Quesnay. General equilibrium theory ignores these issues by making the assumption that economies will always experience full employment. Input-output models ignore them because these models are incapable of showing technological change and how technological change can lead to economic growth.

In contrast, the main purpose of the *Tableau* was to demonstrate how output could be increased (Pressman 1993). One answer Quesnay gave was that demand was an important factor. Demand, of course, plays no role in general equilibrium theories, except for determining relative prices. Demand, however, does not determine the level of output. Its role in input-output models is only secondary or tertiary. A second way to increase output for Quesnay was technological change. Yet Leontief had to hold technology constant in order to derive input-output coefficients. And for general equilibrium models, technology has to be taken as given and constant in order to develop a vector or set of relative prices.

### **CONCLUSION: SCHUMPETER ON THE *TABLEAU* ÉCONOMIQUE**

Schumpeter noted a number of similarities between the *Tableau* and input-output analysis. He also noted many similarities between the *Tableau* and Walrasian general equilibrium analysis. However, Schumpeter noted many differences, differences that were at least as important as the superficial similarities.

Schumpeter correctly noted that the *Tableau* was a sequential model rather than a model where everything happens simultaneously. Likewise, Schumpeter (1944:1022ff.) saw that unlike general equilibrium models, money was an important variable in the *Tableau*. Surprisingly, Schumpeter failed to note that the same things held true of input-output analysis—like general equilibrium models, but unlike the *Tableau*, money is irrelevant in Leontief's system.

In addition, Schumpeter failed to see several other important differences between the *Tableau* and these two more contemporary economic models. In particular, Schumpeter did not see that one of the major features of the *Tableau*, the doctrine of the exclusive surplus in agriculture, could not in principle be represented in either input-output or in Walrasian general equilibrium models. But perhaps most important of all, Schumpeter did not recognize that the *Tableau* was a model that attempted to explain economic growth and decline. Thus it was fundamentally different from general equilibrium analysis, whose primary goal was to explain relative prices, and it was fundamentally different from input-output analysis, which attempted to lay out the blueprints of technology of production.

Looked at the other way around, the major concern of general equilibrium theory—the determination of relative prices—is virtually ignored in the *Tableau*.

Likewise, the major concern of input-output analysis—describing interindustry production relations—is of only secondary importance for the *Tableau*.

Nonetheless, the remarkable thing is that Schumpeter did recognize important differences between the *Tableau* and these more contemporary modes of analysis. This is even more remarkable when Schumpeter's view of the *Tableau* is compared to that of other historians of economic thought. While many economists have admired the *Tableau*, few other historians of economic thought have recognized that the *Tableau* is not a general equilibrium model and is not an input-output model.

## NOTES

- 1 This proposition is expressed in Remarks 1, 5, and 6 which accompany the first edition of the *Tableau*. The theme running through these three remarks is that "the whole of the 400 millions of revenue enters into the annual circulation and runs through it to the full extent of its course; and that it never formed into monetary fortunes, which check the flow of a part of this annual revenue of a nation...to the detriment of the reproduction of this revenue and the well-being of the people" (Meek 1963:109).
- 2 Quesnay's marginal notes at the left of the *Tableau* contain a few assumptions about population and per capita consumption. Revenue of 400 livres enables the proprietor to purchase the food and manufactured goods necessary to live on. Quesnay maintains that his expenditures—200 livres on agricultural goods and 200 livres on manufactured goods—can support one person in each of the producing classes. So while proprietors live on 400 livres, workers in the manufacturing and agricultural sectors subsist on 200 livres apiece. Per capita consumption of the proprietors is thus twice the per capita consumption of the producing classes. (See Kuczynski and Meek 1972: Appendix A.)
- 3 This proposition is expressed in Remarks 2, 3, 4, and 10 which accompany the first edition of the *Tableau*. These all stipulate that the trade account of the economy must be in balance. Quesnay's most forceful call for exporting agricultural goods comes in his *Encyclopedia* article "Corn." This piece was a polemic for free trade, and argued that with free trade France would export corn and import manufactured goods. (See Meek 1963:72–87.)

## REFERENCES

- Barna, Tibor (1975) "Quesnay's *Tableau* in Modern Guise," *Economic Journal* 85 (September): 485–96.
- Hunt, E.K. (1979) *History of Economic Thought: A Critical Perspective*, Belmont: Wadsworth.
- Kuczynski, Marguerite and Meek, Ronald (eds.) (1972) *Quesnay's Tableau Economique*, New York: Augustus M. Kelley.
- Leontief, Wassily (1941) *The Structure of the American Economy, 1919–1929*, Cambridge, MA: Harvard University Press.
- Meek, Ronald (1963) *The Economics of Physiocracy*, Cambridge, MA: Harvard University Press.
- Phillips, Almarin (1955) "The *Tableau Economique* as a Simple Leontief Model," *Quarterly Journal of Economics* LXIX (February): 137–44.
- Pressman, Steven (1993) "Quesnay's Theory of Economic Growth and Decline," in Ron Blackwell, Jaspal Chatha, and Edward J. Nell (eds.) *Economics as Worldly Philosophy*, New York: St. Martin's Press.

WHAT SCHUMPETER SAW IN QUESNAY'S MODEL

- (1994) *Quesnay's Tableau: A Critique and Reconstruction*, New York: Augustus Kelley.
- Shackle, G.L.S. (1967) *The Years of High Theory*, Cambridge: Cambridge University Press.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis*, New York: Oxford University Press.
- Walsh, Vivian and Gram, Harvey (1980) *Classical and Neoclassical Theories of General Equilibrium*, New York: Oxford University Press.



Part V

EXPANDING THE  
FRONTIERS



# COMMONS AND VEBLLEN

## Contrasting ideas about evolution

*Philippe Broda*

### AN AWKWARD ASSIMILATION

The publication of *The Origin of Species* in 1859 brought about a revolution in the natural sciences. Charles Darwin was certainly not the first to argue against the “fixity [of species]” theories by asserting that species undergo transformations. Nevertheless, Darwin’s views caused repercussions that go beyond the implications of the ideas of other transformists, such as his grandfather Erasmus Darwin or Jean-Baptiste Lamarck. Darwin, although exclusively a natural scientist, found his message trumpeted in the social sciences mainly through Herbert Spencer’s contributions. Over time, Darwinian and Spencerian theories were assimilated one to the other.

The fact that Darwinism and Spencerian-evolutionism have become almost synonymous may suggest a possible resolution of the image of an economic discipline split in two fractions: an orthodox approach based on a typically Newtonian mechanical approach as contrasted with a heterodox approach stressing development and evolution.<sup>1</sup> On the other hand, the identification of Darwinism with evolutionism prevents a clear differentiation of several principles that distinguish competing theories especially in the social sciences. A striking example of this may be found in the interesting cases of John R. Commons and Thorstein Veblen. Both are considered “institutionalists” by historians of economic thought but a kind of vast gap separates their thinking. As Mark Perlman said, the “differences between institutionalists were greater than their similarities” (Perlman 1986:270). The way Commons and Veblen were opposed to “laissez-faire” demonstrates Perlman’s point, as I shall explain in this chapter. By emphasizing the main characteristics of Darwin’s ideas and their differences with Spencer’s theories, it is possible to identify the fundamental differences between Commons and Veblen.

### Darwin’s contribution

Transformism is the “negation of fixism, that is: it is not true that species are today what they were originally” (Gilson 1971:69). Etienne Gilson pointed out



the antagonistic nature of these two perspectives. Conflicts between them occurred centuries before Darwin. Nevertheless, Darwin succeeded in giving a new impulse to the old debate because of the specificity of his positions. This idea is best expressed in Joseph Hooker's explanation (Becquemont 1992:177–80; Canguilhem 1989:707–8).

According to this interpretation, there is an inherent variability in each individual which is completely independent of the environment. Afterwards, and only then, a natural selection concept intervenes to sanction the effects of these variations. A distinction must be made between the cause of the rise of the species and the cause of the individual variations. The former derives from the latter. Darwin confessed his deep ignorance about the laws governing individual variations (Darwin 1992:220). Subsequently, the idea of random change emerged from that admission.

The breaking point between Darwin and the transformists who preceded him rested on a lack of harmony. According to Lamarck, the environment acts on organisms in creating new needs. An “innate and unavoidable tendency to the selection of organized beings” (Lamarck 1992:82) allows an entire adaptation of the individuals through the modification of their habits, which are subsequently transmitted to offspring.

Since function generated organ, it is easy to imagine the presence of a Sublime Architect. Darwin rejected “Lamarck's absurdities about a ‘tendency to progression’” (Becquemont 1992:16). The matter is not that there is no reason to be optimistic, it is that there is no perceptible direction to the selection process. For instance, the Malthusian world may be “dismal” but at least it goes somewhere. Daniel Becquemont qualifies Darwin's theory as a “blind sifting process” (Becquemont 1992:95). Veblen used similar terminology about methodological Darwinism.

The critics, however, compelled Darwin to modify his position. For example, he accepted Spencer's suggestion that the expression “natural selection” be replaced by the expression “survival of the fittest” (Gayon 1992:74–5). Given that Darwin's formulations were equivocal about the direction evolution could take, it is not a great surprise to find many diverse interpretations of Darwin's utterances. Darwinism was carried into the social sciences and became a catchword that eventually acquired a teleological dimension and lost its original meaning as a “blind process” in time.

Darwin was only interested in natural science. Striving to expunge metaphysics from his works, he concentrated on observing facts. Although legend has magnified the empirical basis of his method, it is true that he intended to avoid dogmatism (Canguilhem 1989:102–3, 109–10). Therefore, one has to look elsewhere for clues as to how Darwinism was “exported” to other scientific fields. It is mainly through Spencer's efforts that the solution to this particular riddle can be found.

### Spencer's system

Unlike Darwin, Spencer was a system builder. From each science, it is only possible to extract laws adapted to their object, namely, laws with a restricted scope. According to Spencer, an a priori principle belonging to a higher order makes a synthesis from these partial truths. Unified knowledge gives rise to a philosophy (Spencer 1885:115).

The “indestructibility of matter,” the “continuity of motion,” and the “persistence of force” are the foundations for this generalized knowledge. These principles combine to form a philosophy when the law of cooperation between the three factors (matter, motion, force) is discovered. In fact, the principle of “evolution” is the integration of matter with the dissipation of motion (Spencer 1885:257).

Therefore, evolution is equivalent to a formation of more complex bodies. In natural science, new species appear adapted to their environment. Darwin's theory may be integrated with this cumulative outlook, providing that one erases its random aspects, which are not in accordance with the philosophy of progress developed by Spencer. But, if one decides to separate Darwin's thought from any teleological seeds, the incompatibility between his views and Spencer's is absolute.

Spencer stressed the “adaptation to conditions,” the “accommodation of internal relations to external relations,” and favored a “moving equilibrium” idea. In reality, Spencer is more Lamarckian than Darwinian.<sup>2</sup> I am reminded of the objections expressed by Darwin against Lamarck: He disliked his finalism and the place he allocated to the environment. The same progress toward an inescapable perfection is noticeable in both Lamarck and Spencer. The external conditions appear only at the end of *Origin of Species*, and they are introduced to ratify the effects of internal variations.

The principle of evolution is valid for each science. Applied to the social sciences, it allows a new stream of reasoning to appear. Indeed, Social Darwinism became the most famous illustration of the intermingling of Darwin's and Spencer's respective ideas.

### “Social Darwinism”

Spencer developed an analogy between the organism and society. Both are subject to growth. Both experience the transformation of structures and functions, under the grip of the law of evolution (1876–96, vol. 2:1–133). Integration and differentiation mark the history of all societies. The subordination of groups composed of weak individuals to stronger groups is a recurrent form of social integration. With every increase in the size of the aggregate, a differentiation of the parts occurs. In industry, tasks become more specialized as the size of the firm increases. A struggle for life among the individuals in competition for resources is also a part of Spencer's analysis. The struggle is the guarantee that there will be improvement in the species. Nothing must obstruct the competition

among men. Otherwise, the elimination of the unfit would stop, and so would progress. The State has to abstain from intervening in this competition. This should protect individual rights, such as private property.

Spencer distinguished two types of organization: the military and the industrial. The military system is centralized and requires coercion. It is a regime of compulsory cooperation. By way of contrast, the industrial system is based on voluntary contract. The military has been succeeded by the industrial structure. The former may have been serviceable in the past, but the latter is now more socially efficient. Historically, the direction of the law of evolution is also good for humankind.<sup>3</sup> In Spencer's eyes, communism, socialism, or any proposal for reform is linkable to military cooperation. Happily, a step backward can only be temporary. In the long run, nobody is able to prevent the realization of what the law of evolution holds for societies. Herbert Spencer and William Graham Sumner are the chief representatives of the line of thought called Social Darwinism. A free competition between individuals, without the intervention of the State, is the most effective economic system.

The supporters of the Spencer-Sumner "laissez-faire" policy found the idea of natural selection an interesting tool for validating their private plans. The United States of the Gilded Age was a very favorable environment for the diffusion of such ideas. The social and economic transformations of this era are striking (Kaspi 1986, vol. 2:199–235). The increase in trusts gathering together small enterprises to form combines is a good illustration of the Spencerian postulate of the integration of matter. To successful businessmen, their personal rise up the social scale was also perfect evidence that the fittest had indeed been selected.

### **Sources of confusion**

Darwinism does not automatically imply political conservatism. When social scientists use its fashionable concepts, they are able to rationalize a wide range of intellectual constructions. Darwinism can be used to offer arguments to the opponents of "laissez faire" as well. Claims for reform have been based on the model of artificial selection. Researchers such as Lester Frank Ward did not deny that there is a natural selection, but they assert that there is a dualism in the processes of development. In animal societies, nature enforces its law and the creatures must adapt passively. In human societies, it is no longer a question of blind mechanism: the human will is of major consequence. According to Ward, a process "teleological" rather than "genetic" is supposed to characterize the evolution of human societies. Whatever the unexpected consequences of their behavior, men always more or less choose their direction. This argument may justify the Darwinian reference to artificial selection, but it cannot hide the fact that reference should also have been made to Lamarckism. For instance, the plans that Ward fosters in his "sociocracy" to eradicate the tremendous social wastes depend on education. Therefore, his reasoning must be based on the transmissibility of acquired characteristics.

Moreover, pure Darwinism has nothing in common with either evolutionism or Social Darwinism. It is not a coincidence that Darwin avoided using the concept of evolution. It was too metaphysical for his taste.<sup>4</sup> Darwin was often careful not to use adjectives like *superior* or *inferior*, given his uncompromising rejection of teleology. It is therefore not surprising that, in all the disciplines where evolutionary theories became popular among Anglo-Saxon scientists during the last decades of the nineteenth century, these theories came mainly through Spencer's writings but with Darwin's name attached. There are different explanations for this observation. Nevertheless, the confusion between Darwinism and evolutionism came from Darwin himself and also from those close to him. Francis Darwin, Charles Darwin's son, schemed so that his father's fame would be achieved by linking Darwin's name to evolutionism.<sup>5</sup> As for the author of *Origin of Species*, it is clear that his ideas were flexible enough to fuel the muddle. And Spencer's bitter complaints, that what was called "Darwinism" was his evolutionism, did not help.<sup>6</sup> The confusion between Darwinism, evolutionism, and transformism, in the end, was complete.

### VEBLEN AND HIS NATURAL SELECTION

The Institutionalists are included among those who contest the idea of a self-realizing order. According to David Hamilton, their distinctiveness can be summarized in their taking into account evolutionary change (1981:1–6). Yet even among themselves there were important differences about the meaning of evolution. For example, Commons highlights artificial selection whereas Veblen thinks in terms of natural selection.

Veblen displayed a remarkable knowledge of contemporary biology.<sup>7</sup> He was also acquainted with the evolutionary literature, especially the writings of Spencer and Sumner (Dorfman 1972:46). When Veblen used the concept of natural selection, he used it in a special way. His purpose was to undermine the philosophical basis of the economic orthodoxy. In fact, Veblen called for a Darwinian attitude to be held by scientific researchers. His methodological Darwinism was integrated into a materialistic conception of knowledge and a complete rejection of the Spencerian position.

### A "materialistic" conception of knowledge

The cultural point of view embraced by Veblen is confirmed by the vast extent of topics he dealt with in his works: war, economics, epistemological questions, technological changes, the sociology of consumption, all receive erudite discussion.<sup>8</sup> A culture is a "complex of habits of life and of thought prevalent among the members of the community" (Veblen 1919:39). The efforts devoted by man to earn his livelihood decisively direct his activity. Because the need to earn one's living is so vital, "this economic interest has counted for much in shaping the cultural growth of all communities" (1919:76). The habits of

behavior acquired then give rise to habits of thought which, in a process of “crossing and grafting,”<sup>9</sup> come to invade all fields of activity. But, if the habits of activity fashion the habits of thought, they are dependent themselves on the techniques of production, which are nothing other than knowledge or habits of thought whether or not they are materialized in tools.<sup>10</sup> The interaction between habits of thought and of life suggests that it is necessary to conceive of culture as a wide configuration in which all the elements are in a state of mutual dependence. The term *materialist* is better suited than *structuralist* to describe this approach because Veblen reasons as if there is, nevertheless, a decisive factor in social change, which are the habits of life. Science takes place in this analysis under the form of habits of thought:

the current science and the current scientific point of view, the knowledge sought and the manner of seeking it, are a product of the cultural growth. Perhaps it would all be better characterized as a by-product of the cultural growth.

(Veblen 1919:38)

Its driving force is an instinct, idle curiosity that incites people to interpret the facts that confront them. This research is utterly disconnected from any practical utility, its criterion of validity a “dramatic consistency” whose canons are linked to cultural conditions. In this quest for understanding, men need answers of significance to them. They cannot easily disregard their “personal equation.” Therefore, anthropomorphic interpretations are unavoidable (Veblen 1990:51–89). Veblen calls them “animistic” or “teleological” preconceptions. They consist of imputing a conduct to the observed objects. Veblen stated that this imputation of activity never ceases even if, with Darwinism, it is less perceptible (1919:15).

### **Methodological Darwinism**

According to Veblen, the concept of process is among the canons of scientific validity that greeted the “machine” era. Scientists are supposed to accustom themselves to the idea of a “sequence of cumulative change.” In earlier times, the premises animating researchers were based on “sufficient reason.” Theories were conceived in a deductive, a priori, and teleological manner. The heirs of the Newtonian world believed in the natural course of events, independent of any possible disturbance, which could explain the lack of the corroboration from facts. When these disturbances disappeared, events were presumed to return to normal (1919:116). As stress is put on cumulative change, the Newtonian sort of analysis lost ground. The process approach is developmental. Scientific research comes to a rest but only provisionally because its prime postulate is that of consecutive change, and consecutive change can, of course, not come to rest, except provisionally (1919:33).

Veblen was not a naive empiricist. In his view, science is not a “redundancy

of experience.”<sup>11</sup> The affirmation that things change cumulatively is, according to him, a metaphysical preconception. It is also “an unproven and unprovable postulate” (1919:33). It is true that Veblen, in his article on Immanuel Kant, invoked the authority of “inductive reasoning” concerning the “power of judgement” (1919:176) but, as Richard Teggart remarked:

“induction” means to him almost exactly the qualities which are usually associated with deductive reasoning. “Induction” is not the act of simple inference, of reasoning from the particular to the general, but is, on the contrary, the process of subsuming the particular under the terms and reach of an a priori category.

(Teggart 1932:38)

Moreover, induction required a certain steadiness in the observed facts. When the point of view that has been adopted is deliberately evolutionary, induction is completely useless (Becquemont 1992:162–3). Nevertheless, speculations at the time of Darwin were more impersonal, closer to the “matter-of-fact” knowledge than they were before. If Veblen appreciated this form of empiricism, it springs probably at least as much from his skepticism about the abilities of the reason as from the credit he would spontaneously grant to “experience” (Dobriansky 1957:102–3).

Mainstream economies’ failure rests on its preconceptions, namely, its unconscious mental schemes. The problem is to correct such significant deficiencies. By definition, preconceptions are not clearly formulated postulates. They come from a slow cultural conditioning. Veblen recommended that social scientists adopt a Darwinian methodology—that is, principles to guide their research—until they internalize the canons of the scientific perspective required under the influence of the contemporary habits of life.

### Answering Spencerism

Veblen made use of his relativistic conception of knowledge to revisit the history of economic thought. He recognized the qualities of the diverse schools,<sup>12</sup> and had no other choice except to tear down their preconceptions. Their preconceptions were considered “out-of-date.”<sup>13</sup> Veblen’s response to Spencer’s ideas is particularly noteworthy.

In “Some Neglected Points in the Theory of Socialism,” which was mischievously dedicated “in the spirit of the disciple” (1919:387), Veblen was already attacking his master and reversing his position. Veblen denied the Spencerian dichotomy between the military and the industrial system. Instead, Veblen widened the number of possibilities. Natural monopolies existed and could not be integrated within this dichotomy. There was another kind of economic organization, the nationalization of industry, which was linked to constitutional government in politics and did not correspond to either Spencerian category.

It was clear that Veblen's cultural outlook worked along the same lines. The complexity of the network of social interdependencies allowed widely differing models to be imagined. The Darwinian point of view can be seen, even if it has not been said explicitly, as a systematization of this criticism about Spencer's world in which all interventionism is proscribed so as not to disturb the laws of evolution. Human conduct is not able to accelerate this positive and natural movement by purposeful actions because of the unexpected consequences of action. Veblen elevated the powerlessness of humanity and made it his epistemological premise. From a scientific point of view, there are no reasons at all to be optimistic. The "imbecility" of the institutions could even result in the collapse of Western civilization (Veblen 1990:24–5).

### **J.R.COMMONS AND HIS ARTIFICIAL SELECTION**

In opposition to Veblen, Commons drew on *artificial* selection and rejected *natural* selection. Commons's point of view can be appreciated in Spencerian or Lamarckian terms because he gave weight to the capacity of the individual to adapt to new environments.

Commons's family environment was a mixture of Hoosierism, Republicanism, Presbyterianism, and Spencerism, and, thus, he did not hesitate to admit:

I was shocked, at a meeting of the American Economic Association, to hear Professor Ely denounce Herbert Spencer who had misled economists.  
(Commons 1934a:8)

Commons was twenty-six years old at this time. Like Veblen, he developed an interest in biology as evidenced by his article "Natural Science, Social Selection and Heredity" (Commons 1897:90–7). Although these publications tackle natural science only diagonally, they contain clues about his opinion concerning these debates.

Commons and Veblen were both dissatisfied with the way the economic system functioned. The difference is that Commons tried to reform it, because he believed in its potential efficiency. Veblen did not consider any remedy for social problems because their evolution escapes human control. This explained Commons's not-so-idle curiosity toward the controversies opposing the naturalists. He thought that it is in studying man's own nature that one becomes aware of his extraordinary privilege, namely his ability to shape the environment in which he lives.

### **The capacity of adaptation**

In *The Origin of Species*, environmental interference is secondary. The environment serves only to sanction individual variations which do not themselves depend on environmental factors. Commons, however, conceded a

substantial place to the environment. In the tradition of Lamarck, Spencer, and Ward, Commons insisted on the capacity of humans to adapt. Seeking a clue to his questions about the stages of spiritual development, Commons stated that “sociology based as it is upon the sciences of biology tells us through that universal law of life—adaptation to environment” (Commons 1894:33). Moreover, he took up the Spencerian formula of “continuous adjustment of internal relations to external relations” (1899–1900:7). One might certainly reply that Veblen did so also (1953:127). The difference between Commons and Veblen is that in Veblen’s case it is the gap between internal and external relations, not their compatibility, that is significant. On the contrary, Commons is affected by the action of adjustment, the major factor in social progress. Here Commons is on the side of Lamarck and Spencer. Individual faculties blossom or atrophy according to external circumstances, as affirmed by the French naturalist.<sup>14</sup> But the compatibility of Commons and Spencer stops at this point. From this point on their paths diverge.

Spencer reduced the phenomenon of adaptation to a metaphysical principle. The mechanism works alone and, however praiseworthy may be his ends, man cannot hasten its outcome. His intervention could possibly delay it. The law of evolution by itself explains the improvement of the human mind, the transition from a compulsory to voluntary cooperation. It required the selection of the fittest and applies to scallops as well as to man. Qualities specifically human, such as altruism, appear only through its process.

Commons’s thought does not depend on highly speculative principles, although he does not deprive himself of sometimes using Spencerian conclusions. He began differentiating human species and other species based on psychic criteria. Man is bestowed with consciousness. In animal societies, environment acts on individuals, and the one who succeeds in developing the greatest talents in comparison with others in this world survives. The selection executed by nature is brutal, without correction. As a contrast to that scenario, selection in human societies is social. Men act on the physical environment and tame it. Taking into account human consciousness is what justifies the substitution of the concept of education for the concept of environment. The pressure individuals undergo is social. It is expressed through institutions, especially the state, family, and ownership, and is passed on by language (Commons 1897:90–1).

### Progress

The power of education is considerable. More than 90 per cent of individuals, Commons wrote, are under its influence (1897:95). With the cerebral capacities of their biological heritage, we humans are receptive enough to the process of social selection. Abnormal people from a congenital point of view represent only a small part of the population. Outside these exceptions, selection is then essentially artificial. Commons asserted that “it consists in so adjusting the



political, industrial and social environment as to affect personality” (1897:96). A transformation of the environment is equivalent to instituting new rules of the game for life in society. The “game” does not stop: it continues under a new form. Commons’s aim is to mitigate, little by little, its harshest effects.

At the beginning, conscience is “empirical,” that is customary, imitative, and traditional (Commons 1899–1900:34). Under the sway of the educational system, it is then transformed. Conscience becomes “skeptical, critical, introspective, individualistic, at first iconoclastic, later inventive and constructive” (1899–1900:34), “reflective” according to Commons’s terminology. The solutions conceived for present conflicts are more sophisticated: the more highly developed consciousness is, the greater is the control of social selection. Under these circumstances, the gap between man and animal is widest, as is the one between Commons and Spencer. The matter of the direction of the motion imparted to evolution of society still remains to be addressed. An examination of Commons’s ethical view is needed to clear up this element of uncertainty.

### **An ethical dimension**

The religious dimension is firm in Commons’s works. His Social Christianity had always been unflinching even if, in his last writings, it was more implicit than expressed. Commons obviously belonged to that category of religious men who agreed with the evolutionists’ ideas. In *Social Reform and the Church*, Commons stated that it was important to go out in the field and investigate certain facts. Commons claimed to investigate real facts and not to be satisfied with life in an ivory tower (1894:13–14). The contemporary imperfections of society do not disappear spontaneously, thanks to natural selection, but rather have a tendency to last and to make the situation worse on the whole (1894:6–7).

As the environment worsens, crime, intemperance, and alcoholism become widespread. Improvement in the conditions of life would bring about—and this is a Lamarckian inspiration—a decrease in these sad practices and would favor the adoption of moral habits. It is fundamental that reforms draw on the true knowledge of social problems. Promulgated laws must not be Utopian but generalizations of measures taken up at an individual level and whose efficiency has been previously proven (1894:59–60, 75–9). These moral requirements come directly from the Christian reform movement. Since the soul is the “flower of the body,” it is unthinkable to imagine saving it when the most elementary material needs are not met (1894:32–8). Ethically speaking, priority is given to providing a decent livelihood to everyone.

Sociological knowledge is the means. Christianity uses the propagation and application of Jesus’s belief in love, brotherhood, and justice in order to reach its goals. Commons did not aspire to a strict economic equality. His pattern of justice merged into the claim for an equal opportunity among individuals (1894:9–10). This ideal, which is broadly shared in the United States, has

become a myth damaged by unbearable social rigidities. Mobility from class to class is usually exceptional: the chances of success are, from the start of competition between individuals, unequal (1894:34). And this is intolerable. In plain language, religious words of command, related to the lack of harmony, guide the criteria of artificial selection.

Three years later, in “Natural Sciences, Social Selection, and Heredity,” Commons focused on “personality,” as the outcome of social evolution. Now, the personality is also the natural fact of human being (1897:97). Accordingly, artificial and natural selection meet, since this feature of man, personality, realizes its own nature entirely through the peculiarities of the functioning of human societies. Its development is optimal if liberty, security, and equal opportunity are upheld in society. The action of individuals is then voluntary. In this configuration, one observes that a new kind of natural selection, one that depends on conscience and personality, not on strength and ruse, emerges from the process of social selection (1897:97). One does not find any more direct references to religion. All the same, Commons recommended similar social ends as before. Artificial selection must try to promote equal opportunity between individuals and to eradicate constrained behaviors. Any evolution that contributes to the inverse result is to be rejected.

The publication of *A Sociological View of the Sovereignty* in 1899 and 1900 provided additional evidence for the continuity of Commons’s thought. The idea of a norm to respect still played a very important role in this work. Commons posited that men have at their disposal a minimal latitude in their mutual relations. Actually, if they were acting under necessity, their freedom would be only an illusion, and the possibilities of choice implied by morals, vain. Commons reproached Spencer for having forgotten this side of social conduct (1899–1900:37). Besides, his analysis is closer to that of “Natural Science.” The quality of artificial selection is linked to its compatibility with principles of natural or divine law in which individual persuasiveness is cultivated (1899–1900:103–4). Ethics, equal opportunity, and persuasion are joined together in struggle against their common enemy, the concept of coercion, inappropriate to human societies. The genuine nature of man is concerned only with widening his allotment of freedom. Thus, one notes that the connection between both types of selection is newly affirmed. Considering all the directions offered to artificial selection, the only one that deserves to be pursued is the one allowing man to develop his own qualities.

Commons’s *Institutional Economics*, published in 1934, is the most advanced version of his theory (1934a:5). Apart from making a laconic remark about the originality of the interventionist approach of the New Deal (1934b:611) it seems that Commons had not understood the extent of the crisis that began in 1929. Meanwhile, he devoted the last chapter of his book to the dangers of Communism and Fascism (1934b:876–903). If poverty came to perpetuate itself, the masses may prefer an authoritarian system to capitalism, one that would at least procure an acceptable livelihood for them. Commons did not appeal to

the finer feelings of his readers, he brandished the threat of economic chaos. Despite his utilization of new conceptual tools, his concerns did not change. In his attempt to find “reasonable” solutions to the social conflicts, he kept making the most of the margin of freedom of the individual or of collective entities through their leaders. In the notion of “transaction,” the foundation of his reflection, “persuasion” and “negotiation” have an important weight.

Spencer and Commons both emphasized the capacity of individuals to adapt and the role of technology. However, the differences between them were tremendous. Spencer was drawn to the main consequence of adaptation, the survival of the fittest, and found it as valid when applied to man as when applied to slugs and snails. Ethics is itself an outcome of the process of evolution. Unlike Spencer, Commons focused on the process of adaptation itself. Morals are an endogenous factor in his theory, because the principle of adaptation is integrated with conscious human action on environment. The more Commons matured, the more he emancipated himself from Spencer’s influence. Thus, he was quoting his elder in a simply anecdotal and negative way in both the *Legal Foundations of Capitalism* and *Institutional Economics*.<sup>15</sup>

### **An artificial selection**

The concept of artificial selection makes the contrast between Veblen and Commons particularly evident. Commons pointed out the expected effects of behavior. When criticizing Veblen, who considered only the unanticipated consequences of human action, he drew on Darwin. In the writings in which Commons’s institutional economics is thoroughly outlined, Darwin’s name turns up frequently. The first merit of the English naturalist is that “he started the science of organism without borrowing any analogies from Newton’s science of mechanism” (1934a:636).

Once more, the preconceptions of economic orthodoxy are attacked by this sort of argument. Intending to explain the functioning of organisms, Darwin elaborated a principle of Scarcity more pertinent than the Newtonian principle of Energy. In a context where resources are scarce, the study of interaction between organisms and environment is fundamental. It is articulated through the ideas of heredity, overpopulation, variation, struggle and death and survival (1934b:636). But man is different from other creatures. Therefore, when his spirit builds a mechanism

it is no longer Mechanism, it is a Machine. A machine is the human will handed on from generation to generation by the institutions of language, number, custom, weights, measures and so on.

(Commons 1934b:635)

Machines are artificial in the sense that they are just a material excrescence of the intellectual activities of men. With machines, human beings control nature,

and their decisions can have implications capable of modifying the course of events. With regard to machines, the expression *natural selection* is not appropriate. In this case, one would really have to talk about artificial selection, for the notions of purpose, futurity, and planning rule the struggle for existence (1934b:636). Applying the organic analogy to the social sciences is not dangerous as long as one does not forget one feature of human organisms—the will. Darwin’s equivocation on the metaphor of natural selection was enough for Commons to claim that he did not betray Darwin’s thought.<sup>16</sup> According to Commons, it is to be regretted that economists have taken from Thomas Malthus only his laws of overpopulation, because the second part of his famous book, which deals with the moral evolution of man, is usually ignored (Commons 1934b:246). One finds again the plan in which freedom, the individuals margin for acting, and ethics are joined together.

### CONCLUSION

Veblen and Commons accorded the idea of process a decisive place in their respective bodies of thought. In so doing they hoped to distinguish themselves from mainstream economics, viewed as more static in their approach. But their twin concerns for process must not hide their profound differences. Commons appreciated Veblen, but he affirmed that the author of *The Theory of the Leisure Class* made a serious mistake in opting for random natural selection. By doing so, Veblen deprived his theory of the voluntary and intelligent aspects of the human species. In other words, it is possible that the human will can leave a distinctive mark on society.

The disagreement between these two Institutionalists may be related to a wider outlook. Usually, the partisans of “laissez faire,” borrowing theoretical elements from natural scientists (Spencer, for instance), showed an inclination for Darwin’s natural selection, whereas its critics chose their references in the Lamarckian phenomenon of adaptation or in Darwinian artificial selection. Veblen was a desperate enemy of automatic economic regulation through the laws of market. Moreover, as Edgell and Tilman note (1989:1009–10) the cultural emphasis of his theory makes one inevitably think of Lamarckism. Individuals are indeed shaped by their institutional environment, which transmits to them socially cultivated propensities. Veblen was a fierce Darwinian belonging to the natural selection school. The message that could be communicated to an author like Spencer was that, if one elevates to a methodological premise the idea that controlling social evolution is not possible, one cannot escape the conclusion that in such a case the reasons to be pessimistic are numerous: the “invisible hand” seems to be “bloodstained.”

Commons also cited Darwin. Commons unlike Veblen focused on artificial selection. Furthermore, his study of human societies was as much connected with Lamarckism as with Darwinism. Yet, Commons and Veblen repudiated Spencer’s arguments in a different ways. Veblen took from Darwin’s theories a

scientific “state of mind” and neglected entirely the Lamarckian aspects of his thought. Commons branched out into other directions by making effective use of Lamarckian and even Spencerian contributions. What turned Commons away from the Spencerians was his belief that adaptation is not absolutely unmanageable. While Spencer postulated that a neutral principle absorbed the capacity of adaptation of the social actors, Commons proceeded from this adaptability to the hope that important civilized values could be reached and maintained. If Commons called this notion “Darwinian” in his early writings, it is probably because he yielded to the current fashion of his day.<sup>17</sup>

## NOTES

- 1 See, for example, A.G.Gruchy (1947:1–10).
- 2 Gilson defends this opinion (1971:106–8), as does R.Hofstadter (1955:79).
- 3 The Spencerian eschatology is very interesting. Spencer tells about a period when the voluntary cooperation between individuals will be so deep that the opportunities of altruistic behavior will be scarce and, yet, men will be so altruistic that they will leave to others the great pleasure to help their peers in trouble (1905:219)! At the end of his life, this lyricism will disappear (Becquemont 1992:240, 244–5).
- 4 It was not until 1869 and the sixth edition of *Origin of Species* that one was able to find in this book the word *evolution* (Gilson 1971:83).
- 5 In the passage of his *Autobiography* censured by his son, Charles Darwin criticizes severely Spencer (Gilson 1971).
- 6 See Gilson (1971:118–21).
- 7 For example, “The Mutation Theory and the Blond Race,” in Veblen (1919:457–76). Here Veblen proclaims himself Mendelian rather than Darwinian. This is a first sign showing that his Darwinism is a frame of mind and not a theory linked to a particular science.
- 8 The list is not exhaustive, of course.
- 9 T.Veblen (1990:50–1). Malcolm Rutherford indicates too this mechanism of diffusion (1984:334).
- 10 See M.G.Murphey (1990).
- 11 S.Daugert (1950:36); J.P.Diggins (1978:28). See Coats’s reply in A.W.Coats (1954:532).
- 12 For instance, about Marx, see T.Veblen (1919:409–10).
- 13 See almost the whole of Veblen (1919).
- 14 J.R.Commons (1894:33). One will not necessarily claim that Commons has been a pure Lamarckian because transmissibility of acquired characteristics is more doubtful in his works; see Y.Ramstad and J.L.Starkey (forthcoming). One will just note that Commons relied on important elements of Lamarckism.
- 15 For instance, “Darwin’s concept of natural organism became, by analogy again, the foundation of their concepts of society, which reached their peak of absurdity at the hands of Herbert Spencer” (1934b: 637).
- 16 Nevertheless, it is paradoxical that Darwin’s hesitations with the concept of natural selection stem not from his preference for artificial selection but, on the contrary, from his fear that the word *selection* suggests that nature “chooses” the winners for the struggle for life, since the process of evolution is blind.
- 17 Later the Lamarckian defeat, of course, did not incite him to change his behavior.

## REFERENCES

Becquemont, D. (1992) *Darwin, darwinisme, évolutionnisme*, Paris: Kime.

- Buican, D. (1992) *Charles Darwin*, Paris: Criterion.
- Canguilhem, G. (1989) *Études d'histoire et de philosophie des sciences*, Paris: Vrin.
- Coats, A.W. (1954) "The Influence of Veblen's Methodology," *Journal of Political Economy* 62:529–37.
- Commons, J.R. (1967) [1884] *Social Reform and the Church*, New York: Kelley Publisher.
- (1897) "Natural Sciences, Social Selection, and Heredity," *In the Arena* 18 (July): 90–7.
- (1965) [1899–1900] *A Sociological View of the Sovereignty*, New York: Kelley.
- (1934a) *Myself* New York: Macmillan.
- (1934b) *Institutional Economics*, New York: Macmillan.
- Darwin, C. (1992) [1859] *L'origine des espèces [The Origin of Species]*, Paris: G.F. Flammarion.
- Daugert, S. (1950) *The Philosophy of Thorstein Veblen*, New York: King's Crown Press.
- Diggins, J. P. (1978) *The Bard of Savagery*, New York: Seabury Press.
- Dobriansky, L.E. (1957) *Veblenism: A New Critique*, Washington: Public Affairs Press.
- Dorfman, J. (1972) *Thorstein Veblen and His America*, Clifton: Kelley.
- Edgell, S. and Tilman, R. (1989) "The Intellectual Antecedents of Thorstein Veblen: A Reappraisal," *JEI* December: 1003–26.
- Gayon, J. (1992) *Darwin et l'après Darwin: une histoire de l'hypothèse de sélection naturelle*, Paris: Kime.
- Gilson, E. (1971) *D'Aristote à Darwin et retour*, Paris: Vrin.
- Gruchy, A.G. (1947) *Modern Economic Thought: The American Contribution*, New York: Prentice-Hall.
- Hamilton, D. (1981) [1953] *Evolutionary Economics: A Study of Change in Economic Thought*, New Brunswick, NJ, and London: Transaction.
- Hofstadter, R. (1955) [1944] *Social Darwinism in American Thought*, Paris: George Braziller.
- Kaspi, A. (1986) *Les Américains*, Paris: Points.
- Murphey, M.G. (1990) "Introduction to the Transaction edition", in T.Veblen (1990) *The Instinct of Workmanship and the State of Industrial Arts*, New Brunswick, NJ: Transaction.
- Perlman, Mark (1986) "Subjectivism and American Institutionalism," in I.M.Kirzner (ed.) *Subjectivism, Intelligibility and Economic Understanding*, New York: University Press.
- Ramstad, Y. and Starkey, J.L. (forthcoming) "The Racial Theories of John Commons," in W.J.Samuels (ed.) *Research in the History of Economic Thought and Methodology*, Greenwich, CT: JAI Press.
- Rutherford, M. (1984) "Thorstein Veblen and the Processes of Institutional Change," *History of Political Economy* 16 (Fall): 334.
- Spencer, H. (1885) [1862] *Les premiers principes [First principles]*, Paris: Alcan.
- (1876–1896) *Principes de sociologie [The principles of sociology]*, Paris: Alcan.
- (1905) [1873] *Les bases de la morale évolutionniste [The data of ethics]*, Paris: Alcan.
- Teggart, R.V. (1932) *Thorstein Veblen: A Chapter in American Economic Thought*, Berkeley: University of California Press.
- Veblen, T. (1919) *The Place of Science in Modern Civilization and other Essays*, New York: Huebsch. Reprinted in 1990, New Brunswick, NJ: Transaction.
- (1953) [1899] *The Theory of the Leisure Class*, New York: Penguin.
- (1978) *Théorie de la classe de loisir*, Paris: Gallimard.
- (1990) [1914] *The Instinct of Workmanship and the State of Industrial Arts*, New Brunswick, NJ: Transaction.

# MR. BOULDING AND THE AUSTRIANS

## Bouldings contribution to subjectivist economics

*Peter J.Boettke and David L.Prychitko*

The real world is a muddle. And if the real world is a muddle, it is a great mistake to be clear about it.

(Kenneth E.Boulding)<sup>1</sup>

### INTRODUCTION

Kenneth E.Boulding was undoubtedly one of the most prolific economic and social thinkers of the twentieth century. Boulding published close to forty books and hundreds of articles in his academic career. His scholarship, which ranged from technical issues in capital theory to peace research and defense economics to evolutionary social theory, was also one of the most interesting among that of academics. Boulding was a bold social thinker, who not only tried to construct a unified theory of social science, but of knowledge in general.

He was an eclectic thinker who defied classification. In a very real sense he was his own school—sadly a school of all master chefs and no cooks. His classic principles text, *Economic Analysis* (1941), established Boulding firmly within the mainstream of economic thought. The revised versions of this text were among the first attempts to introduce Keynesian ideas into the pedagogical mainstream of economics. Yet, Boulding was not a traditional Keynesian, despite the fact that he accepted the label.<sup>2</sup> Boulding was also influenced to some extent by Joseph Schumpeter, whom, in fact, he had first met on the boat coming to America and with whom he worked at Harvard in 1932. He studied capital theory with Schumpeter, and apparently discovered a fundamental flaw in Boehm-Bawerk's theory.<sup>3</sup>

Boulding often expressed surprise at the pigeonhole others tried to fit him into. As he stated in the introduction to the first volume of his *Collected Papers*:

In spite of the fact that I see myself as not much of a radical, being close to the “main line” of economic thought that goes from Adam Smith to Ricardo, Mill, Marshall and Keynes, in terms of the reception of my

ideas I feel much closer to the heretics, especially to the American institutionalists—to Veblen, Wesley Mitchell, and especially to John R. Commons, who has achieved the remarkable distinction of being perhaps the most influential and most neglected American thinker of the twentieth century.

(1971a:viii)

We do not seek in this chapter to offer the reader another classification for Boulding. He was at one and the same time mainstream economist and radical critic, classical theorist and modern technician, scientist and mystic. Our purpose is, instead, to call attention to those features of Boulding's lifework that suggest that he is one of the most important (let alone creative) post-Knightean American subjectivists.

One of the influences that is often overlooked with regard to Boulding is his deep affinity to the Austrian or subjectivist tradition in economic analysis. His early technical papers, for example, were explorations of Austrian and Fisherian capital theory.<sup>4</sup> Moreover, this influence continued when he moved from technical economics to broader issues in the social sciences. *The Image* (1956), especially, represents a neglected classic in the subjectivist tradition.

A basic theme that Boulding shares with subjectivists of all stripes is that the social world is a messy and complex system, not amenable to neat and monocausal explanations. In fact, formally elegant explanations which purport to provide objective knowledge and tight predictability are an illusion, if not a dogma. Such deterministic views of the social system, Boulding argued, can be quite disastrous since we can be led “to a neglect of adaptability, tentativeness, and that constant willingness to revise images, which are necessities of survival in an uncertain world” (1985b:11).

## BACKGROUND TO BOULDING

Boulding was born in Liverpool, England in 1910. He attended New College, Oxford, on a science scholarship beginning in 1928, intending to study chemistry. But Boulding did not find science as interesting as he initially believed, and decided to focus on social problems instead. In June of 1929, Boulding recounts, he went to visit Lionel Robbins—who was just leaving Oxford for a professorship at the London School of Economics. Boulding wanted to find out what he should read for the summer if he wanted to study economics. Robbins provided a list that included Alfred Marshall's *Principles* and Philip Wicksteed's *Common Sense of Political Economy*. Upon returning to Oxford in the fall of 1929, Boulding scored an almost perfect score on his economic examination, and he was able to retain his science scholarship despite enrolling in the honors school of politics, philosophy, and economics.

Boulding published his first professional paper—an examination of the theoretical role of “displacement costs”—as an undergraduate in *The Economic*



*Journal* (which Keynes edited at the time). After he graduated from Oxford, Boulding secured a Commonwealth Fellowship (the British equivalent to a Rhodes Scholarship) and left to study economics in the United States, first for a brief period at Harvard with Joseph Schumpeter, and then at the University of Chicago with Frank Knight. In fact, Bouldings explorations in Austrian capital theory so irked Knight that it led the latter to publish a paper entitled “Mr. Boulding and the Austrians,” from which we obviously borrowed the title for our present purposes.

Boulding never completed his Ph.D. in economics, an experience he often said would have killed him. Boulding often attributed the professional opportunities he received despite not receiving his academic “union card,” to two factors: his Oxford education, and the scientific “endorsement” of Frank Knight.<sup>5</sup>

Bouldings teaching career included posts at Edinburgh, Fisk, Colgate, Iowa State, McGill, Michigan, and Colorado. After retirement from Colorado in 1980, he taught as a visiting professor at several universities throughout the 1980s. Bouldings contributions as a scholar were vast. As mentioned above, his book, *Economic Analysis*, was one of the leading textbooks in economics in the 1940s. Along with Ludwig von Bertalanffy, Boulding founded the Society for General Systems Research in the 1950s and served as the associations first president. He basically invented the field of defense economics and conflict resolution, and his *Conflict and Defense* (1962) is considered a classic in the field.

Boulding became restless with standard economics early in his career. In *A Reconstruction of Economics*, for example, he wrote that there was no such thing as economics, just social science applied to economic problems (1950:vii). Bouldings disillusionment with standard economics stemmed from a profound discomfort with the assumptions of perfect knowledge, perfect markets, and static equilibrium. The requirements of technical economics actually forced economists into an intellectual straitjacket and failed to offer significant gains that outweighed the loss of creative and critical analysis. The benefits of modern economic technique were there to be had, but the cost to human understanding, Boulding emphasized, should not be overlooked.<sup>6</sup>

It would be mistaken, however, to assume that Boulding was against formalism in economics. During his youth, he was as technically sophisticated as the best of them. What he sought to do, beginning with his first articles on capital theory, but especially with *A Reconstruction of Economics*, was to supplement the techniques of a Newtonian world-view with the formal tools appropriate for a more dynamic and heterogeneous world.

In addition to his unorthodox economic views, Boulding was a devout Quaker and pacifist. He was a deeply spiritual man in a profession of rationalists. His critical attitude toward modern economics and his deep spirituality made Boulding an iconoclast.

Despite his outsider status, Boulding was bestowed with many honors during his career. In 1949 he won the John Bates Clark Medal from the American Economic Association, an award that is given every two years to the economists

under the age of forty judged to have made the most significant contribution to economic thought. After the Clark award Boulding drifted further away from mainstream economics and more into interdisciplinary social science and social philosophy. Nevertheless, in 1968 he was elected President of the American Economic Association.<sup>7</sup>

### SUBJECTIVIST THEMES IN BOULDING'S ECONOMICS

Since its first systemic presentation in Carl Menger's *Principles of Economics* (1871), subjectivist economics had been distinguished from other schools of thought by the emphasis placed on questions of knowledge, time, and process. In a very limited sense all of neoclassical economics embraced the subjective theory of value. But in an important respect the neoclassical revolution represented a victory of marginalism rather than subjectivism. Alfred Marshall's *Principles*, for example, quickly reintroduced an untenable objective cost side into the analysis of market behavior.<sup>8</sup>

A fundamental theme in the subjectivist view of knowledge is that the social world is nothing more (or less) than a social construction of reality. It is individual values, perceptions, and expectations that guide judgment about alternative courses of action. In other words, our world is fragmented into multiple realities and value systems. The knowledge embedded in the social system is dispersed among the various participants. To the subjectivist, both the conflict of values and dispersal of knowledge focus scholarly attention on the institutions and practices that enable participants to coordinate their activities with one another in a reasonable manner. It is precisely these institutions and practices which provide the bridge from solipsism to social order that economists and social scientists seek to explain.<sup>9</sup>

As opposed to the standard Newtonian conception of time, subjectivists view time in a Heraclitian manner. Time is irreversible and represents an unending flow of consciousness. "So far as men are concerned, being," as G.L.S. Shackle has put it, "consists in endless fresh knowing" (1972:156). Time viewed in this manner involves the acceptance of an inherent uncertainty of the future which defies reduction to mathematical formalization.

The concern with knowledge and time leads to a vision of the social world as complex and dynamic. Subjectivists have traditionally argued that process and evolutionary analysis are the most appropriate methods for making sense of the interdependencies of dynamic systems and structures of reality.<sup>10</sup> Standard equilibrium models, at best, provide a useful heuristic for explicating tendencies of mutual adjustments of behavior.

Throughout the vast corpus of Boulding's work, these themes are repeatedly stressed. Even when Boulding was at his most mainstream (in terms of technique and style of argument) his formal analysis—both graphical and in systems of equations—sought to examine period by period adjustments, whereas his verbal analysis often stressed the evolutionary dynamics underlying systems. Boulding

never exclusively concentrated on equilibrium states. In fact, his recognition of the possibility of multiple equilibria and, even more important, the necessity of disequilibrium foundations of equilibrium economics led Boulding from the earliest period in his professional development to look to formal models of population theory and ecological interaction developed in the biological sciences to aid his social research. For instance, both *A Reconstruction of Economics* and *Conflict and Defense*, which were highly technical works (especially given their time), reflect Boulding's concern with process analysis and evolutionary dynamics.

The basic thesis of *A Reconstruction* was that a balance sheet approach to the study of economics would examine the sequence of states rather than the particular states of affairs which traditional equilibrium models are limited to analyzing. In the standard theory of the firm, Boulding argued, it appears to be impossible to introduce the essential concept of uncertainty. Maximizing theories are based on certain knowledge of the future. This approach cannot examine the asset structure of the firm. An analysis of the preferred structure of the balance sheet, and especially the liquidity and flexibility of assets, is not possible without introducing uncertainty from the start. The uncertainty of the future, and the defenses against uncertainty, are built into the asset structure of the firm. If we try to build an elegant theory of the profit-maximizing firm in the absence of uncertainty, then, Boulding feared, we will never be able to fit uncertainty back into the analysis, and our theory of the firm will be woefully deficient (1950:26–38).

Moreover, in *Conflict and Defense* Boulding employs the concept of Richardsonian processes to examine the multiple equilibria that emerge in the face of conflict (these are processes which generate self-justifying and unproductive emulation). His purpose was to develop a theory of conflict and its resolution in order to demonstrate that “conflict processes are neither arbitrary, random, nor incomprehensible” (1962:328). It was his hope that in understanding the logic of conflict, humankind would find solutions to the problems of human betterment and welfare in a nuclear age. The positive analytical point that we wish to highlight is simply that Boulding was concerned with processes and movements between equilibria, and not the theoretical fiction of equilibrium per se.

As Boulding grew even more divorced from the mainstream of economic thought, he ultimately saw the task of the social sciences as explaining the evolution and progress of human knowledge.<sup>11</sup> Equilibrium economics was a case in point of the misallocation of intellectual resources in economics.<sup>12</sup>

The individual in the subjectivist tradition is neither a lightning calculator of pleasure and pain, nor completely blind. Rather, the individual muddles through somewhere between alluring hopes and haunting fear. *The Image* was Boulding's attempt to communicate with his fellow social scientists just how much is absent from analysis when uncertainty, ignorance, and dynamic change are left out of the analysis due to the acceptance of certain operational assumptions, such as perfect knowledge and perfect markets. Rather than perfect, our “relational image

is faulty at the best. Our image of the consequences of our acts is suffused with uncertainty to the point where we are not even sure what we are uncertain about” (1956:84). Traditional economics has dealt with this problem of uncertainty by assuming that human decision-making consists of choosing between alternatives that are presented to the chooser with a known utility tag and probability distribution. This enables economists to calculate the expected value of their choices with great agility. But this does not explain human decision-making in the face of uncertainty, nor does it help us understand how our images adjust to guide behavior and coordinate our actions with those of others.

The calculative wizard of mainstream economics provides the foundation for the doctrine of perfect markets. In the analysis of perfect markets, individual decision-makers need only rely on price information in order to adjust behavior appropriately. Once imperfections are introduced into the market, however, price information is not the only relevant information. Now, information concerning quantities, quality, reputation of the dealer, etc., provide vital feedback. The decision-maker must choose his course of action in an environment where he can only dimly see the possibilities in front of him.

“The process of reorganization of economic images through messages,” Boulding argued, “is the key to the understanding of economic dynamics” (1956:90). Economic life is governed by this reorganization of our images through the transmission of knowledge. The explanation of the use of knowledge in any social system, thus, becomes the key scientific question for understanding the evolutionary dynamic.

Evolution proceeds largely through the ability of “know-how” to instruct, and thus, guide human decisions. “Know-how” is embedded within our images. “The evolutionary vision,” Boulding writes, “is unfriendly to any simple reductionism or materialism. It sees the essence of the evolutionary process in the field of information, know-how, programmed instruction, and so on, leading the human race to consciousness and a great expansion of know-how through the development of ‘know-what’—that is, conscious knowledge” (1978:20). This transference of “know-how” to “know-what” is only possible because of the capacity of individuals to communicate via language. “Know-how” is embedded in the gene structure of animals—a chicken egg, for example, “knows how” to become a chicken—but human progress includes both “know-how” and “know-what.”

A key question for economists, then, falls well outside the confines of neoclassical equilibrium theory: How are people within complex, advanced society generally able to convert “know-how” into “know-what” when, in fact, there is no central authority or data bank through which this knowledge flows? “A very important principle of economic production is that the know-how which is the foundation of it is not held in any single mind,” argued Boulding, “but is scattered among many minds and has to be coordinated through processes of communication” (1981:186). This has been one of the guiding questions of subjectivist economics from Menger to Hayek, and Boulding’s approach (if

not always his conclusions) was consistent with that research program. On the other hand, neoclassical general equilibrium models, beginning with Walras, basically ignore this question by assuming perfect information. Even the models of imperfect information introduced into economics within the last generation assume an objective knowledge of the statistical distribution of possibilities. Real uncertainty remains untractable even in the most advanced models of information economics. In a fundamental sense, this is because mainstream models can only incorporate “know-what”—objective data—and must remain silent on “know-how.”

The confidence with which neoclassical economists assert the efficiency of the market system seems to rise and fall with external events. After the Great Depression and World War II, economic theory often stressed how the real world market economy failed to live up to the ideal of the model of perfect competition. In other words, imperfections in the objective data failed to guide resource use efficiently, and, thus, corrective government measures were necessary. Recently, and especially with the collapse of socialism in Eastern Europe and the former Soviet Union, neoclassical economists have tended to emphasize the comparative ability of the decentralized price system to generate efficient outcomes. In either case the similarity to the subjectivist questions concerning the use of knowledge is only superficial.

Boulding was too sharp to accept fully the formal neoclassical arguments on either the strengths or weaknesses of the price system. It is not so much that neoclassical economics is wrong when it cautions about the pathologies of the price system or champions the strength of the market economy to generate efficient outcomes, as much as the theory says too little about how the system accomplishes what it does, and how other social systems are also employed within society to coordinate people’s plans and images.<sup>13</sup>

Boulding emphasized a more interdisciplinary approach and identified at least three systems that coordinate individuals within society—prices, politics, and preachments—his so-called “three P’s” (1978:2–24; 1981:177–80). The coordination of complex societies requires more than market prices. Political systems (systems of law, protection of property rights, the power of threat) as well as integrative systems (systems of morals, ethics, love and kinship) are just as crucial to legitimate economic institutions and provide a trust in both face-to-face and more socially anonymous interaction. His *Three Faces of Power* (1990) is a primer to a social theory that attempts the difficult intellectual feat of integrating the interdependent, but conceptually distinct, coordinating systems of modern society.

### **BOULDING THE DISCIPLINARY TRESPASSER: A CONCLUSION**

Few scholars in the twentieth century had Kenneth Bouldings remarkable ability to speak across disciplines, from economics and biology to sociology and

ecology to mathematics and systems research, and to say something sensible and insightful. Few people will.

One of the methodological threads that ties much of Boulding's far-reaching analysis together was his radical subjectivism, germinating early in his technical economics articles in the 1930s and 1940s, surfacing in *The Image* in the 1950s, and flourishing, both implicitly and explicitly, throughout most of his later social analysis. We hope that this short chapter properly places Boulding within the American branch of modern subjectivist economics and, moreover, that it might encourage others in the tradition critically to explore further the fruits of Boulding's theoretical contributions.

## NOTES

- 1 Lecture notes from Boulding's course, Great Books in the History of Political Economy (George Mason University, 10 September 1985).
- 2 See, for example, his acceptance and reservations about Keynesianism expressed in the preface to the first edition of *A Reconstruction of Economics* (1950:ix). Also see *The Skills of the Economist* (1958:5), where Boulding refers to himself as a classical economist on the one hand (though he learned a great deal from institutionalism and historicism), and a moderate Keynesian on the other (though he must admit that Mises and Hayek raise important and disturbing questions).
- 3 Boulding remarked: "I worked with him [Schumpeter] on capital theory, and discovered what I thought was a fundamental flaw in Boehm-Bawerk. I cannot quite now remember what it was, and I seem to have lost my paper" (1985a:6). It seems that Boulding's paper probably didn't influence Schumpeter, as there is no reference to Boulding's criticism in Schumpeter's discussion of Boehm-Bawerk in *The History of Economic Analysis* (Schumpeter 1954).
- 4 See, for example, Boulding (1934, 1936).
- 5 Boulding was deeply impressed with Knight despite their disagreements in technical economics. In fact, Boulding's description of Knight as "an engine of creativity without a clutch" may also be just as appropriate a label for himself.
- 6 See, for example, Boulding's review of Paul Samuelson's *Foundations of Economic Analysis*. Logic and judgment are necessary for scientific progress, according to Boulding, but mathematical skill does not help us with judgment. Rather, it is only an aid to logic. As Boulding states: "Conventions of generality and mathematical elegance may be just as much barriers to the attainment and diffusion of knowledge as may contentment with particularity and literary vagueness.... It may well be that the slovenly and literary borderland between economics and sociology will be the most fruitful building ground during the years to come and that mathematical economics will remain too flawless in its perfection to be very fruitful" (1948:247). Also see Boulding (1970:115) where he argues that mathematical reasoning can be a wonderful servant, but a very bad master.
- 7 Boulding, we believe, set a record for serving as the president of major scholarly societies. Besides the American Economic Association, he served as the president of the American Association for the Advancement of Science, International Studies Association, Peace Research Society, Society for General Systems Research, and the Association for the Study of the Grants Economy.
- 8 This is a point that Wicksteed made clear in his critical address to the British Economics Society in 1914. Rather than two blades of a pair of scissors, Wicksteed explained, supply and demand are made of the same stuff—the subjective evaluations of consumers. See Wicksteed (1914).

- 9 See, for example, Georg Simmel (1908) for a discussion of the motivating question of social theory.
- 10 Process analysis examines the adjustments and changes of behavior within any existing set of parameters, whereas evolutionary theory examines consequences of changes in the parameters themselves.
- 11 A few of Boulding's famous quips relate his growing disillusionment with mainstream economics. When asked why in the mid-twentieth century logical positivism took hold of economics, Boulding simply replied: "Of course nobody opposed logical positivism because no one wanted to be considered an illogical negativist." In addition, Boulding often referred to Walras as "a total disaster for economics because he had no concept of the food-chain." In other words, the concept of evolutionary dynamics was completely foreign to mainstream equilibrium analysis. Finally, Boulding also would state that the main problem with modern economists was that they were employing seventeenth-century mathematics to solve twentieth-century problems, and they thought they were sophisticated. This discussion was drawn from our lecture notes from Boulding's Great Books in the History of Political Economy course at George Mason University (Fall 1985), and personal conversations.
- 12 Boulding argued that intellectual resources could be misallocated because in the absence of a working capital market in ideas we do not have reliable information on the rates of return on the use of intellectual resources. Instead, information concerning intellectual resource use is provided (a) from the grants economy, and (b) from the intellectual fashion. As Boulding saw it, the real problem was that the power structure of the modern university system (and especially the system of doctoral education) could serve to generate a tyranny of fashion, and it was not clear that there were "forces" in the system that would provide the necessary feedback to "correct" misallocations. See Boulding (1973). Also see Boulding (1966:102–14).
- 13 This was part of Boulding's critique of the Whig theory of the history of economic thought, i.e., the belief that all that was good in the ancients has been incorporated in the moderns. On the contrary, Boulding argued that earlier writers, such as Adam Smith, may have contained wisdom which our modern techniques overlook. See Boulding (1971b).

## REFERENCES

- Boulding, Kenneth E. (1934) "The Application of the Pure Theory of Population Change to the Theory of Capital," *Quarterly Journal of Economics* 48 (August): 645–66.
- (1936) "Time and investment," *Economica* 10 (May): 196–220.
- (1941) *Economic Analysis*, New York: Harper and Brothers.
- (1948) "Samuelson's *Foundations*: the role of mathematics in economics," *Journal of Political Economy* 56 (June): 187–99.
- (1950) *A Reconstruction of Economics*, New York: John Wiley and Sons.
- (1956) *The Image*, Ann Arbor: University of Michigan Press.
- (1958) *The Skills of the Economist*, Cleveland: Howard Allen, Inc.
- (1962) *Conflict and Defense*, New York: Harper and Row.
- (1966) *The Impact of the Social Sciences*, New Brunswick, NJ: Rutgers University Press.
- (1970) *Economics as a Science*, New York: McGraw-Hill.
- (1971a) "Introduction," *Collected Papers*, vol. 1, Boulder: Colorado Associated University Press.
- (1971b) "After Samuelson, who needs Adam Smith?" *History of Political Economy* 3 (Fall): 225–37.
- (1973) "The Misallocation of Intellectual Resources in Economics," in *Collected Papers*, vol. 3, Boulder: Colorado Associated University Press.

- (1978) *Ecodynamics*, New York: Sage.
- (1981) *Evolutionary Economics*, New York: Sage.
- (1985a) “My Life Philosophy,” *The American Economist* 29 (Fall): 5–14.
- (1985b) “Systems Research and the Hierarchy of World Systems,” *Systems Research* 2:7–11.
- (1990) *Three Faces of Power*, New York: Sage.
- Marshall, Alfred (1961) *Principles of Economics*, 9th edn., New York: Macmillan.
- Menger, Carl (1871) *Principles of Economics*, New York: New York University Press, 1981 reprint.
- Schumpeter, Joseph (1954) *A History of Economic Analysis*, New York: Oxford University Press.
- Shackle, G.L.S. (1972) *Epistemics and Economics*, Cambridge: Cambridge University Press.
- Simmel, Georg (1971) [1908] “How is society possible?” in Donald N. Levine (ed.) *On Individuality and Social Forms*, Chicago: University of Chicago Press.
- Wicksteed, Philip (1938) [1914] “The scope and method of political economy in light of the ‘marginal’ theory of value and distribution,” *The Common Sense of Political Economy*, 2 vols., London: Routledge.
- Wright, Robert. (1988) “Kenneth E. Boulding,” in *Three Scientists and Their Gods*, New York: Harper and Row.



## ECONOMICS AS A PATRIARCHAL DISCOURSE

*Antonio Callari*

This chapter maps onto “the history of economics” certain insights that feminist thought has produced into the gendered construction of “science” in general, and of economics in particular. A consideration of patriarchy, of its historical perdurance as well as of the specific form it takes in the “modern” age, can help us better understand certain key moments of the history of economics. It can, in particular, better explain its birth in the form of Classical Political Economy (henceforth CPE) and its eventual transformation into neoclassicism—better, that is, than we have so far been able to “explain” by relying on existing approaches to the history of economic thought.

The argument pursued here is indeed far from the type that a Schumpeterian (Whiggish) approach would have suggested.<sup>1</sup> But it is also far from the “relativist” method in the history of economics, which tends to explain theoretical developments by reference to changing economic circumstances. My argument does sufficiently acknowledge the continuity that deep-seated intellectual traditions have historically imparted on the discipline. In significant ways, this chapter bypasses the absolutist-relativist structure altogether and presents itself as an exercise in a new type of historiography that, influenced by the work of Michel Foucault, seeks to discover and highlight the epistemic structure of discourses. Since the time when historians of economics could take the object of their work, “economics” itself, as an already well-defined discipline, new “voices” have spoken about it, adding a gendered dimension to its logical structure and epistemic protocols. What they have said, if it is of relevance, must also change “the history” of the discipline, the way that history is told and done. The reader will judge whether this chapter is successful in the attempt to bring the voices of the feminist standpoint into the way we think about the past history of our discipline.

Among feminist scholars, a consensus has been reached that, over the course of the seventeenth and eighteenth centuries, the development of modernist concepts of knowledge and science was partially a gendered operation: privileged epistemological norms (objectivity, rational thinking, etc.) were metaphorically designated as masculine, with their obverse being implicitly or explicitly designated as feminine. At the same time—because of the modernist epistemological requirement that the structure of knowledge “mirror” the

structure of the object of science<sup>2</sup>—as the concept of knowledge changed, the concept of “nature” (and of its parts as specific objects of analysis) also changed. It is not at all surprising, therefore, that the gendered character of the development of modern notions of knowledge/science should find significant echoes in an also-gendered concept of nature and, most importantly, an also-gendered transformation of the perceived relationship between “man” and nature. It is through these gendered transformations (of *both* science and its object/s) that modern forms of patriarchy became inscribed in the knowledge discourse of the “modern” age. And it is through association with these gendered transformations that economic discourse itself produced a consciousness of itself as a “science” in a relation of mutual dependence with patriarchy.

It is well known that the development of modern notions of science was paralleled by an ideology of *progress* defined exactly in terms of domination over “nature.” Merchant (1980) documents varied ways in which “nature” has historically been gendered as feminine and argues that the development of modern science provided a discourse of domination that lent itself readily to patriarchal usage. Once the equations of nature as feminine and of science as masculine were accepted—which occurred through literal allusions at first, but was accomplished in an increasingly metaphorical mode as modernity solidified its protocols—patriarchy naturally found a powerful echo in the ideology of progress. The birth of economics was implicated in these parallel transformations of “knowledge” and of “nature,” not just methodologically, as when practitioners of the discipline adopted modernist and gendered models of science, but also substantively: as we shall see, the *analytical* concepts that represented economic relations and constituted “the economy” as a separate and independent sphere of society and object of analysis themselves carried a patriarchal genetic code.

The initial concept through which economic discourse partook of patriarchal relations was that of the production of a surplus, and we will see how the analytical structure of classical political economy puts in evidence the patriarchal character of economic discourse. But, paradoxical though it might at first seem, the neoclassical rejection of “the surplus” as an organizing concept, indeed its *denial* of this concept as tenable altogether, also has a patriarchal lineage. The next section of the chapter will outline the differing ways in which patriarchal modes and economic discourse mutually constituted each other at different stages of the discipline. The final section will discuss the methodological implications of this reading for the structure of the history of economics.

## **THE REPRODUCTION OF PATRIARCHY: CHANGING CONCEPTS OF NATURE AND OF ECONOMY**

### **Changing concepts of nature and forms of patriarchy**

According to Merchant (1980), over the sixteenth and seventeenth centuries, the western European discursive rendition of “nature” underwent a basic

transformation: organicist concepts of nature and of the natural order came increasingly to be replaced by mechanistic concepts.<sup>3</sup> The key difference between these two arching philosophies of nature, *organicism* and *mechanicism*, is the presence of *difference* as a discursive/analytical principle in the organicist view of nature and the *absence* of it in the mechanistic view. The transition from the organicist to the mechanistic world-view was characterized by the gradual emergence of the presumption that behind and beyond the appearance of flux and of variety that presents itself to observation of Nature, there are some essences, some essential principles and sources of order (with each principle having its own knowledge domain, or discipline), and that variety (difference) itself can be stripped of its ontological status and traced back to the operation of this or that source—the mechanism being the channels of this force. These different ontological regimes were associated with different modes of knowledge construction. In the organicist view of nature, and of society, the whole could only be represented as a composite of diverse elements (without a center, one could say; but, as we will see, not necessarily without a hierarchy) and could only be presented in *descriptive terms* (as a *list* of its composite parts). In the mechanistic view the theorist could dispense with description (except as a secondary, or preparatory, form of discourse) and concentrate on the mode of mechanical operation of the bounded set of practices that constituted a knowledge domain per se and that, as such, was capable of being *rationaly reconstructed*.

Now, to be sure, patriarchal modes of discourse appear in both of these conceptions of nature and of knowledge; but, given the different modes of knowledge production, they do so in quite distinct ways. In the organicist view of nature, the occasion for patriarchy emerged from (or had to come to terms with) the fundamental assumption that, as an organism, nature contained within it a number of different life-forces. In this system, nature, in its various elements, was *active*, and women were also seen as playing active roles, being effective social agents. Patriarchy here could only operate (or operate most easily) within conceptual structures, such as Neoplatonism,<sup>4</sup> that explicitly imposed some hierarchical order (for example, a privileging of the soul over matter/body) over the different forces at work (different agents) and/or that identified the vital forces associated with women as evil or disturbing. Patriarchy, in the premodern, organicist mode, operated by *naming*, recognizing and setting apart as an object of specific and particular attention, the object(s) of its attention—the practice of oppression of women as bearers of witchcraft would seem to be a particularly poignant example of how brutally patriarchy could operate in this epistemic universe.

Within the mechanistic view of nature, by contrast, patriarchy had to come to operate quite differently. Here, the rational order of the machine came to be imposed on the apparent chaos and disorder of the world, and “nature” came therefore to be seen as largely a *passive* elementary structure, or at least a structure pliable to the force of the machine.<sup>5</sup> With the mechanistic view of

nature, we move into the to-us-more-familiar world of modernity, with its theme of science as a vehicle for the domination of nature. In this world, the continuing gendering of nature as female, of course, signifies a continuation of patriarchy—but with this difference: that whereas in the organicist view patriarchy required a prior specification of the particular vital forces that needed to be named (to be tamed), in the mechanistic view there is no need for any such specific identification. In the latter, nature (women and the world of female agency) in general is passive, not life-giving, and can therefore be ignored (relegated to the sphere of the private, not be counted, etc.) or absorbed in or dominated by the dominant (genetically patriarchal) discourse(s). In the mechanistic world, then, patriarchy takes the form of *anonymity* much more than it did in the organicist world. In the epistemic universe of organicism, patriarchy could not ignore its object of domination, but had to name it; there, patriarchy had to be much more direct, accusatory of the feminine, and thus brutal in its forms of coercion and expurgation: hence, the power of the witch-hunting imagery of the premodern world. In the epistemic universe of mechanism, by contrast, patriarchy works best by rendering women invisible; here patriarchy works by absorbing the subject identity of women into patriarchal constructions—be they constructions of models of “beauty” or of models of economic rationality: hence, the more pervasive, and structurally no less brutal, forms of patriarchal control and domination of the modern world.

To sum up, patriarchy exists in both the premodern (organicist) world and in the modern (mechanistic) world, but it operates quite differently in these two separate worlds. In the premodern world the operation of hierarchy took place primarily on a discourse of differentiation, and patriarchy therefore required that the feminine be named as a precondition for its identification as inferior, or evil—or whatever designation could be a prelude to the imposition of forms of control. But in the modern world the mode of functioning of patriarchy changes. The world of modernity replaces the conception of society (and indeed of nature) as an agglomeration of differences, of irreducible different parts and different functions, with a generalized conception of “man.”<sup>6</sup> In this new state, the condition for women’s oppression becomes increasingly a condition of anonymity. Modern patriarchy proceeds by negating the identity of “woman.”<sup>7</sup> This *anonymity* is the reason why feminism as a movement, able to raise the question/status of women *in general* and to subsume different forms of oppression and injustices against women under the common heading of *patriarchy* only emerges in the modern world.<sup>8</sup>

### Changing concepts of economy

Some interesting parallels can be constructed between the transformation of the concept of nature that Merchant describes and the transformation of economic discourse that accompanied the modern age. As Merchant develops a contrast between organicist and mechanistic views of nature, so Tribe (1978)

contrasts two structures of economic discourse, which he respectively designates as “Political Oeconomy” and “Political Economy,” with the latter designating the composition, beginning with Classical Political Economy, of economics as a scientific, modernist, discourse. There are key structural similarities between the organicist view of nature and the system of Political Oeconomy on the one hand, and between the mechanistic view of nature and the system of Political Economy on the other. It is the presence of these similarities that suggests to me a strong link between the development of economic discourse and the changing forms of patriarchy.

For Tribe, Political Oeconomy represented economic relations as elements of a structure/process of circulation, whereas Political Economy constituted “the economy” as a structure of production.<sup>9</sup> The argument is supported by the well-known proposition that the economic literature of the seventeenth and eighteenth centuries was preoccupied with the art of state building and, specifically, with two practical questions: first, the *listing* of all economic activities which could provide revenues for the treasury; second, the identification of policies to improve the state of the treasury by enlarging the system of circulation of revenues.<sup>10</sup> Certainly mercantilist literature falls in this type of discourse, but so also does the work of figures such as Sir William Petty and Sir James Steuart, Antoine de Montchretien and Richard Cantillon, and the Physiocrats.

The structure of seventeenth- and eighteenth-century economic treatises suggests strong parallels to the organicist view of nature we presented above. Tribe convincingly argues that the classificatory schemes of these treatises is not driven by anything like the logic of any economic principle to which the multiplicity of the venues of circulation could be reduced. Tribe (1978:91) uses as an example the work of Cantillon, who produced a “rather peculiar collection of employments being considered as of a class,” grouping together “the General who has his pay, the Courtier his pension and the Domestic servant who has his wages” as falling into the class of hired hands, and “all the rest [except for the Prince and the Proprietors of land], whether they be set up with a capital to conduct their enterprise, or are Undertakers of their own labor without capital, and they may be regarded as living at uncertainty; the Beggars even and the Robbers” as undertakers. This, of course, gives us a taste of the nature of analytical distinctions in premodern economic discourse. We find ourselves in the organicist mode of knowledge production: The operative principle of knowledge here clearly appears to be one of classification, of the preparation of a list of diverse agents whose positions, although they are all linked to a circulatory order, are not reducible to a prior principle—for example, the principle of production.

Now, one of the significant differentiations we note in premodern economic discourses is the one between proprietors of land (including the sovereign) and the other members of civil society. This differentiation is, of course, explained by the fact that premodern writers had to identify an original source for the circulating revenue. As is well known, this source was located in the productive powers of nature, or “land,” and this leads us, of course, to the original

formulation of the theory of a surplus and of rent as its form. It is no surprise that land/nature should have been seen as the source of this surplus. In addition to all the sociological elements that, for example, Ronald Meek (1962) discussed with respect to Physiocracy, the identification of land as the source of the surplus rested well on the philosophical view of nature as *active* that we have seen Merchant identify as *organicism*.<sup>11</sup>

Of course, from the standpoint of later developments, it would be easy (and it apparently has been irresistibly tempting for economists) to see in these seventeenth- and eighteenth-century dissertations on the “source” of the surplus the beginnings of a “scientific” discourse on the economic order later finally represented by CPE. But this reading represents the “mistake,” of the Whiggish, logical reconstructivist type, that we wish to avoid. It is possible to give a different interpretation to this premodern concept of the surplus, and it is important not to confuse it, and the category of “rent” which accompanied it, with their counterparts in the discourse of CPE. Tribe (1978:93–4) argues that the “rent” of Political Oeconomy was not an economic category: “There is no connection ...between the ‘rent theories’ of Petty and David Ricardo apart from the fact that certain words can be located as common to both texts. Ricardo is the theorist of capital, forms of commodity exchange and the production and distribution of commodities, and within this framework the question of rent encapsulates the basics of such theoretical work. On the other hand, Petty conceives the powers of Nature sufficient to project a surplus into a process of circulation which exists only to subsist the polity.” Nature as such is the source of the surplus, which can therefore be called a *natural surplus*, not an *economic surplus*, until Smith: “the most sophisticated versions of the seventeenth century,” writes Tribe (1978:60–1) “present not a philosophy of labor, nor of property, but of *soil*.” The distribution of this surplus, therefore, is also not an economic question, but a political question. Tribe wrote:

Far from the agricultural producer being placed in an economic terrain... the relation of the landlord to the tenant is conditional upon its conception as a juridical relation, and is not expressed as an economic relation. Consequently, it is not possible to raise the problem of the hire of land and the payment of rent as economic issues. Any payment actually proposed is an expression not of an economic relation but of the subordination of the tenant to his landlord.

(Tribe 1978:61–4)

In support of this thesis, we may, of course, point to the theoretical difficulties that CPE had to surmount as it transformed the surplus into an economic category. The Physiocratic concept of the surplus can also be called natural, rather than economic—and herein lies the key, I believe, to understanding the refusal to conceive that, if competition could reduce price to cost of production among the artisans, it would reduce the price of agricultural producers similarly.

Of course, the later development of the surplus as an economic category was accompanied by a need to conceptualize rent as a result of monopoly pricing, as a price-determined rather than a price-determining magnitude. But, it is not important here to pursue these analytical issues per se. The point is rather that the economic discourse of the seventeenth and eighteenth centuries, because it was structured with a grid of circulation and by reference to the polity this circulation represented, had no way of conceptualizing the increase in circulation other than by reference to the active/creative powers of nature. This is clearly the case until the very end of our period, with Adam Smith's own problematic representations of rent as a price-determining magnitude still offering significant echoes of the organicist view of nature as a source of wealth.

It is only with Ricardo that a clear and unambiguous transition in the structure of economic discourse is made in this respect; it is with him that the determination of "rent" is reduced to a logical extension of the principle of an economic value determined by conditions of production at the margin (where, in fact, the productive powers of the land become irrelevant) and explained by the operation of the mechanism of price formation in a competitive economy.

### **Economics and patriarchy**

It is now possible to link explicitly this changing structure of economic discourse with the changing concepts of nature we discussed previously. It is easy to see that there are some fundamental correspondences. Premodern economic thought assigned to land (nature) creative, generative powers, and this attribution corresponded well with the organicist view of nature; the later, modernist, thought of CPE, while it continued to acknowledge a productive power of the soil in a limited context, reduced the determination of rent to the operation of an *economic principle*, and this reduction corresponded well to the mechanistic view of natural relations. But, of course, history is more than simple correspondence, and I would like to propose a specific hypothesis about the nature of the relationship between these changing conceptualizations: that the development of economic discourse—the invention of an economic discourse with its own object of analysis, properly and strictly delineated as a science of relations of production, and its later transformation from CPE to neoclassicism—was, at least partially, prompted precisely by the transformation of the gendered concept of nature and the consequent transformation of the mode of patriarchy.

The reader will remember that we located the transition from an organicist to a mechanistic view of nature at the end of the 1600s—roughly speaking, of course. There is, thus, a certain disjuncture between the passive view of nature that increasingly populated the imagery of knowledge and social codes in the eighteenth century and the still active view of nature on which premodern economists depended during the same period. From the point of view of the transformation and reproduction of patriarchy, therefore, the economists' continuing representation of nature as active, as "source," must have been an inconvenient anachronism; the

discursive structure of premodern economics was not in line with the patriarchal transformation of nature and, to use a phrase of Foucauldean inspiration, was, thus, in a state of “epistemic disjuncture from it.”

It follows that, whatever other forces might also be said to have been at work, the formation of economics as a discipline represented a response to this state of epistemic disjuncture. The regime of CPE represented a transformation in economic discourse which was functional to (went along with, was supported by and, in turn, supported) the transformation of patriarchy that had preceded it.<sup>12</sup> As is well known, in CPE it was capital that came to organize the social order, and to do so quite in line with the mechanical analogy. One can think here of Adam Smith’s “History of Astronomy” and of the role of the analogy of celestial mechanics in the generation of the principle of the average rate of profit as the ordering force for the economy. And, once capital came to be seen as *the* source (or appropriator) of the surplus, land became thereby domesticated. From then on, economic discourse could join the ranks of the discourses of science in general in producing discursive structures which supported patriarchy.

The formation of CPE can thus be partially explained by the patriarchal function played by the transformation of land from a natural source of the surplus to an economic element now controlled by the logic of capital (gendered, in various ways, as male). This step, however, did not, and could not, by itself totally resolve the epistemic disjuncture between economic discourse and the mode of patriarchy of modernity. The subsumption of land to the rule of capital, as the embodiment of the principle of economic rationality, if it was to function as a condition of patriarchy, had to come to do so in a way that took into account the general transformation of the discursive conditions for patriarchy, and, as we discussed above, this transformation entailed the operation of a principle of anonymity, a refusal to visualize and (valorize) female subjects and subject positions.

Did CPE operate so as to become a condition of *this mode of patriarchy*? How well and to what extent? Did it do so as a matter of its integral conceptual structure, so that gender was rendered invisible *as a matter of principle*, or did it produce a less than fully suitable ground for the modern mode of patriarchy?

The answer is that in fact CPE did not fully satisfy the discursive conditions of the modernist patriarchal order—and this is the reason why economics, in so far as it had to comply with a patriarchal authority, had to develop to a next stage in which the principle of anonymity could be analytically embedded, secured. We therefore offer a reading of the transition from the regime of CPE to the regime of marginalist economics exactly in the key of the demands of patriarchy (hierarchy) for a more complying discursive (or, for those who might be so inclined, “analytical”) space.

There is no question that classical political economy *de facto* worked to make gender invisible. The collusion (not intended, but effective) between the *growing* separation and gendering of public and private (domestic) spheres, on the one hand, and the construction of “the economy” as a structure of the



activities of the public sphere of market relations, on the other, worked to cement the anonymity of women. It certainly did not help matters that, in CPE, the economic sphere was reduced to relations of exchange that reflected a structure of production itself conceived in terms of machinery and male mental (capitalist) and manual (worker) work. This gendering of the economy as male was an operation in which even the conceptual structure of Marxism participated, at least in its more abstract formulations.<sup>13</sup> This complicity with patriarchy notwithstanding, however, there is a sense in which CPE did not fully take economic discourse into the field of anonymity that the modern form of patriarchy required.<sup>14</sup>

Of course, the reason CPE did not present a structure compliant to patriarchy is not that it affirmed any authorship/presence of women—for, as we have seen, the wealth of CPE was produced in the male-gendered public space of capitalist production—but that *it failed to provide closure to its concept of “the economy.”* The absence of an economic closure is, of course, represented by the conflictual nature of distribution in CPE and by the fact that the whole of economic relations which represented the “structural unity” of sectors (the price set) could not be determined until after the wage rate was given (determined, as it were, in the economy but through noneconomic processes).<sup>15</sup> The indeterminacy of distribution (and, therefore, of production) left open a space in which all sorts of societal differentiations *could* enter to affect the economic structure, including *potentially* the element of gender differences. To the extent, therefore, that CPE did not foreclose the possibility of noneconomic forces determining the space of economic relations, it left it possible for the principle of *difference* to enter again into the discursive space of market relations.

This is not to deny, of course, that in historical reality the construction of the political side of CPE has been predominantly a male affair, in which gender has been kept as anonymous as modern patriarchy has required. Even within Marxism, arguably the discourse with the most promise to question the construction by modern discourse of the economy as a space of anonymity (homogeneity), the range of social vision was *so much* focused on conflictual relations within the publicly constituted economic space (for example, a narrowly defined class struggle), that more or equally fundamental (cultural) struggles that created that very space to begin with were not attended, explored, or *recognized*. The orthodox versions of Marxism did not escape the metaphor of the machine in their constructions of the social space or of the process of history, and therefore did not escape the patriarchy embedded in that metaphor.<sup>16</sup> But, be that as it may, the fact remains that the *structure of surplus theory*, requiring a reference to nonmarket forces, is/was not compliant with what could be called a *strong* patriarchal request: that economic discourse create a self-sustained concept of economy as a space of anonymity. If CPE could be used by patriarchal forces, it could also be used (in some of its formulations more so than in others) by radical, liberatory forces, including antipatriarchal forces—and this, of course, is the opportunity Marxism took with respect to the agency

of “labor,” even as it neglected to recognize as equally fundamental the gendered dimension of the “rule of capital.”

The situation, however, is not the same with marginalist economics. I am referring, of course, to the self-contained structure of the economy that the marginalist method produces (and is, in fact, based on) with its attendant reduction of social classes, social positions—of the framework of *difference*, that is—to a flat homogeneous space of analytically *symmetrical* “factors” of production. Here, land is again assigned productive powers, and one would be tempted to find echoes of the era of the natural surplus—were it not for the fact that the retention of the mechanistic framework and the operation of a *single* principle of rationality make it quite clear that this type of economic theory remains firmly on a terrain of anonymity.<sup>17</sup> Land (and, with it, any metaphorically gendered allusion) is valued in accordance with a rationalistic (and masculine) principle of abstract economic rationality. With neoclassicism, therefore, economics can finally partake not only of the patriarchal subsumption of land to capital, but also and more importantly of the modernist patriarchal mapping of land onto a terrain of anonymity (the symmetry of factors in the theory of production and distribution, whereby the specificity of any one factor is irrelevant, swallowed by the pervasive and unimodal operation of a form of economic rationality).

## RECONSTRUCTING THE SHAPE OF THE HISTORY OF ECONOMIC THOUGHT

### The structure and history of economics as a patriarchal discourse

One might argue (and some have) that there is nothing in the basic structure of modern neoclassical economics that is essentially inimical to feminism. One might argue that, in fact, the emphasis on “the individual” that is the philosophico-political hallmark of marginalism is quite amenable to feminist concerns, with the notion of “individual rights” being used to support feminist struggles to assert equality of rights for women and to argue for the removal of discriminatory “barriers” to the universality of these rights. While such a reading would *seem* unobjectionable in purely logical terms, it runs into the problem of “history as it has really occurred and still occurs.” The promise of equality notwithstanding, the subordination of women has remained persistent and pervasive, and this phenomenon has yet to be satisfactorily explained (often it isn’t even acknowledged) by the individualistic rights tradition. In fact, the clearer the logical possibility of women’s equality in the individualistic framework, the more difficult it becomes for it to explain why it is that the subordination of the gender persists/persisted.

In fact, the discourse of individual rights is quite compatible with the existence of patterns of oppression (of which discrimination is only the most obvious manifestation); more than that, it may even be complicitous with it. As we have seen, the subordination of women has, in the “modern” age, been

reproduced through a discourse/culture structured by the principle of anonymity.<sup>18</sup> The abstract language of individual rights partakes of the modern discursive structure of anonymity: the individuals (“subjects”) invested with “rights” are always constructed abstractly (juridically or philosophically) and, therefore, anonymously; rights and powers, access to and disposition of resources (including ones own body) are in principle granted not on the basis of special needs, or special social positions, but on the basis of adherence to given (abstract) juridical norms. But if, as much feminist scholarship has demonstrated, these norms are themselves historically and discursively constructed in relation to patriarchal (or other oppressive) structures, then the discursive introduction of a subject (women) in the given system of rights can at most open those given social processes to the participation of that subject (women). However, simple participation in those processes cannot challenge either their direct patriarchal construction (for example, the gender wage gap has hardly been reduced, even as the labor-force participation of women has noticeably increased) or the metaphorical reproductions of patriarchy which those processes make possible (for example, the nature of work and of economic rationality have not been significantly transformed by the participation of women in the labor-force, and patriarchal gendered metaphors still construct the meaning of work and economic rationality).

The reproduction of patriarchy then occurs not only, and perhaps even not so much, through the principle of exclusion but also quite possibly through the participation of “subjects” in victimizing structures; Bartky (1988) provides an excellent illustration of how this Foucauldean subject formation—willing (socialized) participation in structures of victimization—works in the relation of women to their bodies. In the modern age, patriarchy may exist not only despite the discourse of “rights” but also partially because of it.

The neoclassical reliance on the foundation of individualism, which expresses itself not only substantively but also as a methodological principle, is, therefore, quite compatible with the existence of patriarchy. In fact, to the extent that modern patriarchy operates through the principle of anonymity, neoclassicism is the form of economic discourse most compatible with and supportive of it.<sup>19</sup> By contrast, one could argue that CPE, although actually complicitous in the discourse of patriarchy, had in principle a different relation to it. From the standpoint of a patriarchal code, the historical function of CPE was, as we have seen, to *domesticate* land, to produce a patriarchal containment of nature within the masculine mechanism of production. But, in order to so domesticate nature, to so subordinate the feminine, CPE had first to *recognize* it, to recognize *difference*. From the standpoint of a patriarchal code, in other words, CPE was a necessary first stage in the development of economic discourse—of patriarchal economics, that is—a first, but *necessary* and *unavoidable*, step towards the final neoclassical reduction of difference to anonymity.

This discussion has certain implications for the relationship of feminism to economic theories. Specifically, if the arguments of this chapter have any

validity, they would imply that a feminist economics—at least a feminist economics which would go beyond simply requesting an inclusion of women in patriarchal relations—has little to gain intellectually from neoclassicism. On the other hand, it is possible to think that the analytical structure of CPE is more extractable from patriarchal constructions because it is a structure which recognizes “difference” (is more institutional, does not reduce all “economic” behavior to *one* principle of rationality)—although, obviously, the adaptation of CPE to a feminist economics would be possible only on the condition of a transformation of its patriarchal signifiers.<sup>20</sup>

### Methodological lessons

Existing approaches to the history of economic thought can (do) not contain both the classical and the neoclassical period within the discourse of the discipline. Internalist histories written from the standpoint of neoclassicism present the transition from CPE to marginalism as natural or inevitable—so natural, in fact, that to some of the best minds of marginalism, including George Stigler along with Joseph Schumpeter and Paul Samuelson, the whole period of CPE seemed an “unnecessary detour.” On the other hand, the alternative historiographical version (in simple as well as in sophisticated versions), for which “the science” was inscribed in the analytical structure of CPE and the transition to marginalism was a matter of ideology versus science, seems intent on attributing the whole phase of neoclassicism to some presumed effect of “ideology.” But there would seem to be a fundamental problem with these approaches. It is difficult to accept the neoclassical absolutist notion that the whole period of CPE in the history of the discipline can be dismissed as an unnecessary detour. Resorting to this invented way out of actual history really does seem like a substitution of absolutist simplicity for historical realism. But it is equally problematic to accept the notion that neoclassicism somehow can be dismissed as “ideology,” and such dismissal seems not less an absolutist escape from historical realism. In either case, a whole period of the history of economics remains unexplained.

Relativist, or even Kuhnian, histories do not have to resort to such epistemologically pretentious moves. But, while they acknowledge the existence of differing paradigms and analytical structures, they cannot discuss the transition from one paradigm to the other on any other than sociological grounds; they must miss, by virtue of the approach used, elements of intellectual continuity which might impart a logic to the transition. The same is true of more recent approaches in which “economic theories” are evaluated as discursive constructions, as the product of specific communities (for example, post-Keynesians, or Austrians), and not against some presupposed objective, extradiscursive, set of economic relations.<sup>21</sup>

In contrast to the problems which beset both absolutist and relativist approaches, this chapter has presented an argument which encompasses both continuities and discontinuities. The introduction of the theme of patriarchy

explains both the emergence of economics in the form of CPE and its subsequent transformation into neoclassicism. In contrast to either of the two absolutist historiographical approaches, this chapter has argued that, in fact, economics had first to take the form of CPE because, *before* it could systematize the economy by reference to “the individual,” it had to give patriarchy its pound of flesh—it had to have created a discursive space which, in an abnegation of the logic of individual rights, could be used, through association by metaphor, to restore patriarchy and other forms of hierarchy, including class. From the point of view of the demands of a patriarchal (hierarchical) order, then, CPE was no “detour” but, on the contrary, a necessary phase of transition. It was also no “science” but a discursive domestication of subordinate identities. Nor is neoclassicism either a “science” or an “ideology,” but also a (more developed, more modern) form of discursive domestication of subordinate identities.

The fable of economics was metaphorically constructed on the foundation of the fable of the bees. Economists and historians of economic thought have remained trapped by the power of that fable, in which all agents are the same and about the same thing, in which one principle reigns, and individuals are both paramount and anonymous (substitutable). But now contemporary deconstructions of language and discursive practices of modernism have problematized the fable of economics. The introduction of identities (such as gender) on which economic discourse has metaphorically drawn as organizing themes for the construction of a series of histories of economics can produce other, quite different, stories. It can also, as we have suggested, get us around both the absolutist vice and the weak relativist responses to that vice.

## NOTES

I have benefited from the comments of Sean Flaherty, Harriet Fraad, John Davis, Ulla Grapard, Laurence Moss, Sara Reiter, David Ruccio, and Richard Wolff.

- 1 Of course, I choose Schumpeter’s as a contrasting approach because of the theme of this volume.
- 2 A now classic criticism of this epistemological position is Rorty (1979).
- 3 Although, in a chronological detail that is of some significance here, Merchant (1980:30, emphasis added) notes that “the image of Mother Earth and her *generative* role in . . . production . . . continued to be significant well into the eighteenth century.”
- 04 Merchant (1980:99–126) identifies other possible conceptual structures, such as naturalism and vitalism; but these did not lend themselves easily to the construction of hierarchical orders.
- 05 Merchant (1980:149–63) finds traces of the increasing imagery of women’s sexual nature as passive and dominated in Renaissance culture (whereas it had been portrayed more as active in medieval literature and imagery). Interestingly, Martin (1987) finds a similar transformation in medical-biological renditions of women’s reproductive organs in the nineteenth century.
- 06 This, of course, calls to mind the work of Michel Foucault, especially Foucault (1973). Although Foucault’s own investigations into the modern construction of “man” and of the internal and external mechanisms of repression and domination that accompanied

the emergence of modern “subjects” did not take him specifically into the question of “women,” his work has provided a fertile point of departure for feminist investigations. Diamond and Quinby (1988) provide a collection of such feminist encounters with Foucault.

- 7 This proposition, of course, does not mean that patriarchy does not exist in other forms, or even in the form of naming the “other” as inferior as a prelude to its domination; what it does mean is that these forms can be associated with the cultural modes of signification which preceded the age of modernity, and that modernity’s particular modes of domination (of which patriarchy is. one) are predicated on an operation of rendering “invisible,” of making anonymous.
- 8 Merchant (1980) seems to me to demonstrate that, prior to the age of modernity, the identification of nature as female was more literal than metaphorical. The discursive equation of nature with the body was pictorially and analytically sustained—with, e.g., mining veins being literally represented as bodily veins. Thus, patriarchal discourses of the nonmodern world depended less on metaphor and were, instead, more literal and direct. This would seem to suggest a certain modernity to metaphor itself as a mode of signification. The implications seem significant for the feminism of our still-modern times: once the bases for patriarchy become metaphorical, they thereby also become unanchored, shifting and more difficult to recognize and resist. The struggle against patriarchy then becomes more difficult because of the shifting (shifty) nature of modernist, metaphorical discourse. If true, this would be sufficient reason for a strategic alliance between feminism and postmodernism. The relation of affinity between feminism and postmodernism has been noted in Nelson (1994).
- 9 Tribe does not discuss the process of transition from one to the other; arguing against a dominant view of the history of economics as a history of continuity, he is merely concerned with establishing the principle that the analytical structure of Political Oeconomy was different from that of Classical Political Economy, and that historians who see in seventeenth- and eighteenth-century treatises intimations of modern economics fail to understand the structural grids of those treatises. Tribe’s work, I suppose, can be understood as a radical intervention against dominant historical methodologies, both Marxist and bourgeois, that look/ed at the past—and to the future—only through the prisms of their particular definitions of “the economy.” It represents, in this respect, a pioneering and still unexploited call for a radical reconstruction of the history of economics.
- 10 Tribe (1978:85) writes: “Political Oeconomy is concerned with the administration of an aggregated polity by a ‘sovereign’ or ‘statesman,’ whose presence is essential to the discourse in providing a unity which is otherwise dispersed among the instances of the economy or the categories that articulate these instances.... Two principal forms most adequately meet the demands of this discursive formation: taxation and money. The first is the means by which the statesman intervenes to both support and order the ‘economy’ and the second is the means by which comparisons of different elements in the polity can be effected via a common standard. This utilization of money and taxation in turn expresses the conception of an economy purely as a system of circulation of goods and money, in which the ‘economic growth’ of the modern theorist is in fact augmentation of circulation.”
- 11 See note 3 above.
- 12 Whatever the analytical filiation that can be traced between post- and pre-Smithian discourses (and, of course, there was such filiation).
- 13 It is even possible to extend the identification of patriarchal relations in some of the themes of economic concern that begin to emerge out of the structure of political economy. Martin, for example, points out gendered nineteenth-century metaphors for economic relations which support the privileged position of “capital” in ordering the economy and the process of economic growth:

Women spent and men saved.... If unchecked, a woman would ruin a man, by her extravagant spending, by her demands on him to spend, or, in another realm, by her excessive demands on him for sex. Losing too much sperm meant losing that which sperm was believed to manufacture: a man's lifeblood.

(Martin 1978:34)

Susan Sontag has suggested that nineteenth-century fantasies about disease, especially tuberculosis, "echo the attitudes of early capitalist accumulation. One has a limited amount of energy, which must be properly spent.... Energy, like savings, can be depleted, can run out or be used up, through reckless expenditure. The body will start 'consuming' itself, the patient will 'waste away.'" (Quoted from Sontag, *Illness as Metaphor*.)

One can certainly find echoes of this metaphor among "economists" and it will be time well spent going through the texts of political economy to locate all such metaphors. (But, although the theme of consumption provides an ample field of investigation of the insertion of gendered metaphors in economics, I will argue that not all economic schools lend themselves equally to this metaphorical play and that, in fact, modern economics—in which I include the Keynesian and post-Keynesian streams—provides more ample opportunities for this play than did classical political economy. Whether this proposition will stand close scrutiny of the sources remains, of course, to be seen.)

- 14 Or, indeed, that the modern form of all types of hierarchy require. In this context it is important to note that the "modern" oppression of peoples on the basis of race, beginning with the commercial slavery of the colonial period, seems at all times to have been more anachronistic, more in line with premodern forms of hierarchy, and therefore both more brutal and more objectionable than has been the oppression of women during this time. Check Balibar and Wallerstein (1988) and Balibar (1996) for similarities and differences with the theses developed here about feminism and racism.
- 15 As is well known, this is, of course, reproduced in more recent versions of the structure of surplus theory, the Sraffian version. Speaking of the significance of the Sraffa system, Dobb, in Hunt and Schwartz (1972:208), writes: "what we are concerned with here is not just some technical difficulty within the specialized field of capital theory, but with the much more general problem of the relativity of all price relations to income distribution: I.e., to the wage profit relation. The latter cannot, therefore, be determined within the sphere of price relations (what Marx called the sphere of circulation): for its determination one has to look *beyond and outside it* (or, if you like, beneath it). This is 'back to Marx' with a vengeance."
- 16 Analogies can become thin, but I will nonetheless suggest that the different treatment of rent by Ricardo and by Marx has implications for the feminist imagery. Ricardo had only a concept of differential rent. In some ways, this replicated a pattern from the era of the *natural surplus*, allowing rent to be determined solely on the basis of differential natural (productivity/fertility) conditions, while integrating it into a structure that had reduced these natural conditions to a passive element (rent as price-determined) in line with the patriarchal reconstruction of nature as passive. Marx, on the other hand, had both a concept of differential rent and a concept of absolute rent. To the extent that the category of rent can function, by analogy or metaphor, as a sign of female energy and authorship, then Marx can be said to have retained an element of female presence (i.e., an abnegation of anonymity) in the proposition that capital pays a share of the surplus as absolute rent (on the basis, that is, of social property relations, not on the basis of natural effects).
- 17 Schumpeter (1954) in fact seized on the absence of a uniform application of the concept of "factor of production" across labor and capital as well as land as an index of the lack of scientificity of CPE. The thesis of this chapter, however, is that this "factor symmetry" is not justifiable in and of itself by appeal to a principle of scientificity, of objectivity, but

- rather by appeal to the modernist need to construct analytical structures that matched the patriarchal “anonymity” needs. Therefore, for us, the lack of “symmetry” in the way in which resources are conceived in CPE and the sociological and political parameters behind CPE’s theory of production and distribution appear not as indices of a lack of scientificity, or consistency, or rigor, but as indices of a failure (in this case, a welcome failure) to buy into the totalizing trap of modernism (mechanicism).
- 18 An interesting parallel discussion of the function of anonymity in extending patriarchal relations to the level of a social structure, in which women themselves often internalize (and choose) external and patriarchal practices, can be found in Bartky (1988). Bartky clearly links the role of anonymity in modern patriarchal practices to Foucault’s discussion of the transformation of the operation of power from traditional to “modern” societies.
  - 19 In fact, one could say that, for good reasons (not excuses for “bad reasons,” that is) all economics done a la mode of model building and depending on univocal concepts of rationality has neglected issues of the location of women in the structure and reproduction of the economy. Callari (1993) discusses how economics (that is, this type of economics) posits and produced *homogeneous* fields of economic relations in which *difference* (gender, e.g.) is inconsequential. This motivated neglect of *difference* among the model building enterprise is a strong reason for the apparent preference among some feminists for institutionalist frameworks. See Waller and Jennings (1991). See also Jennings’s article, “Public or Private? Institutional Economics and Feminism,” in Ferber and Nelson (1993). Julie Nelson (in Ferber and Nelson 1993) does not explicitly identify institutionalism as a fecund structure for the type of economics feminism would want, but the title of her article, “The Study of Choice or the Study of Provisioning? Gender and the Definition of Economics,” is clearly suggestive of the institutionalist perspective embedded in the conceptual grid of Karl Polanyi—his distinction between formal and substantive economics.
  - 20 I use the term “signifiers” instead of the more traditional “concepts” because I want to allude to the Saussurean character of the nature of meaning, including the meaning conveyed by analytical concepts. In this universe of discourse/communication, the objects (signifiers) designated by concepts/words (signifiers) are not fixed, but can change: Language/theory has a diachronic course, whereby the synchrony of fixed meanings is both conditional and conjunctural. Marxist thought in particular has been associated with forms of patriarchy. But, to my knowledge, the association has been made in terms of its neglect or mis-specification of the role of household production (see, e.g., Matthaei 1989 and Folbre and Hartman 1989). Without diminishing the force of that critique—it is possible none the less to suggest a reconstruction of the Marxian category of value based on a notation of *difference* (and a critique of the bourgeois *domestication* of difference) that produces the principle of an *organic and militant alliance* between the struggles against patriarchy and against class exploitation, without subsuming one to the other.
  - 21 For one survey of this approach, see Backhouse (1992). Backhouse is critical of this approach and calls for a pluralistic approach to the history of economics: “we need many types of theory, including not only cultural histories, or historical reconstructions, such as Weintraub and Ross wish to write, but also the evaluative histories that Walker advocates.” Nothing in this chapter argues against a methodological pluralism. All histories can serve to enlighten, if they are epistemologically well delineated. But the approach taken in this chapter goes beyond a pluralism of method. It calls for a thematic reconstruction of the *episteme* of economic discourse against issues (here it has been “gender,” elsewhere it could be some other dimension on which economics metaphorically feeds) that have traditionally been left out of the analytical scope of the discipline.



## REFERENCES

- Backhouse, Roger E. (1992) "How Should We Approach the History of Economic Thought, Fact, Fiction, or Moral Tale?" *The Journal of the History of Economic Thought* 14, 1 (Spring): 18–35.
- Balibar, Etienne (1996) "Has the World Changed?" in Callari, Cullenberg, and Biewener (eds.) *Marxism in the Postmodern Age. Confronting the New World Order*, New York: Guilford.
- Balibar, Etienne and Wallerstein, Immanuel (1988) *Race, Nation, Class. Ambiguous Identities*, London: Verso.
- Bartky, Sandra Lee (1988) "Foucault, Feminism, and the Modernization of Power," in I.Diamond and L.Quinby (eds.) *Feminism & Foucault*, Boston: Northeastern University Press.
- Callari, Antonio (1993) "Good, Work, Trade: Towards an Anthropology of Economics," unpublished manuscript.
- Diamond, Irene and Quinby, Lee (eds.) (1988) *Feminism & Foucault*, Boston: Northeastern University Press.
- Ferber, Marianne and Nelson, Julie (eds.) (1993) *Beyond Economic Man: Feminist Theory and Economics*, Chicago: The University of Chicago Press.
- Folbre, Nancy and Hartman, Heidi (1989) "The Persistence of Patriarchal Capitalism," *Rethinking Marxism* 2, 4 (Winter).
- Foucault, Michel (1973) *The Order of Things*, New York: Random House.
- Hartsock, Nancy (1983) *Money, Sex, and Power*, New York: Longman.
- Hunt, E.K. and Schwartz, Jesse (1972) *A Critique of Economic Theory*, Harmondsworth: Penguin Books.
- Martin, Emily (1987) *The Woman in the Body*, Boston: Beacon Press.
- Matthaei, Julie (1989) "Surplus Labor, the Household and Gender Oppression," *Rethinking Marxism* 2, 4 (Winter).
- Meek, Ronald (1962) *The Economics of Physiocracy*, Cambridge, MA: Harvard University Press.
- Merchant, Carolyn (1980) *The Death of Nature: Women, Ecology, and the Scientific Revolution*, New York: Harper & Row.
- Nelson, Julie (1994) "Feminist Economic Methodology," manuscript draft.
- Rorty, Richard (1979) *Philosophy and the Mirror of Nature*, Princeton: Princeton University Press.
- Rosenau, Pauline M. (1992) *Post-Modernism and the Social Sciences: Insights, Inroads, and Intrusions*, Princeton: Princeton University Press.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis*, New York: Oxford University Press.
- Tribe, Keith (1978) *Land, Labor and Economic Discourse*, London: Routledge & Kegan Paul.
- Waller, William and Jennings, Ann (1991) "A Feminist Reconsideration of Karl Polanyi," *Journal of Economic Issues* XXV, 2 (June).

Part VI  
THE SYNTHESIS



# THE SOCIOLOGY OF SCIENCE AND SCHUMPETER'S IDEOLOGY

*Yuichi Shionoya*

## WHAT IS SCIENCE?

In part I of the *History of Economic Analysis* (1954), Schumpeter gives several versions of the definition of science before launching into an inquiry of the history of economic analysis over a period of more than two thousand years. The first definition reads as follows:

(1) [A] science is any kind of knowledge that has been the object of conscious efforts to improve it.

(1954:7)

By this definition science and other kinds of knowledge are distinguished. In order to talk about “conscious efforts to improve,” it is necessary to make explicit what rules the scientific efforts should follow and by what criterion the scientific improvement can be judged. Schumpeter mentions two distinctive characteristics of the rules of procedure in empirical science:

[i] [The rules of procedure] reduce the facts we are invited to accept *on scientific grounds* to the narrower category of “facts verifiable by observation or experiment;” and [ii] they reduce the range of admissible methods to “logical inference from verifiable facts.”

(1954:8)

This description represents a broad viewpoint of positivism in that the rules of procedure in science are essentially based on empirical observation and logical analysis. If the rules of procedure are only relevant to the investigation of scientific activity, the nature and progress of science will be judged exclusively by those rules.

Schumpeter argues that science is distinguished from an ordinary way of thinking in that it follows such special styles of thinking as the use of methods and techniques regulated by certain epistemological criteria. If one accepts this point, the second definition will follow:

(2) [A] science is any field of knowledge that has developed specialized techniques of fact-finding and of interpretation or inference (analysis).  
(1954:7)

According to Schumpeter's classification, theory, mathematics, history, statistics, and economic sociology are "specialized techniques" in economics. While history and statistics are the techniques that are used for the acquisition of "facts verifiable by observation or experiment," theory and mathematics are the techniques that make possible "logical inference from verifiable facts." Economic sociology is regarded as a more complex technique that involves a generalization of institutional data.

While the second definition clearly shows that science is equipped with certain kinds of methods and techniques to which "the conscious efforts to improve" are devoted, it implicitly means at the same time that scientific work is the job of special groups of trained experts. If one wishes to give a sociological definition of science, referring to the group of experts who are specialized in the cooperative work of controlling and improving the socially shared scientific stock of knowledge, the third definition will follow:

(3) [A] science is any field of knowledge in which there are people, so-called research workers or scientists or scholars, who engage in the task of improving upon the existing stock of facts and methods and who, in the process of doing so, acquire a command of both that differentiates them from the "layman" and eventually also from the mere "practitioner."  
(1954:7)

This definition leads to the field that is called the sociological investigation of science or the sociology of science. What Schumpeter had in mind as the task of inquiry into the sociological aspect of science was the following:

[The sociology of science] analyses the social factors and processes that produce the specifically scientific type of activity, condition its rate of development, determine its direction toward certain subjects rather than other equally possible ones, foster some methods of procedure in preference to others, set up the social mechanisms that account for success or failure of lines of research or individual performances, raise or depress the status and influence of scientists (in our sense) and their work, and so on.  
(1954:33)

These aspects of science cannot be explained by the logical criteria of science and demand a different kind of research, the sociology of science (or knowledge).

Schumpeter gives still other definitions:

(4) "science is refined common sense,"  
(1954:7)

and

(5) “science is tooled knowledge.”

(1954:7)

In definition (4), the emphasis is on refinement rather than common sense, and the purpose of refinement is to transform common sense into “techniques that are not in use among the general public” (1954:7). In a 1931 lecture in Tokyo, Schumpeter used a similar expression:

Science or theory is nothing but systematised and refined common sense, a technique, learned by experience, of getting hold of the world, not as practical life does, in every given practical instance, but in a way that will hold good for many or all instances of a given class of phenomena.

(1982:1054)

This definition is of interest in that it indicates how science emerged historically. Science, he believed, began with a discussion of practical problems in which people were interested; while the knowledge they held at the outset with respect to the problems in question was the result of the application of common sense or unsystematic thought, it grew over time into techniques that were inaccessible to ordinary people. As I have discussed on Schumpeter’s economic methodology elsewhere (Shionoya 1990a), definition (5) represents his concept of instrumentalism in the philosophy of science: that science is a general instrument for understanding reality and is in itself neither true nor false.

In summary, Schumpeter argued, on the one hand, that, as in definition (2), science is the object of the philosophy of science or methodology of science because it has certain rules of procedure and, on the other, that, as in definition (3), science is the object of the sociology of science because it is carried out by groups of experts and thus socially conditioned. Ernest Nagel ingeniously characterized science as an “institutionalized mechanism for sifting warranted beliefs” (1961:490): he believed that any account of this function of science requires both the epistemological criteria to distinguish between valid and invalid theories and the modes of behavior of scientific groups that are more or less compatible with these criteria. It is within these perspectives of the two disciplines, the philosophy of science and the sociology of science, that Schumpeter defined the notion of science.

The philosophy of science has traditionally discussed the status, structure, and function of science, and it is likely to be concerned with the form rather than the substance of science and with the logical nature of an ideal theory per se. On the contrary, the sociology of science draws attention to the actual activity of science that is carried out in social surroundings and tries to clarify empirical and dynamic phenomena such as growth and decline, acceptance and rejection of specific sciences. Schumpeter was interested in the sociological aspect of science not only because he thought that social factors influence science, positively or negatively, but also because the sociology of science, as well as economic sociology, constitutes a part of a “universal social science.”

In the light of Schumpeter's concept of a "universal social science," sociology is the first approximation of the interactions between various aspects of social life: the sociology of science deals with the relationship between thought and society, and economic sociology (the sociology of economy) with the relationship between the economy and society. These two sociologies were Schumpeter's major attempts to define sociology. Instead of investigating the intricate network of interrelations between each branch of society, sociology is a parasite, so to speak, of any developed branch of science and depicts the relationship between that branch and other branches lumped together; thus, the sociology of science rests on the philosophy of science, and economic sociology rests on economic theory. Specific sociologies usually criticize their parasitized sciences for their limitation of scope, but their parasitism is impossible without the latter.

According to the Marxian economic interpretation of history, the economy and thought represent the substructure and superstructure of the society respectively, and the latter is merely a reflection of the former. This is no doubt a biased view. Schumpeter's two sociologies are alternative approaches to the central problem of Marx's social theory, namely the evolution of the society as a whole. In order to overcome the Marxian bias and still admit the social conditioning of knowledge, it is necessary to consider economic sociology in addition to the sociology of science and to take into account the bilateral interactions between the superstructure and the substructure.

This chapter deals with Schumpeter's sociology of science based on his notion of science as well as on its relationship with economic sociology, as is described above. In his view, two major social factors influence science: ideology and school. The latter half of this chapter identifies the structure of his basic ideology with reference to his substantive work.

### SCIENCE, VISION, AND IDEOLOGY

In his presidential address to the American Economic Association in 1948, entitled "Science and Ideology," Schumpeter observed that scientific inquiry in the broad sense consists of two stages, namely the formation of vision and the building of a model, and argued in what sense and to what extent the former influences the latter. The first stage is to perceive as the object of an inquiry the set of related phenomena to be analyzed. This requires a judgment of what is important and relevant in understanding natural or social phenomena. Such perception and judgment is called vision. The second stage is to analyze the material conceived by the vision according to the scientific rules of procedure. The recognition and collection of facts leads to the building of concepts and an analytic apparatus, and vice versa. As a result of the feedback between factual and theoretical research, scientific hypotheses and models are formulated. The same argument is also developed but unfinished in Chapter 4 of Part I of his *History of Economic Analysis*.

From the standpoint of a logical positivist philosophy of science, the context of discovery and the context of justification are distinguished, the former

representing the setting of problems and the discovery and growth of theories and the latter representing the formulation, justification, and appraisal of theories. This distinction was introduced by Hans Reichenbach (1938:6–7) to define the proper domain of the philosophy of science as the context of justification. Schumpeter's distinction between vision formation and model building can be interpreted as corresponding to the context of discovery and that of justification, although vision is one of the factors working in the context of discovery.

Standard accounts explain the contrast between discovery and justification in the following way.<sup>1</sup> Discovery concerns the origin and invention of scientific theories and hypotheses, whereas justification concerns their construction, testing, confirmation, and evaluation. Problems in the context of discovery are the concern of psychology, sociology, and the history of science, whereas logical problems in the context of justification are the subject matter of the philosophy of science. Discovery is subjective, but it is only descriptive. Justification is objective, but it is also normative because it gives the criteria for the evaluation and acceptance of a theory. Discovery deals with the initial selection of facts for study; justification evaluates whether the facts give the objective evidence for hypotheses.

In this view, factors concerning the genesis of theories are irrelevant to the philosophical analysis of science; the philosophy of science is concerned only with the logical nature of a completed theory, because it is believed that no logical method could be applied to the discovery of a theory. As Reichenbach put it, "The act of discovery escapes logical analysis; there are no logical rules in terms of which a 'discovery machine' could be constructed that would take over the creative function of the genius" (Reichenbach 1951:231).

Admittedly, the philosophy of science should identify the normative rules of science, as does the grammar of language, but at the same time the rules should explain the actual practice of scientists. Critics of logical positivism claimed that epistemological elements that govern the dynamic process of discovery, evolution, and acceptance or rejection of a theory should also be a legitimate concern of the philosophy of science.<sup>2</sup> This claim is based on at least two major points. First, logical positivism contends that a nonanalytic (factual) statement has meaning only if it is verifiable by observational evidence. But with regard to this most fundamental proposition, the critics claimed that it is impossible to distinguish strictly between theory and observation because we can observe facts only on the assumption of a theoretical framework. This is the thesis of the theory-ladenness of observation. If this is the case, scientific work must be conducted by means of a perspective that governs what is an important problem and what is a desirable answer; this perspective is a *Weltanschauung*—viewpoint, style of thought—and is not necessarily neutral to the context of justification. Second, contrary to the contention of logical positivism, observation is not enough to determine the validity of a theory on account of the problem of induction. This is the thesis of underdetermination of theory by evidence. As a result, it is possible to build many theories from a given observation, and a theory is accepted in fact based on various criteria



other than the principle of verification. Even a test of confirmation and falsification does not mean a simple once-and-for-all evaluation, and a theory continues to exist with tenacity through the endless modification and proliferation of auxiliary assumptions even if it is falsified.

The most important consequence of this criticism of the positivist philosophy of science is that serious attention has been given to the dynamics of scientific growth and persistence, and to the social and cultural circumstances in which scientific activity is actually carried out. In this way, the scientific interests of philosophers, sociologists, and historians have overlapped. Contemporary philosophers such as Karl Popper (1935), Norwood Hanson (1958), Thomas Kuhn (1962), Imre Lakatos (1970), Paul Feyerabend (1975), and others have contributed to this stream albeit there are striking differences among them. Against this background the sociology of science has shown a new upsurge since the 1970s in the work of Barry Barnes (1974), David Bloor (1976), and Michael Mulkey (1979), to name a few.<sup>3</sup> In addition, Pierre Bourdieu (1990) has a unique perspective comparable to Schumpeter's.

In distinguishing between vision and model, Schumpeter did not mean that each stage is independent of each other; he emphasized instead, as most contemporary philosophers do, that the former influences the latter, and took out some solid factors from the black box of the discovery process in which mere intuition and irrationality seemed to prevail.

Schumpeter focused on ideology as a specific factor in the vision formation stage; he introduced the concept of ideology in the following remark:

[T]here exist in our minds preconceptions about the economic process that are much more dangerous [than value judgments] to the cumulative growth of our knowledge and the scientific character of our analytic endeavors because they seem beyond our control in a sense in which value judgments and special pleadings are not. Though mostly allied with these, they deserve to be separated from them and to be discussed independently. We call them ideologies.

(Schumpeter 1949:347)

He stressed that he was not going to discuss the problem of value judgments, which might be easily suggested by the topic "science and ideology." He also did not agree with the Marxian notion of ideology that a system of ideas depends on the class interests of the proponents. Although Marx's theory of ideology contributed to the sociology of knowledge that developed in the interwar period, the sociology of knowledge already had freed itself of the Marxian bias. Karl Mannheim, the leader of the German sociology of knowledge, defined the key term of the discipline *Seinsverbundenheit des Wissens* (knowledge is existentially related)<sup>4</sup> not as *Interessiertheit* (interest-orientedness) but as *Engagiertsein* (committedness) (Mannheim 1964:377–8; 1952:183–4). Committedness means that knowledge is indirectly correlated with social existence so as to shape a total configuration of the

world and the human mind. Mannheim maintained that social existence is linked with thought through the structure of “perspective,” which signifies the meaning of the concepts used, the structure of categorical apparatus, models of thought, the level of abstraction, the presupposed ontology, and so forth. “Perspective” is a *Weltanschauung*-style of thought, and intellectual viewpoint, which in turn depends on various social factors (Mannheim 1936:244). Schumpeter similarly dealt with ideology in terms of an open-ended relationship with society.

Although some points in his argument might suggest that Schumpeter regarded vision and ideology as interchangeable,<sup>5</sup> his basic intention was to make them distinct. According to him, vision is a preliminary image of problems in a prescientific age. In order to draw such an image, one does not start from scratch but from some existing ideas; this is what scientists, not laymen, do:

We start from the work of our predecessors or contemporaries or else from the ideas that float around us in the public mind. In this case our vision will also contain at least some of the results of previous scientific analysis. However, this compound is still given to us and exists before we start scientific work ourselves.

(Schumpeter 1949:350)

Such a preconception is ideology; ideology is likely to be incorporated into vision because scientific work takes place in a socially continuous process. Vision is indispensable to science, but ideology can be dispensed with in principle. In fact, however, they are combined, and vision is shaped by ideology.

For Schumpeter, “*ideologies are not simply lies*; they are truthful statements about what a man thinks he sees” (1949:349). “It [ideology] does not exclude delusions of a wide variety of types,” but at the same time “ideologies may contain provable truth up to 100 per cent” (1949:351). The important point is that although ideology is a prescientific or extrascientific view of the economic process, it is also a prerequisite of scientific research. Ideology is expected to be tested or falsified by the rules of science in a subsequent stage of the scientific act, but Schumpeter emphasized that such anti-ideological safeguards are not always effective. Thus, the sociological questions he raised were the following:

How far, then, does it [ideology] fail to disappear as it should? How far does it hold its own in the face of accumulating adverse evidence? And how far does it vitiate our analytic procedure itself so that, in the result, we are still left with knowledge that is impaired by it?

(1949:351)

These questions cannot be answered in a general and macroscopic way, but should be explained individually with regard to some major systems of thought in the history of science.

By using the term *ideological bias*, Schumpeter points out that ideology is

uncontrollable and dangerous to science. Why is it so? As mentioned, science is knowledge for which it is possible to talk about progress based on certain criteria, and it is different from value judgments or policy recommendations. And what is more, Schumpeter deliberately separated values and policy from ideology. He emphasized the fundamental role of ideology in the formation of vision:

[Vision] embodies the picture of things as we see them, and wherever there is any possible motive for wishing to see them in a given rather than another light, the way in which we see things can hardly be distinguished from the way in which we wish to see them.

(Schumpeter 1954:42)

Of course, there are many facts that no one can deny, and many rules of procedure in science are free from the effects of ideology; but Schumpeter observed that the scope of science that can be protected from ideological bias is fairly limited because the more fundamental “the way in which we see things” is, the more difficult it is for scientific rules to compare and appraise these perspectives. This is the problem of incommensurability; the typical example is the relationship between the subjective theory of value and the labor theory of value. Each value theory can criticize the other on the basis of its own rules of procedure, but the other theory is effective in relation to its underlying vision. Two value theories are the results of two incommensurable visions and ideologies.

The problem of ideological bias occurs not only in the case where vision and theory are consistently linked, but also where they are not. Since vision is an image of things that is to be formulated according to certain rules, the part of vision that is not successfully formulated in the model-building stage is irrelevant and redundant to science and, so to speak, leftover material that is not processed. Such a vision is merely an illusion or a *Weltanschauung* and sometimes vanishes. But it sometimes has a life of its own outside of science and exerts an influence as political value judgments or social beliefs. Occasionally, it continues to exist in disguise in science as if it were science; Schumpeter called these cases the “history of ideology over analysis” or “sterilization of science by ideology” (1949:355). Furthermore, there is a possibility of the rebirth of a defunct ideology because the ideology may be revived repeatedly when scientists try to form a vision. Thus, ideology works as an important factor constituting what Schumpeter called “the process of the Filiation of Scientific Ideas” in the history of science (1954:6).

What is the significance of Schumpeter’s argument concerning ideology? Although he distinguished two stages of a scientific act, vision formation and model building, he admitted that all scientists do not necessarily begin from the formation of their own visions (1954:45–6). They begin to work within the existing system of science and take underlying vision and ideology for granted; sometimes they are never aware of this fact. On the contrary, those who bring about a revolution in existing science never fail to begin from the formation of

their own vision. Thus continuity and discontinuity of science are explained. In his study of the history of economics, Schumpeter tried to pinpoint the visions underlying the great systems of thought that correspond to Kuhn's paradigms or Lakatos's research programs. We are thus led from the problem of vision and ideology to another problem of the sociology of science, namely the behavior of groups of scientists and schools.

### SCHOOLS AND THE DEVELOPMENT OF SCIENCE

In the last year or two of his life Schumpeter wrote about the problem of ideology in the sociology of science in "Science and Ideology" and Part I of *History*. But in his neglected book *Vergangenheit und Zukunft der Sozialwissenschaften* (1915), which presented his farewell address at the University of Czernowitz in 1911 before he left for Graz, he discussed the history of the social sciences in the formative period and included a chapter titled "The Outcomes of Conflicts between Schools—Towards the Sociology of Science." This was an attempt to explain the sociology of science before Max Scheler and Karl Mannheim introduced it in the 1920s and the 1930s, and it is notable for its discussion of the schools represented by groups of scientists especially from the viewpoint of the historical development of science. His 1931 lecture at Kobe University on a *Weltanschauung*, schools, and methods was also an interesting attempt to define the sociology of science (Schumpeter 1931). He might have intended to discuss these problems relating to schools as well as the problem of ideology in Chapter 4 ("The Sociology of Economics") of Part I of *History*, but his description was unfinished.<sup>6</sup> However, it is not difficult to reconstruct his view on the problem of schools from the material available.

Schumpeter has been perceived as if he claimed that there are or should be no schools in economics, probably owing to his characteristic view about methodological tolerance in his first book *Wesen*, but this is not a correct way to represent his view on the sociology of science. Nothing is clearer than his own explanation on this point:

I am sometimes credited with the saying that there are *no schools in economics*. By this I mean that there are now no differences as to fundamental standpoints among serious economists. I do not deny the existence of schools in the sense which we have first defined. And I do not deny the existence of schools in the sense for which Universalism is an example. Only in the first case I hold that the differences are much less important than fervent disciples like to make out. And in the second case I deny that the phenomenon comes within the realm of science.

(Schumpeter 1931:9–10)

What, then, is his definition of schools? In the same article, he stated:

There is *one* meaning to the word "school," which is incident to the very life of science: groups of disciples gather round some teacher or some

institution. By being interested in similar problems, by being taught similar ways of handling them, by exchanging and assimilating their views and results, they acquire a sort of mental family likeness.... The history of Science is a fascinating stud which unveils to us the ways of the human mind. And it has a neighboring field of research, which is developing slowly and is perhaps more fascinating still. It may be called the *Sociology of Science*, and consists of the study of Science as a social phenomenon, for example, of how the scientific profession developed, from what social groups its members come, how their social origin and position influences upon [*sic*] their work and so on. In this study, the phenomenon of grouping which we call scientific schools, is of primary importance.

(Schumpeter 1931:78)

According to Schumpeter, various schools in neoclassical economics and even the German Historical School stand on common ground with respect to the fundamental viewpoint of science in spite of their different theoretical structures (Marxists are excluded!). On the other hand, Schumpeter maintained that conflicts in a political view and *Weltanschauung* that camouflage science do not belong to science and referred to Othmar Spann's holistic approach as Universalism. Schumpeter ardently believed that economics should be advanced to an objective technique that all practitioners must accept whatever purpose they might have. By saying that there were no schools among serious economists of his day, he meant that there was *one* science of economics just as we have *one* science of electricity.<sup>7</sup>

Nevertheless he admitted that scientific schools were established as a matter of fact and regarded them as a most interesting phenomenon in scientific activity:

How such schools arise and decay, how and why they fight each other and how their success or defeat determines the directions in which scientific endeavour moves, all this explains to a considerable degree why we have just the sort of science which we do actually have and why it is that no other lines of thought, just as promising in themselves, have been followed. Schools in this sense will probably always exist, for they are intimately linked up with the fundamental sociological phenomenon of Leadership.

(Schumpeter 1931:7-8)

No doubt when Schumpeter talked about leadership in science he had in mind an analogy from entrepreneurs in economic development. As I have argued on Schumpeter's research program of a "universal social science" that consisted of statics, dynamics, and sociology (Shionoya 1990b), he distinguished between statics and dynamics in each area of social life; while the static state is governed by an established order, the dynamic state involves the destruction and substitution of an old order by a new one. In a scientific field, he who has achieved a revolution in science and acquired a wide group of supporters becomes a leader of a school. Schumpeter regarded the Ricardians as a genuine school:

[T]here was one master one doctrine, personal coherence; there was a core; there were zones of influence; there were fringe ends.  
(Schumpeter 1954:470)

He also accepted the Keynesian school as a sociological entity, that is:

[A] group that professes allegiance to One Master and One Doctrine, and has its inner circle, its propagandists, its watchwords, its esoteric and its popular doctrine. Nor is this all. Beyond the pale of orthodox Keynesianism there is a broad fringe of sympathizers and beyond this again are the many who have absorbed, in one form or another, readily or grudgingly, some of the spirit of some individual items of Keynesian analysis.  
(Schumpeter 1951:288)

He said that analogous cases in the history of economics were the Physiocrats and the Marxists.

Between schools a controversy often develops concerning differences in basic approaches, problems addressed, causal relations, and so on. According to Schumpeter, controversy is the life of science; without it, science does not progress. The state of affairs in economics he actually faced at the turn of the century was characterized by bitter disputes between schools. Apparently in the scientific world conflict, dispute, and disharmony were dominant instead of compromise, cooperation, and harmony. He believed, however, that at a deeper level of scientific activity consistent development was achieved because of the common recognition of the basic nature of science. Thus he claimed the following philosophical thesis:

This is one of the cases, so often found in all fields of human history, where the “arbitrariness,” “accidentalness,” “uncertainty,” etc., of actual individual phenomena are paired with the irresistible impression of “regularity,” “uniformity,” “necessity,” etc., of the totality grasped by observers.  
(Schumpeter 1915:94)

For Schumpeter this was the central question of the history of science. He attempted to explain this thesis by paying attention to the modes of behavior of schools, on the one hand, and the methodological ideals of economics, on the other.

With regard to the modes of behavior of schools, Schumpeter observed that in the perspective of eternity (*sub specie aeternitatis*), schools are so much driven by vanity and narrow-mindedness that they are apt to emphasize trivial points and criticize others. When a leader creates intelligible and provocative slogans and identifies his foes, he can easily achieve an appeal to a wide circle of people; moreover, schools often maintain philosophical and political beliefs that can be supported by still wider circles of people. Although Schumpeter admitted that schools are the products of innovative scientific leaders, he

sometimes spoke of schools in a pejorative fashion: the word *school* also means a group of fish; he used to say that schools were only fish shoals.<sup>8</sup> In fact, in view of his analogy of statics and dynamics to science, a school is a group of imitators, like fish in shoals, running after leading entrepreneurs.

On the other hand, with regard to the regulative idea of science, he did not take a simplistic view of cumulative scientific development that is prescribed by any rationalist philosophy of science. His first explicit statement about the development of science was:

“Nature does not make a jump” (*Natura non facit saltum*)—Marshall opened his book with this thesis as a motto, and in fact it adequately represents the characteristics of the book. But I disagree that the development of *culture*, especially of knowledge, takes place just in leaps and bounds. Vigorous jumps and stagnation, overflowing hope and bitter disillusion alternate, and even if the new is rooted in the old, development is not steady. Our science indicates this.

(Schumpeter 1908:8)

In his magnum opus, written in the final years of his life, Schumpeter addressed almost the same subject in the same vein:

Scientific analysis is not simply a logically consistent process that starts with some primitive notions and then adds to the stock in a straight-line fashion. It is not simply progressive discovery of an objective reality—as is, for example, discovery in the basin of the Congo. Rather it is an incessant struggle with creations of our own and our predecessors’ minds and it “progresses,” if at all, in a criss-cross fashion, not as logic, but as the impact of new ideas or new observations or needs, and also as the bents and temperaments of new men, dictate.... [T]his process of specialization [of science] has never gone on according to any rational plan—whether explicitly preconceived or only objectively present—so that science as a whole has never attained a logically consistent architecture; it is a tropical forest, not a building erected according to blueprint.

(Schumpeter 1954:4, 10)

To sum up, the sociological activity of schools, on the one hand, is too shortsighted to shape a well-ordered history of science by itself, and the logic prescribed by the philosophy of science, on the other, is too unrealistic to depict an actual history of science by itself. Nevertheless, Schumpeter considered the possibility that through the sociological activities of scientific groups the logical direction of science is approximately realized. In other words, he took sides neither with an irrational model nor a rational model of scientific development but attempted to integrate both from a historical point of view. It can be argued that he seemed to believe in an invisible hand in history.

How is such a belief possible? Schumpeter emphasized “the existence of

given facts we cannot change” (1915:99), which consist of the historically given objects and apparatus of science, namely the “problems and methods” of science. For scientists, these data are a given; problems, if once addressed, cannot be forgotten, and doctrines, if once established, cannot be easily dismissed. A vein of ore, once discovered, continues to be patiently explored over time. The streams of great ideas in particular never dry up. He called the tenacity of these moments “a great truth” (1915:90). For Schumpeter, the development of science takes place zigzag through dialogues of present scientists with history, that is to say, through the rediscovery and reinterpretation of past ideas. In essence, these dialogues are required by the roles of vision and ideology in science. Past thoughts, as unchangeable given data, are repeatedly revived as ideologies and serve to reproduce a continuous scientific framework.

Indeed, in an actual field of science one wants to change existing theories drastically if possible, and in proposing a new theory, one creates a sandstorm and a battle cry under a new slogan. Sooner or later, however, the new is absorbed into the old to accomplish the latter, and a trend of uniform development of science follows. Schumpeter called the inevitable forces by which individual conflicts and diversities in science are coordinated into a totality so as to form a uniform development in a certain direction “the logic of things” (1915:102). The direction destined for economics is to integrate the logical analysis and empirical observation, as is implied in his notion of science. Despite apparent conflicts between schools, they rest on common ground concerning the fundamental notions of science (this is the reason Schumpeter believed that there were no schools in economics), so that, in spite of discontinuities at first sight, a continuous development of science can be seen from a distance. In *History* he called this process, which leads, after all, to a uniform, although not linear, development of science, “the process of the Filiation of Scientific Ideas.” This is “the process by which men’s efforts to understand economic phenomena produce, improve, and pull down analytic structures in an unending sequence” (1954:6), and a description of this process is taken to be the main purpose of writing a history of science. Thus, starting from his concern with the sociology of science and building upon his component ideas, we have arrived at what Schumpeter regarded as the task of the history of science.<sup>9</sup>

## ISSUES IN THE SOCIOLOGY OF SCIENCE

In order to develop the problems of the sociology of science based on Schumpeter’s views on ideology and schools, I shall address three issues. Schumpeter’s scientific work covers three fields, namely economic statics, dynamics, and economic sociology, and his metatheory includes three areas, that is, the sociology of science, the methodology of science, and the history of science. Against this backdrop, I shall argue first, how his sociology of science is related to the methodology of science; second, how it influences the history of science; and third, how it is concerned with substantive theories, economic statics, dynamics, and economic sociology.



### The sociology of science and the methodology of science

One of the basic characteristics of the modern philosophy of science after the fall of logical positivism has been the effort to fill a gap between the logical explanation of science in the philosophy of science and the actual scientific activities described by the history of science. Imitating Immanuel Kant's famous dictum, Imre Lakatos stated: "Philosophy of science without history of science is empty; history of science without philosophy of science is blind" (Lakatos 1971:91). Schumpeter's viewpoint might be seen as anticipating the current stream of thought, but in order to denote his thought in the historical context one must recognize how much he was influenced by the German sociology of knowledge. Compare Lakatos's dictum above with the following manifesto of Max Scheler, one of the pioneers of the sociology of knowledge: "Epistemological study is judged to be empty and unfruitful without the simultaneous study of social and historical developments of the supreme types of human knowledge and cognition; however, the history and the sociology of human knowledge would remain without direction, support, and ultimate foundation if these attempts were not directed by clearly conscious and epistemologically valid beliefs—as Condorcet and A.Comte first attempted on a large scale" (Scheler 1926:v). The aspect of the current philosophy of science represented by Lakatos and Kuhn might be seen as an acknowledgment of the tenet of the German sociology of science in the 1920s. Schumpeter began with such a sociology of science.

When he discusses the sociology of science in Part I of *History* and in his article "Science and Ideology," Schumpeter referred to Scheler and Mannheim (Schumpeter 1954:33; 1949:348). He seemed to regard Mannheim as more relevant than Scheler. Whereas Scheler is classified as representing the phenomenological sociology of science, Mannheim is classified as exemplifying the historicist sociology of science, each reflecting a different approach to the sociology of science.<sup>10</sup> The perspective of Scheler was metaphysical and static in that he sought for the essential and the eternal beyond facts. While the sociology of science is principally concerned with the social conditioning of knowledge, the aim of the discipline in his case was to find essential knowledge that was not subject to historical contingency. Schumpeter would not have shared this view.

Mannheim observed the relationship between thought and society as objective or existential and accepted the influences of social process not only as the external moments of thought but also as the cores of thought. He interpreted the social conditioning of thought not as "relativism" in the sense that objective, universal truth does not exist, but as "relationism" in the sense that truth cannot be formulated except within the framework of an existential correlation between knowledge and society (Mannheim 1936:254). How to overcome epistemological relativism is an important task that the sociology of science must address as a result of its recognition of the social conditioning of thought.

Mannheim considered the objectivity of existentially conditioned thought in the following ways. First, with regard to different theories that have the

same perspective, uniform criteria can be applied to them. Second, for those theories that have different perspectives, a certain formula is required to understand the structural differences between their cognitive styles and to transform or translate the one to the other (Mannheim 1936:270). This means that objectivity could be obtained by a roundabout method, but there is no assurance of overcoming incommensurability. Schumpeter wrote:

Roughly up to the middle of the 19th century the evolution of “science” had been looked upon as a purely intellectual process—as a sequence of explorations of the empirically given universe or, as we may also put it, as a process of filiation of discoveries or analytic ideas that went on, though no doubt influencing social history and being influenced by it in many ways, according to a law of its own. Marx was the first to turn this relation of interdependence between “science” and other departments of social history into a relation of dependence of the former on the objective data of the social structure and in particular on the social location of scientific workers that determines their outlook upon reality and hence what they see of it and how they see it. This kind of relativism—which must of course not be confused with any other kind of relativism—if rigorously carried to its logical consequences spells a new philosophy of science and a new definition of scientific truth.

(Schumpeter 1949:348)

Unfortunately, Schumpeter did not provide in this context a definition of “a new philosophy of science” and “a new definition of scientific truth.” In other words, he did not pursue the consequences of his position on the sociology of science for the philosophy of science. But if we interpret his stand on the philosophy of science as instrumentalism, we can deduce the relationship between his viewpoint and relativism. Those theories that have different perspectives reflecting different social processes appear, at first sight, unable to claim objectivity. But according to Schumpeter’s instrumentalism, a theory is an instrument and should be evaluated in light of its effectiveness in dealing with the problems it addresses, within whatever perspective it is constructed. The notion of effectiveness provides an alternative criterion to what is ordinarily conceived as truth.

### **The sociology of science and the history of science**

Starting from Schumpeter’s definition of science, we have seen that science, in his view, is both the object of the philosophy of science, because it has certain rules of procedure, and the object of the sociology of science, because it is carried out by groups of scientists and thus socially conditioned. As a result, it must be emphasized, in writing the history of science in *History* Schumpeter claimed that science has two aspects. Therefore, the history of science is properly written as internal and external history. As there is no contradiction between the two

aspects of science, so there is no contradiction between the internal and external history in his projected work. The meaning of this positing of the problem is, first, that the history of science is not a mere chronological or encyclopedic description of doctrines but requires a conceptual framework based on the philosophy of science and the sociology of science. Thus, *History* should not be consulted piecemeal like a guide to individual theories and authors; to use Schumpeter's favorite term, it is a "reasoned history" of economics (1939, I:220). Second, since the contents and methods of science are combined with historical and social factors, the philosophy of science and the sociology of science should not be fixed and ahistorical. Various theories appearing in the history of science are treated as the test of different methodologies and sociologies of science.

It is now clear that the three metatheories, that is, the philosophy of science, the sociology of science, and the history of science, established here as the framework for studying Schumpeter, are interrelated in light of his view of science. He investigated the history of science to pursue their interrelationship in the context of actual economic theories.

### **The sociology of science and vision**

Schumpeter's discussion of ideology at the vision formation stage in economics was actually confined to the founders of the great theoretical systems or the leaders of schools, such as Adam Smith, Karl Marx, and John Maynard Keynes. What kind of research problems, then, can be the objects of vision? According to Schumpeter, it is in long-term change that the vision or the image of an economic process plays an important role. This idea is noteworthy in order to pinpoint concretely the locus of vision in his system of thought. He explained:

[W]hen we are concerned with nothing more ambitious than to formulate the way in which—on the plane of pure logic—economic quantities "hang together," that is, when we are concerned with the logic of static equilibrium or even with the essential features of a stationary process, the role of vision is but a modest one—for we are really working up a few pretty obvious facts, perception of which comes easily to us. Things are very different when we turn to the task of analyzing economic life in its secular process of change. It is then much more difficult to visualize the really important factors and features of this process than it is to formulate their *modi operandi* once we have (or think we have) got hold of them. Vision (and all the errors that go with it) therefore plays a greater role in this type of venture than it does in the other.

(1954:570)

In the long-term economic process a large number of factors change, and there are many alternative hypotheses with regard to assuming a causal relationship and drawing a historical scenario. Moreover, the verification or falsification of a theory of economic development requires an accumulation of long-term

experiences, without which any theory of the long-term process would be no more than a vision. Any work on the total development of capitalist society must be concerned with a long-term process, and Schumpeter admitted that in this case vision and ideology might survive without a crucial check. Here the relevance of the sociology of science to economic statics, dynamics, and economic sociology is different. The rhetoric that characterizes Schumpeter's writings is interpreted as a device to approach and challenge those problems of a long-term process that are only amenable to such a means of cognition as vision and intuition. Rhetoric is the art of constructing and communicating visions in the prescientific stage; it is to be located, especially for Schumpeter, in the tool box of economics in addition to theory, history, statistics, and economic sociology.

Of the three issues raised above in connection with the sociology of science, the balance of this chapter delves into the problem of Schumpeter's own vision.

## WALRAS AS IDEOLOGY

### Statics versus dynamics

Schumpeter proposed a double dichotomy: the static state versus the dynamic state as different economic phenomena, and statics versus dynamics as different economic theories; there is no direct correspondence between the two dichotomies. Schumpeter's model of statics is a version of neoclassical equilibrium theory; basically, it is a timeless model of economic equilibrium established under certain conditions, but if time is taken into account, it also relates to a stationary state or a circular flow that repeats itself year after year on the same scale and with the same pattern. A model of an equilibrium or stationary state assumes the constancy of natural, social, and institutional conditions, as well as the constancy of preferences, technology, and the quantity and quality of productive resources. This model is characterized by the nonexistence of saving and investment and by a zero rate of interest. Schumpeter's notion of the static state includes, in addition, the growth process with steadily increasing populations and capital. Under steady economic growth, changes are limited to the quantitative expansion of an existing economy and do not include doing something new or doing it differently. In other words, under a constant production function an increase in productive resources causes a change in the economy but is absorbed without much disturbance; this state of affairs is dealt with by static theory. Schumpeter would have included in his notion of economic statics the economic growth theory, which was developed after World War II by Roy Harrod and Robert Solow but not by Simon Kuznets and W.W.Rostow.

For Schumpeter, dynamic phenomena are characterized essentially by innovation. He included all the rest within the scope of the static world. In this sense his method was an extreme isolation and purification of dynamic phenomena, which he called "economic development." His theory of economic development appeared in *Theorie der wirtschaftlichen Entwicklung* (1912). Economic development, in his view, is

caused by “innovation,” broadly defined as the introduction of new commodities, new methods of production, new markets, new sources of supply, and new forms of industrial organization. The impact of innovation on the static model is that it changes the data of an economy from within, alters the existing channels of the economy, and causes peculiar disturbances known as “business cycles.” Schumpeter called all the changes and repercussions in the economy brought about by innovation “economic development.”<sup>11</sup>

In this fashion Schumpeter’s models of circular flow, the stationary state, and the growth process, not to mention static equilibrium, which are all covered by the static model, seem to play only a part in making a dynamic process conspicuous, but he neither regarded the static model as unrealistic in comparison with the dynamic model nor denied its significance in economics at all. He raised three questions concerning statics—dynamics relations: First, should static theory be replaced by dynamic theory? Second, should static theory be supplemented by dynamic theory because it is merely a first approximation to reality? And third, do static theory and dynamic theory describe separate facts respectively? To the first question, Schumpeter gave the following negative answer:

[I]t can be understood that dynamics should destroy or modify a lot of things. However, it is a mere subfortress or an extension, as it were. The core of static theory should not be replaced by an idea of development.  
(Schumpeter 1912:511)

The reason for this remark is given in his affirmative answers to the second and third questions. He considered that statics is an abstract model not only because it deals with the price mechanism of markets regardless of the differences in organizational form but also because it excludes the phenomenon of development. In this sense dynamics, as a theory of development, is closer to reality. But statics is never replaced by dynamics, for the two theories are different apparatuses that address different problems (static phenomena and dynamic phenomena, respectively). It follows that to ask which is correct or realistic is pointless.

Schumpeter further extended the static and dynamic dichotomy; thus he now had four pairs:

- First, two theoretical apparatuses: static theory and dynamic theory (theory of development);
- Second, two real processes: circular flow, steady growth, the tendency toward equilibrium, and the adaptation to innovation, on the one hand, and a change in the circular flow and in the growth process, the deviation from equilibrium, and endogenous and discontinuous innovation, on the other;
- Third, two types of individuals: mere manager and entrepreneur; and
- Fourth, two periods in economic life: the depression period, when the liquidation and reorganization of an economic system takes place, and the boom period, when there is a deviation from an existing economic pattern.

The third point is further generalized to ordinary man versus leader, or, in terms of human motivation, the satisfaction of hedonistic wants versus the pursuit of excellence, creation, and victory. All these elements are regarded as real.<sup>12</sup>

### **The methodological significance of the dichotomy**

The static–dynamic dichotomy is the most basic vision about the economic as well as the social world in Schumpeter’s work. It is noteworthy that he stated that the proof of economic equilibrium is the Magna Carta of economic theory (1939, I: 41). In neoclassical economic theory, given some exogenous data, the prices and quantities of various goods and factors of production—that is, the pattern of resource allocation—are uniquely and interdependently determined. Schumpeter argued that if in a certain area of social life a state of equilibrium can be determined to correspond to exogenous data, the area in question is logically so self-sufficient that one can legitimately assume an autonomous and independent science for that area. A social area can be taken to be a cosmos and not a chaos only if a unique equilibrium can be proved under exogenous conditions from outside that area. In this sense, the subject matter of economics is an orderly world.

Also, Schumpeter’s view that although static phenomena have an equilibrium, dynamic ones do not offer an important key to an understanding of the static–dynamic dichotomy. Innovation is merely the destruction of equilibrium. Therefore, the world of dynamic phenomena cannot be an object of scientific inquiry unless it is located epistemologically on some axis of coordinates as a framework of reference and unless it is actually linked with some mechanism of restoring the order. The concepts of equilibrium growth and growth equilibrium are used in economic growth theory, but, as mentioned above, Schumpeter certainly would have included these concepts in a static model. After all, innovation is a case of a change in data, and its effects on the economy are analyzed in terms of an equilibrating mechanism, which works to adapt economic structures to innovation or to absorb the effects of innovation into the economy.

Paradoxically speaking, Schumpeter could grasp the dynamic phenomena of equilibrium destruction cognitively because he believed in the immanent stability of the capitalist economy. Whatever destructive forces may emerge in the economy, markets can be relied on to adapt to them and absorb their effects to establish a new equilibrium. This was his notion of economic order. When seen as the objects of inquiry, static and dynamic states are two separate phenomena, but when seen as the methods of inquiry, static and dynamic theories are not independent; it is statics that makes economics, including dynamic theory, possible as an autonomous science. Dynamics can add new propositions about development phenomena with the aid of statics. In this sense, too, equilibrium analysis is the Magna Carta of economic theory as an autonomous science.

It was Léon Walras who first established equilibrium analysis in economics. Schumpeter, who all along regarded Walras as “the greatest of economic theorists” (1935:348), wrote:

To Walras we owe a concept of the economic system and a theoretical apparatus which for the first time in the history of our science effectively embraced the pure logic of the interdependence between economic quantities.  
(1936:2)

It is to be noted that in light of Schumpeter's concepts of economic analysis, consisting of theory, history, statistics, and economic sociology, he praised Walras most highly as far as the field of theory was concerned.

Schumpeter discussed in greater detail the reasons why equilibrium analysis is essential to an understanding of the economy and summarized the following points (1939, I: 68–70):

- 1 However abstract equilibrium theory may be, it gives “the bare bones of the economic logic.”
- 2 Equilibrium theory provides a description of the response apparatus of an economic system to changes in the data, whether exogenous or endogenous.
- 3 The concept of equilibrium is indispensable as the standard of reference, whether for analytic or diagnostic purposes.
- 4 The primary relevance of the equilibrium concept depends on the existence of a tendency toward equilibrium in the real world.

While points 1–3 relate to Schumpeter's view about the significance of equilibrium theory as an analytic tool, point 4 is concerned with his outlook on the equilibrating capacity of the real world and must be distinguished from the others.

With regard to points 1–3, Schumpeter thought that equilibrium theory sustains epistemologically the whole structure of economics. Concerning point 4, then, he stressed that the capitalist economy, while embodying factors of disturbance, is self-adjusting through alternating booms and depressions. In his empirical analysis of business cycles, he noted:

What matters to us is precisely the presence or absence of an actual tendency in the system to move toward a state of equilibrium: if this concept is to be useful as a tool of business-cycle analysis, the economic system must strive to reestablish equilibrium whenever it has been disturbed or, to put the same thing in the language of a principle associated in physics with the name of Le Chatelier, it must tend to move, in reaction to every disturbance, *in such a way as to absorb the change*.... Common sense tells us that this mechanism for establishing or reestablishing equilibrium is not a figment devised as an exercise in the pure logic of economics but actually operative in the reality around us.

(1939, I: 47)

In short, Schumpeter praised Walras's general equilibrium theory in two respects. First, it established the conceptual framework that represented the interdependence of economic variables, and it clarified the mechanism of

economic order by which all economic variables are interdependently determined under given exogenous conditions. For Schumpeter, the discovery of general equilibrium made economics a genuine science. Second, economic equilibrium is not a fiction; the forces moving toward equilibrium are working in markets in spite of apparent disturbances, and the economic system is regarded as stable after all. Of course, the recognition of the self-adjusting mechanism of markets did not begin with Walras; it is linked with the name of Adam Smith, who found in market activity an order as if it was created by an invisible hand. But the importance of Walras is that he described the order by his conceptual apparatus. Thus, on the form and content of economic analysis, Schumpeter accepted Walras's view. This might be called the Walrasian preconception or ideology *W* in Schumpeter.

### Criticism of the common interpretation

In view of Schumpeter's ideas on static-dynamic relations we must be careful how we treat his critique of Walrasian statics and his concern with dynamic phenomena. The common interpretation of Schumpeter is that he deals with statics only as the object of critique, and that he starts with an analysis of circular flow or statics in the exposition of his theory of economic development only for the purpose of making the process of dynamic change conspicuous in contrast to stationary conditions. I believe that such an interpretation is superficial.

Thus, struck by its poetic form, Paul Samuelson calls the exposition of the circular flow in the first chapter of *Entwicklung* a "parable" (Samuelson 1943:61). Among the most recent arguments is the one by John Elliot in his introduction to the English version of Schumpeter's *Theory of Economic Development*

Schumpeter's analysis of the circular flow in a deeper sense is not intended to be either descriptive or prescriptive; that is, it neither accurately describes actual capitalist economies nor provides normative benchmarks for evaluation of capitalist economic performance. Instead, it constitutes a useful mental experiment by asking what a capitalist market economy *would* be like *if* the dynamic, revolutionary changes of economic development were absent. The austerity of the circular flow model is justified by Schumpeter on the suggestive ground of its corollary implication that the pulsating processes of real-world economic life are better explained from an explicitly dynamic and evolutionary perspective.

(Elliot 1983: xviii)

Elliot refers to a similar interpretation by R.C. McCrea (1913), the early reviewer of Schumpeter's first German edition. McCrea even says that Schumpeter's equilibrium analysis is a *reductio ad absurdum*. In this fashion, the misunderstanding began at the time the book was published. These interpretations of statics, such as parable, mental experiment, and *reductio ad*



*absurdum*, no doubt contradict Schumpeter's points 1–4 on equilibrium analysis, and in themselves do not take into account the deeper methodological problem that dynamics cannot be constructed without the foundation of statics.

On the other hand, Wolfgang Stolper's view is different from conventional ones: he is quite right in emphasizing the role of equilibrium as well as that of innovation as central to Schumpeter's theory of development:

To me, understanding the nature of the equilibrium is as central a part of understanding Schumpeter's approach to evolution as is the role of the entrepreneur. The equilibrium may be quite dynamic in the technical sense of the word. It is a concept which describes all the adaptive forces in an economy, forces which are very strong and which serve not only to keep an economy from going off in all directions or from exploding, but which, by the same token, require special efforts to break out of.... So the "equilibrium" in the Schumpeterian case and its characteristics are neither just a methodological principle...nor something the economic system is passing through as the cycle is moving up and down. It is a firm and important part of reality, explaining behaviour and adjustments. And to escape from it, i.e., to destroy it, requires more than routine [*sic*].

(Stolper 1982:31, 33)

Stolper is right in recognizing that equilibrium is neither a mere fiction nor a rhetorical device but an important part of reality, but his interpretation is insufficient in that he neglects the methodological role of equilibrium analysis in the sense described here.

### **A Lakatosian interpretation**

It is illuminating to summarize the relationship between statics and dynamics in Schumpeter's work with the aid of current methodological concepts. Lakatos's methodological view (1970) seems most appropriate to interpret Schumpeter. He calls a series of theories, as a unit of describing a science, a "scientific research program" that has both the negative and positive heuristics as methodological principles; the negative heuristic is concerned with the maintenance of a "hard core" and the positive heuristic with the development of a "protective belt." The hard core is a set of propositions, accepted by the believers of the scientific research program, that are immune from empirical test, and the negative heuristic has the role of preventing this hard core from being exposed to critiques and anomalies. It is the role of the positive heuristic to deal with the critiques and anomalies arising from the gaps between observation and theory and to extend the scope of the application of a theoretical hypothesis with regard to the explanation and prediction of reality. The positive heuristic actually works through the construction of a protective belt, which consists of auxiliary hypotheses, observation hypotheses, initial conditions, and so forth to protect the hard core from being refuted.

A scientific research program does not mean a single theory but a series of theories constituting a vast protective belt around the hard core. The hard core is irrefutable; only the protective belt, which is directed to the explanation and prediction of reality, is refutable. If a series of theories in the protective belt can predict and discover novel facts that have not been expected, the research program in question is called progressive. Whether a program is progressive or not is the criterion for determining the superiority of the program. However, since a judgment of progressiveness takes a long time, Lakatos stressed the hindsight elements in appraisals of theories and regarded the existence of competing research programs as normal in science. This consideration led him to emphasize the importance of methodological tolerance.

If one can interpret, as Roy Weintraub (1985) did, the development of the general equilibrium theory since Walras as a scientific research program in Lakatos's sense, the hard core in the program will consist of the fundamental propositions of price theory and the underlying belief in the price mechanism.<sup>13</sup> Weintraub defines as the positive heuristics:

- 1 go forth and construct theories in which economic agents optimize, and
- 2 construct theories that make predictions about changes in equilibrium;

and as the negative heuristics:

- 3 do not construct theories in which irrational behavior plays any role,
- 4 do not construct theories in which equilibrium has no meaning, and
- 5 do not test the hard core propositions.

Is it possible to locate Schumpeter's contribution of the theory of economic development within the framework of what Weintraub calls a neo-Walrasian research program?

My interpretation is that Schumpeter accepted the hard core of the general equilibrium theory as the Walrasian ideology *W* and developed his propositions about economic development *W+* as a protective belt in order to approach the reality of the capitalist economy.<sup>14</sup> Specifically, in Schumpeter's thought, the basic assumptions of price theory and the belief in the price mechanism are accepted (the negative heuristic "5"). His dynamic theory, guided by the positive heuristic, intends to develop economic theory through a progressive problem shift. Although dynamic phenomena destroy equilibrium, the market forces are conceived to restore equilibrium positions (the positive heuristic "2" and the negative heuristic "4"). The question whether the entrepreneurial activity in Schumpeter's dynamic process is an optimizing, rational behavior (the positive heuristic "1" and the negative heuristic "3") seems problematical. Although the entrepreneurial activity is not an optimizing behavior in a narrow sense, it is not an irrational behavior. Schumpeter's dynamic theory can be seen as intending to expand the neo-Walrasian research program by developing

a protective belt not within the framework of static theory, but on the basis of it. His dynamic theory depended on static theory, far from rejecting it. Weintraub's specification of the heuristics seems to be narrow if it excludes the possibility of a protective belt that may be beyond static theory. For Schumpeter, statics and dynamics are not only separate tools addressed to different objects, but also are the complements, as the hard core and the protective belt, in the construction of the Walrasian scientific system and play different roles, that is, the negative and positive heuristic respectively.

## MARX AS IDEOLOGY

### Economic development and sociocultural development

Schumpeter started from *Wesen*, which was a recapitulation of economic statics, and explored the area of economic dynamics in *Entwicklung* and *Business Cycles*. In view of his program of universal social scientific research, however, his theory of economic development marked only a halfway position toward his goal. Had he remained within the area of economics, he might have regarded it as a satisfactory contribution. However, his concern with the totality of social phenomena always prompted him to go beyond economics. Thus, finally, in *Capitalism, Socialism and Democracy* (first published in 1942), he went as far as establishing as the object of his inquiry a wider area including politics, society, and culture as well as the economy and discussing the historical evolution of the capitalist system in terms of the interrelationships between economic and noneconomic areas. This wider perspective gave Schumpeter an opportunity to complete a more satisfactory theory of evolution. In this sense, the theory of economic development in *Entwicklung* and *Business Cycles* might be called a halfway house between *Wesen* and *Capitalism*.

That his theory of economic development was half finished in a wider perspective can be ascertained from his treatment of the concept of innovation, the central idea of the theory. Schumpeter repeatedly argued that the innovation of the entrepreneur alters the customary channels of the economy from within the economic system, but it is merely a sort of rhetoric. Innovation appears to be an endogenous variable in the sense that it is carried out by the entrepreneur, but it is still an exogenous variable in the sense that it cannot be analyzed further from the standpoint of economics. It is, as it were, a change in an exogenous variable emerging within the economic system. Schumpeter's following remark admitted this:

[This book] is not at all concerned with the concrete factors of change, but with the method by which these work, with the *mechanism of change*. The "entrepreneur" is merely the bearer of the mechanism of change.  
(Schumpeter 1934:6In)

In other words, he did not intend to analyze innovation but to describe various

economic phenomena accompanying innovation. Despite his rhetoric, the fact that innovation was treated as exogenous in the system of economic analysis limited his theory of economic development.

Only in the overall perspective could an endogenous explanation of capitalist development be possible. When Schumpeter limited himself to the economic area, he defined capitalism as a set of three economic institutions: that is, market mechanism, private ownership, and bank credit. When he took a broader view, however, he conceived of capitalism as a civilization, including political system, class structure, ways of thinking, value systems, science and art, lifestyles, and so on. According to this conception, interrelationships among various areas of social life form a grand general equilibrium, so to speak. The evolution of capitalism must be explained through changing interrelationships among these areas. Economic development theory conceived in the economic area is not sufficient to indicate the historical behavior of capitalist society as a whole and is therefore no match for Marx's analysis of capitalism. Although Schumpeter claimed the similarity of his theory of economic development with Marx's with respect to the idea of endogenous changes, he admitted that "my structure covers only small part of his [Marx's] ground" (1934:60n).

Schumpeter thus adhered to the idea of analyzing the process of change in capitalist society as a whole rather than from just an economic perspective. This idea was inspired by Marx. Schumpeter praised Marx so highly because he sympathized with the form and content of Marx's social analysis.

First, concerning the formal aspect of analysis, Schumpeter thought well of Marx's view that economic systems evolve endogenously in the context of historical time. He even said that his concept and aim were exactly the same as those of Marx; their common idea was "a vision of economic evolution as a distinct process generated by the economic system itself" (1937:3). In other words, it was "the idea of a theory...of the actual sequence of those patterns or of the economic process as it goes on, under its own steam, in historic time, producing at every instant that state which will of itself determine the next one" (1950:43). In Schumpeter's mind, Marx's idea of immanent evolution was comparable to Walras's discovery of general equilibrium.

Second, with regard to the substantive content of analysis, Schumpeter accepted Marx's general vision of decaying capitalism. In Marx's scenario, capitalism would fall, through the revolution of the proletariat, after increased aggravation of its inherent contradictions. Schumpeter thought, in contrast, that capitalism must decline because of its economic success. The means of inference was entirely different between them, but they agreed that capitalism has a historical existence and does not continue to work like a perpetual motion machine. Schumpeter regarded this vision as a truly great achievement:

[T]he grand vision of an immanent evolution of the economic process—that, working somehow through accumulation, somehow destroys the economy as well as the society of competitive capitalism and somehow

produces an untenable social situation that will somehow give birth to another type of social organization—remains after the most vigorous criticism has done its worst. It is this fact, and this fact alone, that constitutes Marx’s claim to greatness as an economic analyst.

(1954:441)

Schumpeter was influenced by Marx’s ideology of endogenous evolution and the self-destruction of capitalism. I call this Marxian preconception or ideology *M* in Schumpeter. He wanted to describe the total process of capitalist development on the basis of Marxian ideology *M*. Schumpeter’s theory of social development, which was constructed in a manner consistent with this ideology, might be called *M+*. *M+* is quite different from Marx’s theory; in the above quotation, the rather poetic repetition of the word *somehow* implies that Schumpeter did not accept Marx’s causation for several crucial aspects of society and replaced it with his own.

### **Critique of the economic interpretation of history**

According to Marx’s materialistic or economic interpretation of history, the forces of social evolution can be found in the conflict between the productive forces and the relations of production. Schumpeter considered this view to be of “first-rank importance” and summarized its essential points in the following propositions (1954:439):

- 1 All the cultural manifestations of a society are ultimately functions of its class structure.
- 2 A society’s class structure is ultimately and chiefly governed by the structure of production.
- 3 The social process of production displays an immanent evolution.

In Marx, the class structure of capital and labor is the axis of production relations: it governs the process of capital accumulation and exploitation of labor in relation to the productive forces, on the one hand, and determines the superstructure including the social, political, and cultural processes, on the other. In this sense, the class structure is an important link between the superstructure and substructure. Schumpeter observed that Marx’s theory of social classes was incorporated as a submodel in the framework of the economic interpretation of history but rated it as least valuable because its exclusive emphasis on class struggle was patently wrong.

Schumpeter formulated propositions 1–3 so as to minimize the Marxian tone. His appraisal was as follows. Regarding proposition 1, Schumpeter denied the Marxian causation that the superstructure is unilaterally determined by its economic foundation and class structure and merely admitted a functional relationship between them. Rather, in Schumpeter’s analysis of capitalist evolution

the reverse relationship—the superstructure governs the economic process—is crucial. As for proposition 2, Schumpeter claimed that class structure is also determined by diverse factors other than economic ones; for example, he regarded the symbiosis of the bourgeois with the feudal nobility in the early modern ages as a characteristic of the superstructure in the capitalist system. He also paid particular attention to dynamic phenomena; the contents of classes, he maintained, change like “a hotel or an omnibus, always full, but always of different people” (1951b: 165). Finally, with respect to proposition 3, Marx’s thesis was that capital accumulation and class struggle proceed around the notion of classes so that the framework of capitalism will finally collapse. Schumpeter rejected all of these analytic apparatuses and scenarios of Marx and accepted only his general vision of immanent social evolution and self-disintegration of the capitalist economy.

Despite his claim that the two were similar, Schumpeter accepted neither Marx’s labor theory of value nor his theory of social classes, but only a general view that “the social process of production displays an immanent evolution (tendency to change its own economic, hence also social, data)” (1954:439), as is shown in proposition 3. This inheritance was no longer worthy of the label “economic interpretation of history;” Schumpeter jettisoned the Marxian substance of proposition 3 because he rejected propositions 1 and 2.

### **The interrelationship between economic and noneconomic areas**

The bases of Schumpeter’s social scientific research, therefore, were partly Walrasian ideology *W* (markets function interdependently so as to achieve general equilibrium, and thus capitalist economy is essentially stable) and partly Marxian ideology *M* (markets develop by their momentum and thus capitalist economy will break down). In fact, Schumpeter thought it necessary to refer to two great names, Walras and Marx, in order to explain his goal in the study of economic change (1937:2). More than a few authors in the Schumpeter literature have criticized the paradox and inconsistency in his admiration of, and indebtedness to, both Walras and Marx. This criticism is rooted in the popular misinterpretation of his statics-dynamics dichotomy that fails to understand the coordination of statics and dynamics in Schumpeter’s thought; it is no wonder that this misinterpretation is now extended to relations between economic and noneconomic areas in a wider perspective of universal social science.

Social events are related to each other, not only simultaneously but also intertemporally. Simultaneous relationships are the subject of the Walrasian general equilibrium theory; intertemporal relationships are the theme of the Marxian theory of evolution. Both relationships are necessary like the abscissa and the ordinate to explain any event at any point in time. But, it must be remembered, a theory of evolution must cover not only the economic area but also other social areas, because in a historical process the assumption of *ceteris paribus* is not valid. The contradiction of the two ideologies *W* and *M* is apparent only on an abstract level. The apparent contradiction is refuted by the idea,

based on historical experience, that the very success of the capitalist economy will produce noneconomic factors that are inconsistent with it; these factors will in turn worsen the economic performance of capitalism. Although the economy can work successfully by itself, the impact of external factors will ultimately spoil it. Accounting for the fact that the changes in noneconomic factors are the result of economic development, we can assume a grand general equilibrium between the economic and noneconomic spheres and its evolution over time. This was Schumpeter's integrated vision of *W* and *M*.

In Schumpeter's *Capitalism*, it is innovation, not class structure, that mediates bilateral interactions between economic and noneconomic spheres. Furthermore, the concept of innovation is linked, in unique ways, to Walrasian ideology and Marxian ideology respectively. First, despite the destructive and destabilizing effect of innovation, the capitalist economic system has a remarkable adaptive capacity to absorb it and to revitalize itself. Second, despite the growth and welfare-promoting effects of innovation, the capitalist economic system cannot survive indefinitely. These two propositions are not fundamentally different from the Walrasian and Marxian ideologies respectively, except that they now explicitly include the notion of innovation. In each case, it is claimed that, despite the effects of innovation, other forces (toward the equilibrium of markets and toward the fall of the system) will eventually govern the process because the auxiliary assumptions must be consistent with the basic ideologies located at the hard core.

### KEYNES AND SCHUMPETER

Since Walras and Marx are unmistakable ideological presuppositions of Schumpeter's thought, one must examine the structure of his vision in light of their theories. But it is also important to shed light on his vision from outside by referring to John Maynard Keynes. Both Schumpeter and Keynes, born in the same year, were concerned with the problems of inflation, deflation, unemployment, and business cycles caused by the instability of the capitalist economy in the first half of the twentieth century. Interestingly enough, they approached these problems from different directions and developed different theories to analyze the instability of capitalism. Keynes succeeded in constructing a new theoretical apparatus and redrawing the intellectual field of economics. To Schumpeter, Keynes was a tough rival. In order to understand the nature of Schumpeter's ideology, it is useful to compare him with Keynes in the context of the intellectual field at that time.

#### Different visions

Schumpeter and Keynes developed different views; Keynes's were accepted, whereas Schumpeter's were not. But Schumpeter, with confidence, continued to be critical of Keynes as his cool eyes stared at the limits of Keynes's economic theory.

At its hard core, neoclassical microeconomic analysis is concerned with the problem of resource allocation under the assumption of the full utilization of resources. The largest contribution of Keynes's theory was to reject the fundamental notion of neoclassical economics, namely the belief in the long-term stability and harmony of the capitalist economy, which was formulated in Say's law, and to establish, as a tool to analyze the unstable reality, the framework of macroeconomic analysis, which addresses the fluctuations of effective demand. The essence of Keynesian economics, it can be argued, is captured in the following phrases: "[T]his *long run* is a misleading guide to current affairs. *In the long run* we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again" (Keynes 1923:80). Keynes maintained that capitalism, if left alone, could not escape from difficulties and would decay because the capitalist economic system has inherent defects with regard to the saving and investment mechanism. The framework of equilibrium analysis and the corresponding picture of a stable economic order constituted Walrasian ideology in Schumpeter. Thus Keynes and Schumpeter disagreed on the most basic level of vision.

Moreover, Keynes's method of building preconception differed from that of Schumpeter. Keynes built a vision from the observation of an actual economy and attempted to deviate from traditional thought through the theoretical formulation of a vision. It might be better to say that he constructed a vision from a deviation between traditional thought and reality. On the contrary, Schumpeter believed in the continuity of great ideas and continued the thoughts of Walras and Marx in the form of vision. Most neoclassical economists at that time similarly looked at [reality with a preconception of the inherent stability of capitalism, but they did not pay much attention to the gap between their preconception and unstable reality. While both Schumpeter and Keynes were concerned about the anomaly in neoclassical theory, Schumpeter claimed the viewpoint of dynamism in order to explain the gap, whereas Keynes tried to resolve it.

Schumpeter's idea of decaying capitalism was not necessarily based on the observation of facts, such as the Great Depression, but largely on Marxian thought. He pursued the logical consequence of capitalist development to theorize this idea, and his theorizing might have been influenced by the stage theory of the German Historical School in that he placed socialism beyond the stage of mature capitalism. The nonempirical nature of Schumpeter's ideology should be stressed, but it is not correct to say that his ideas were always idealistic. In *Business Cycles* he made strenuous efforts to base his ideas on an empirical analysis of the historical process; however, in the broader perspective of sociocultural development, vision inevitably plays a greater role than observation and analysis.

### **Against Keynes**

Schumpeter's criticism of Keynes is summarized in three major points. First, Schumpeter distinguished between economic theory as science and economic



policy as practice and asserted that: “No science thrives...in the atmosphere of direct practical aim, and even practical results are but the by-products of disinterested work at the problem for the problems sake” (Schumpeter 1933:6). To him, economists’ conflicting answers to current policy issues and loss of credibility was a result of the confusion between theory and practice. In the discussion of practice, value judgments were introduced and a viewpoint obstructive to scientific inquiry was often adopted. Although the discipline of economics emerged historically from the discussion of practical problems, the progress of economics was made possible by its separation from politics and ethics. Schumpeter regarded this recognition as the regulative idea of science and maintained that it was a pillar of the studies in the history of science.

When Keynes’s *General Theory* (1936) was published, Schumpeter did not seem to understand its theoretical points, but he had a keen nose for distinguishing its political orientation. In his review of the *General Theory*, Schumpeter contended that Keynes was offering, in the garb of general scientific truth, policy recommendations that held meaning only with reference to the practical exigencies of the unique historical situation. He wrote:

This sublimates practical issues into scientific ones, divides economists... according to lines of political preference, produces popular successes at the moment, and reactions after—witness the fate of Ricardian economics—neither of which have anything to do with science.

(Schumpeter 1936:791–2)

This appraisal anticipated the immediate triumph of Keynesian economics and the later controversy between the Keynesians and the non-Keynesians (such as the monetarists, the libertarians, the rational expectations school).

Indeed, one characteristic of Schumpeter’s thought is its independence from a policy viewpoint, but this requires a careful interpretation. In fact, he warned economists against indulging in hasty policy discussions without a fundamental understanding of situations from a long-term perspective; it is a mistake to say that he was not interested in policy. The following remark in his preface to *Business Cycles* clearly indicates this position:

I recommend no policy and propose no plan. Readers who care for nothing else should lay this book aside. But I do not admit that this convicts me of indifference to the social duty of science or makes this book—including its historical parts—irrelevant to the burning questions of the day. What our time needs most and lacks most is the understanding of the process which people are passionately resolved to control. To supply this understanding is to implement that resolve and to rationalize it. This is the only service the scientific worker is, as such qualified to render.

(Schumpeter 1939, I: vi)

Nor does Schumpeter deny the application of science to diagnoses and recommendations; he even says:

I am speaking of science which is technique that turns out the results which, together with value judgements or preferences, produce recommendations, either individual ones or systems of them—such as the systems of mercantilism, liberalism and so on.

(1949:349)

The sum total of practical recommendations together with the underlying schema of social values is called “political economy” and is distinguished from economics (1954:1141).

Schumpeter thought, on the one hand, that science should be a neutral technique that could or should be used regardless of one’s objectives, as was seen in natural science; he wished that economics could progress to such a stage. But, on the other hand, he admitted that where the procedural rules of science do not work, science must be influenced by ideology, and that theories must be built so as to be consistent with a scientist’s goals and perspectives. Furthermore, insofar as Schumpeter held an instrumentalist philosophy of science, he had to accept this in principle. In this sense, the second and third points of Schumpeter’s criticism of Keynes clearly reflect the basic differences in their ideologies.

The second criticism focused on Keynes’s aggregate analysis. According to Schumpeter’s preconception, an economic system can be analyzed only in terms of the general interdependence of microeconomic variables. Viewed from this viewpoint, Keynes’s macroeconomic analysis considered some variables that related directly to practical problems and ignored all others for the sake of simplicity; thus it established simple macro relations among selected variables like a tautology to arrive at the conclusions that Keynes desired. Schumpeter called this “the Ricardian Vice” (1954:473); David Ricardo was the first theoretical economist who constructed models artificially on the basis of simplifying assumptions.

In Schumpeter’s interpretation, Keynes’s vision was that, although investment opportunity had declined, saving habits persisted, causing capitalism to fall into chronic functional disorder. In order to develop this vision within a theoretical apparatus, Keynes constructed a model by means of three macroeconomic functions: the consumption function, the efficiency-of-capital function, and the liquidity-preference function. Schumpeter, at last, said:

[I]f we place ourselves on the standpoint of Keynesian orthodoxy and choose to accept his vision of the economic process of our age...then there can be little objection to his aggregative analysis that produced his results.

(1951a: 281)

He admitted the consistency of Keynes's theory with his original vision but exclaimed with a touch of irony: "What a *cordon bleu* to make such a sauce out of such scanty material!" (1951a: 281).

Schumpeter, however, disagreed with Keynes's vision about the fall of capitalism. And macroanalysis, too, he considered to be an expedient for policy linked with this vision. His skepticism toward macroanalysis was consistent, and as late as 1939 he stated that "the saving-investment mechanism, as such, does not produce anything that could qualify for the role of an explanation of crises or depressions" (1939, I: 78).

The third criticism concerned Keynes's short-term analysis. For Schumpeter, the waves of boom and bust were as natural in a capitalist economy as the beats of the heart or the ebb and flow of the tide, and it was silly to let oneself be affected by temporary economic fluctuations without realizing the mechanism of capitalist development at work. Unemployment was essentially a temporary phenomenon that characterized the period of adaptation subsequent to the prosperity phase. In contrast, Keynes took this phenomenon seriously and made the vanishing of investment opportunity a vital point of his argument. But his explanation of the investment process seemed to Schumpeter entirely unrealistic; Keynes's reasoning that the lack of inducement to invest would produce unemployment had no greater practical importance than a statement that "motor cars cannot run in the absence of fuel" (1936:794).

While Keynes dealt only with some aggregate variables, ignoring all other factors, what was most intolerable to Schumpeter was Keynes's assumption that methods of production and the quantity and quality of capital equipment were not allowed to change. Under Keynes's theory, Schumpeter wrote:

*All the phenomena incident to the creation and change in this [industrial] apparatus, that is to say, the phenomena that dominate the capitalist process, are thus excluded from consideration.*

(1951:283)

Schumpeter's emphasis on the long-term perspective characterized the "protective belt" which defended his Walrasian ideology that the capitalist economy was stable in the long run. However, verification or falsification of a theory of sociocultural development is not easy because from his long-term perspective "a century is a 'short run'" (1950:163). Therefore, one cannot always expect that the underlying ideology will become extinct as far as a long-term theory is concerned. It follows that when Schumpeter, in the name of science, criticized Keynes for his practical orientation and specifically for his aggregate, short-term analysis, he himself was not free from the ideological bias underlying his own general equilibrium approach with its long-term perspective. His criticism of Keynes cannot be understood independently of his own ideology.

For good or for evil, Keynes's theory dominated the intellectual field. His demand management policy has been widely applied in the revival of capitalism, which

was once thought to have lost its self-adjustment mechanism. After World War II a full employment policy took hold in developed countries as a part of their economic system. The third quarter of the twentieth century is sometimes called the “Age of Keynes.” As Schumpeter died in 1950, he did not experience the heyday of the Keynesian economic system but witnessed Keynesian economics in vogue. Anyway, he could anticipate the problems that such an era would face, and this was Schumpeter’s last blow against Keynes. According to Schumpeter, Keynes, in order to overcome the alleged malfunction of capitalism, broke down the conventional belief that saving, as a part of the bourgeois scheme of life, and unequal distribution of income and wealth, as a necessary evil for progress, were social virtues. This was, Schumpeter declared, the essence of the Keynesian Revolution (1951a: 290). However, the renouncement of allegiance to the bourgeois scheme of values was the most basic noneconomic factor leading to the fall of capitalism. Thus, for Schumpeter, the very success of Keynes’s theory, which aimed at the revival of capitalism in the short run, proved to be helping the fall of capitalism over the long term. This was the severest critique that Keynes ever received.

At the Highgate Cemetery in London there is a huge tomb of Karl Marx; on it is inscribed an epitaph of his words, the eleventh thesis on Ludwig Feuerbach: “Philosophers have only interpreted the world in various ways. But what is important is to change it.”<sup>15</sup> This well represents the madness and ardor of Marx, seeking to overthrow capitalism by revolution. A suitable epitaph for Keynes, who worked for the reform of capitalism through rational policy, might be his declaration, “In the long run we are all dead.” Unlike Marx’s cry for revolution and unlike Keynes’s claim of control, Schumpeter’s uniqueness lay in his insight into the logic of things in the long run. Those who advocate changing reality, whether revolutionists or reformists, sharply grasp an aspect of some things but are unlikely to account for others. Schumpeter could not tolerate this mode of thought. I would choose as his epitaph the words of Pope Julius II (1443–1513), which Schumpeter quoted near the end of his life: “Mundus regitur parva sapientia” (With how little wisdom the world is governed!) (1950:376).<sup>16</sup>

### **A changing power distribution**

This chapter on the sociology of science cannot close without mention of a well-thumbed topic: why there was no Schumpeter school of economics. The explanation that has been regarded as the most plausible is the one given by Schumpeter himself, that since economics is not a philosophy but a science, there should be no schools in economics.<sup>17</sup>

Although this explanation is consistent with Schumpeter’s thought and work, it does not do justice to his sociological view of schools, leadership, and innovation. Moreover, it contradicts his personal portrait. Whether or not the academic success would result in the formation of a school, no one would deny the desire to win a reputation. The conventional view, which was probably forged in the heyday of

the logical positivist philosophy of science, seems to commit the error of explaining sociological phenomena of science by a normative proposition of the philosophy of science. The question of why there is no Schumpeter school seems to presuppose a kind of valuation that he deserved to have a school. The conventional answer rests on Schumpeter's ostensibly negative attitude toward schools, but the formation of schools is an objective fact that is related not only to a scientific appraisal but also to a highly sociological phenomenon. Therefore, it is important to ask why Schumpeter could not dominate the academic field, independently of his positive or negative attitude toward schools. To this question the existence of Keynes is crucially important.

The Keynesian Revolution in terms of science and ideology was complete; the loyalty test for the Keynesians was a denial of Say's law. From the 1930s to the 1960s, however, the general equilibrium theory, detached from the problem of reality, was concerned with the mathematical inquiry into the existence, uniqueness, and stability of equilibrium in order to harden its "hard core." Despite Schumpeter's interest in general equilibrium analysis, he had nothing to do with this development.

Of course, there were inherent reasons why Schumpeter could not have a school. The scope of this chapter does not permit an examination of the factors that led to his isolation; rather, the question should be answered by his career as a whole. But one point relating to his ideology can be raised here. Although mathematical economics showed remarkable progress during the period under study, Schumpeter could not lead it in the direction of his vision. Mathematical economics and econometrics developed along the track of Keynesian macrodynamics. Schumpeter's failure to attract this emerging potentiality of economic analysis was due not only to his lack of a mathematical orientation but also to the unamenability of his vision of dynamics to mathematical manipulation.

Furthermore, another sociological factor was that Schumpeter was not blessed with the opportunity for long-standing positions in academic centers. In the first half of his life he was not accepted by the Austrian and German academic establishment. Czernovitz, Graz, and Bonn were just provincial; his work in government and banking was a digression from this point of view. He was a gypsy economist.<sup>18</sup> In the second half of his life he stayed at Harvard for seventeen years; it was a chance. But, except for having some influence on studies of entrepreneurial history, he could not form a school at Harvard, where after 1936, there was a surge of Keynesian Revolution.

After Keynesian economics was established as a new orthodoxy, all the claims arising from theoretical and political issues were heaped upon it. The practical problems of an economy that could not be solved by Keynesian economics were pointed out one after the other: cost inflation instead of demand inflation, rigidity in fiscal policy operation under democracy instead of functional finance, economic development instead of economic stability, and so forth. In the mean-time, neoclassical economics regained its strength through a series of objections to Keynesian economics: neoclassical synthesis, monetarism, libertarianism, new

Austrian economics, rational expectation, supply-side economics—all of these movements were reactions to Keynesian economics.

After Keynesian economics was properly stored in the toolbox of economics, changes in the distribution of power in the economics field brought about the restoration of Keynes's two former rivals: Friedrich von Hayek and Schumpeter. In the case of Hayek, freedom was emphasized instead of Keynesian government intervention; in the case of Schumpeter, economic development was stressed instead of the Keynesian preoccupation with short-term economic stability.<sup>19</sup>

## NOTES

- 1 The account in this paragraph is based on Kordig (1978).
- 2 A survey of the logical positivist view of science and its criticism is given in Suppe (1977).
- 3 For a survey of the recent sociology of science, see Knorr-Cetina and Mulkay (1983), Coats (1984), and Mäki (1992).
- 4 The common English translation as “knowledge is existentially determined” is not appropriate, for it conveys the one-sided causal determination from society to knowledge. It is strange to encounter this translation at the place where Mannheim warns that the word *Seinsverbundenheit* does not indicate the exact nature of the correlation between society and knowledge (Mannheim 1931:643; 1936:239). See also Wolff (1993:42n).
- 5 The following remarks might be misleading: “the original vision *is* ideology by nature” (1949:351); “vision is ideological almost by definition” (1954:42). What Schumpeter meant here was that there is nothing for vision but to embody ideology.
- 6 According to Schumpeter's plan, Section 1 of Chapter 4 of *History*, which discusses the relationship between science and ideology, was to be followed by sections on “The Motive Forces of Scientific Endeavor and the Mechanisms of Scientific Development” and “The Personnel of Science in General and of Economics in Particular.” See the editor's note (Schumpeter 1954:44–5).
- 7 A little later, at his farewell talk at Bonn, Schumpeter expounded the same view: “I have never tried to bring about a Schumpeter School. There is none and it ought not to exist. . . . Economics is neither a philosophy of economy nor a world view. . . . Hence there can be no ‘schools’ in our field” (Schumpeter 1952:600–3).
- 8 See Allen (1991: vol. 1, xx).
- 9 Bottomore criticizes Schumpeter for neglecting the progress of science through confrontation between rival theories (Bottomore 1992:21–2, 25–7). But, seen from above, this is far from the truth. Furthermore, in the same place he attributes the idea of the progress of science as “slow accretion” to Schumpeter by quoting Schumpeter (1954:9) and criticizes him for not providing more recent conceptions of scientific revolution. Again, this is not true. Schumpeter spoke about “slow accretion” only for the origins of “a science as distinguished from the origins of a particular method or the foundation of a ‘school’”; for the latter, there was obviously a dramatic breakthrough (1954:9). Bottomore does not understand that Schumpeter did have a framework for his statics-dynamics dichotomy, i.e., a conception of scientific growth within a paradigm and that of a paradigmatic change.
- 10 For the contrast between phenomenology and historicism, see Mannheim (1952:154–79).
- 11 In the second edition of *Entwicklung* Schumpeter abandoned the double dichotomy of statics-dynamics with respect to the phenomena as well as to the theoretical tools (1926:99n; 1934:64n). The customary use of the word *dynamics* increasingly had been to indicate analysis that links quantities pertaining to different points of time, following the idea of Ragnar Frisch. In his own system Schumpeter now used static state versus

- evolutionary state (or development) for phenomena, and statics versus the theory of development for analysis. See also Schumpeter (1954:9–63–7). But we do not necessarily follow such a strict usage.
- 12 The first three pairs of the static–dynamic dichotomy were given in the second edition of *Entwicklung* (1926:121–2; 1934:82–3). The fourth pair was mentioned in the first edition in place of the first pair (1912:512–13).
  - 13 Weintraub specifies the hard core of the neo-Walrasian research program consisting of the following propositions:
    - 1 there exist economic agents,
    - 2 agents have preferences over outcomes,
    - 3 agents independently optimize subject to constraints,
    - 4 choices are made in interrelated markets,
    - 5 agents have full relevant knowledge, and
    - 6 observable economic outcomes are coordinated, so they must be discussed with reference to equilibrium states (Weintraub 1985:109).
  - 14 A similar interpretation is given by Mark Blaug. According to him, “Lakatos’s ‘hard core’ expresses an idea similar to that conveyed by Schumpeter’s notion of ‘Vision’—‘the preanalytic cognitive act that supplies the raw material for the analytic effort’ or Gouldner’s ‘world hypotheses,’ which figure heavily in his explanation of why sociologists adopt certain theories and reject others” (Blaug 1976:157n). If it is assumed that one of Schumpeter’s visions was Walras, then Blaug’s general view of hard core vis-à-vis vision might coincide with my interpretation of statics vis-à-vis-dynamics.
  - 15 Karl Marx and Friedrich Engels, *The German Ideology* (1845–7).
  - 16 Quoted in Chapter 28 (“The Consequences of the Second World War”) of *Capitalism*, which was added to its second edition (1947). This saying is also attributed to Count Axel Oxenstierna of Sweden (1583–1654). A.Partington (ed.), *The Oxford Dictionary of Quotations*, 4th edn., 1992, p. 503.
  - 17 This view is best expressed by Haberler (1951:45–7). See also Allen, who supports Haberler’s view (1991, II: 255–6).
  - 18 The word was suggested by Martin Bronfenbrenner.
  - 19 According to Augello’s work on the Schumpeter bibliography, there were about 200 entries on Schumpeter—including books, articles, and other materials—during his career (1907–49); 360 in the fifties; 200 in the sixties; 250 in the seventies; and 900 in the eighties. Although the last figure reflects the effects of the centenary of his birth, since Schumpeter’s death there has been a growing interest in appraising his work.

## REFERENCES

- Allen, Robert Loring (1991) *Opening Doors: The Life and Work of Joseph Schumpeter*, 2 vols., New Brunswick, NJ, and London: Transaction Publishers.
- Augello, Massimo M. (1990) *Joseph Alois Schumpeter: A Reference Guide*, Berlin-Heidelberg: Springer-Verlag.
- Barnes, Barry (1974) *Scientific Knowledge and Sociological Theory*, London: Routledge & Kegan Paul.
- Blaug, Mark (1976) “Kuhn versus Lakatos or Paradigm versus Research Programmes in the History of Economics,” in S.Latsis (ed.) *Method and Appraisal in Economics*, Cambridge: Cambridge University Press.
- Bloor, David (1976) *Science and Social Imagery*, London: Routledge & Kegan Paul.
- Bottomore, Tom (1992) *Between Marginalism and Marxism: The Economic Sociology of J.A.Schumpeter*, New York: Harvester Wheatsheaf.

- Bourdieu, Pierre (1990) *The Logic of Practice*, translated by Richard Nice, Stanford: Stanford University Press. Original edition, *Le sens pratique*, Les Editions Minuit, 1980.
- Clemence, Richard V. (ed.) (1951) *Essays of J.A.Schumpeter*, Cambridge: AddisonWesley Press.
- Coats, A.W. (1984) "The Sociology of Knowledge and the History of Economics," *Research in History of Economic Thought and Methodology* 2.
- Elliott, John E. (1983) "Introduction to the Transaction Edition," in J.A.Schumpeter, *The Theory of Economic Development*, New Brunswick, NJ, and London: Transaction Books.
- Feyerabend, Paul K. (1975) *Against Method*, London: Verso.
- Haberler, G. (1951) "Joseph Alois Schumpeter, 1883–1950," in S.E.Harris (ed.) *Schumpeter: Social Scientist*, Cambridge, MA: Harvard University Press.
- Hanson, Norwood Russel (1958) *Patterns of Discovery*, Cambridge: Cambridge University Press.
- Keynes, John Maynard (1923) *A Tract on Monetary Reform*, London: Macmillan.
- (1936) *The General Theory of Employment, Interest and Money*, London: Macmillan.
- Knorr-Cetina, Karin D. and Mulkay, Michael (1983) "Introduction: Emerging Principles in Social Studies of Science," in K.D.Knorr-Cetina and M.Mulkay (eds.) *Science Observed: Perspectives on the Social Study of Science*, London: Sage Publications.
- Kordig, Carl R. (1978) "Discovery and Justification," *Philosophy of Science* 45 (March).
- Kuhn, Thomas S. (1962) *The Structure of Scientific Revolutions* (2nd edn. 1970), Chicago: University of Chicago Press.
- Lakatos, Imre (1970) "Falsification and the Methodology of Scientific Research Programmes," in I.Lakatos and A.Musgrave (eds.) *Criticism and the Growth of Knowledge*, London: Cambridge University Press.
- (1971) "History of Science and Its Rational Reconstruction," in R.C.Buck and R.S.Cohen (eds.) *PSA 1970: In Memory of Rudolf Carnap. Boston Studies in the Philosophy of Science*, vol. VIII, Dordrecht, Holland: Reidel.
- Mäki, Uskali (1992) "Social Conditioning of Economics," in N. de Marchi (ed.) *PostPopperian Methodology of Economics: Recovering Practice*, Boston: Kluwer Academic Publishers.
- Mannheim, Karl (1936) [1931] "The Sociology of Knowledge," translated by L.Wirth and E.Shils in *Ideology and Utopia*, London: Routledge and Kegan Paul. Original edition : "Wissenssoziologie," in A.Vierkandt (ed.) *Handwörterbuch des Soziologie*, Stuttgart: Ferdinand Enke.
- (1952) [1925] "The Problem of a Sociology of Knowledge," translated by P.Kecskemeti in *Essays on the Sociology of Knowledge*, London: Routledge & Kegan Paul. Original edition: "Das Problem einer Soziologie des Wissens," *Archiv für Sozialwissenschaft und Sozialpolitik* 53; reprinted (1964) in *Wissenssoziologie*, Berlin: Luchterhand.
- McCrea, R.C. (1913) "Schumpeter's Economic System," *Quarterly Journal of Economics* 27 (May).
- Mulkay, M. (1979) *Science and the Sociology of Knowledge*, London: George Allen & Unwin.
- Nagel, Ernest (1961) *The Structure of Science: Problems in the Logic of Scientific Explanation*, New York: Harcourt, Brace & Co.
- Popper, Karl (1959) [1935] *The Logic of Scientific Discovery*, London: Hutchinson. Original edition: *Logik der Forschung*, Tübingen: J.C.B.Mohr.
- Reichenbach, Hans (1938) *Experience and Prediction: An Analysis of the Foundations and the Structure of Knowledge*, Chicago: University of Chicago Press.
- (1951) *The Rise of Scientific Philosophy*, Berkeley and Los Angeles: University of California Press.
- Samuelson, Paul A. (1943) "Dynamics, Statics and the Stationary State," *Review of Economic Statistics* 25 (February).
- Scheler, Max (1926) *Die Wissensformen und die Gesellschaft*, Leipzig: Der Neue-Geist Verlag.
- Schumpeter, Joseph Alois (1908) *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*, Munich and Leipzig: Duncker & Humblot.
- (1912) *Theorie der wirtschaftlichen Entwicklung*, 1st edn., Leipzig: Duncker & Humblot.



- (1915) *Vergangenheit und Zukunft der Sozialwissenschaften*, Munich and Leipzig: Duncker & Humblot.
- (1926) *Theorie der wirtschaftlichen Entwicklung: Eine Untersuchung über Unternehmervergewinn, Kapital, Kredit, Zins und den Konjunkturzyklus*, 2nd edn., Leipzig: Duncker & Humblot.
- (1931) “The Present State of Economics or on System, Schools and Methods,” *Kokumin Keizai Zasshi* 50 (May).
- (1933) “The Common Sense of Econometrics,” *Econometrica* 1 (January). Reprinted in R.V.Clemence (ed.) (1951) *Essays of J.A.Schumpeter*, Cambridge: Addison-Wesley Press.
- (1934) *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, translated by R.Opie, Cambridge, MA: Harvard University Press.
- (1935) “Meetings of the Econometric Society in Chicago and Pittsburgh, December 1934,” *Econometrica* 3 (July).
- (1936) “Review of Keynes’s General Theory,” *Journal of the American Statistical Association* 31 (December). Reprinted in R.V.Clemence (ed.) (1951) *Essays of J.A.Schumpeter*, Cambridge: Addison-Wesley Press.
- (1937) “Preface to the Japanese Edition of *Theorie der wirtschaftlichen Entwicklung?* Tokyo: Iwanami Shoten. Reprinted in R.V.Clemence (ed.) (1951) *Essays of J.A.Schumpeter*, Cambridge: Addison-Wesley Press.
- (1939) *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*, 2 vols., New York and London: McGraw-Hill.
- (1949) “Science and Ideology,” *American Economic Review* 39 (March). Reprinted in R.V.Clemence (ed.) (1951) *Essays of J.A.Schumpeter*, Cambridge: Addison-Wesley Press.
- (1950) *Capitalism, Socialism and Democracy*, 3rd edn., New York: Harper & Brothers (1st edn. 1942; 2nd edn. 1947).
- (1951a) *Ten Great Economists from Marx to Keynes*, New York: Oxford University Press.
- (1951b) *Imperialism and Social Classes*, translated by H.Norden, New York: Augustus M.Kelley.
- (1952) Aufsätze zur ökonomischen Theorie, ed. by E.Schneider and A.Spiethoff. Tübingen: J.C.B.Mohr.
- (1954) *History of Economic Analysis*, New York: Oxford University Press.
- (1982) “The ‘Crisis’ in Economics—Fifty Years Ago,” *Journal of Economic Literature* 20 (September). Lecture originally delivered at Tokyo University of Commerce in 1931.
- Shionoya, Yuichi (1990a) “Instrumentalism in Schumpeter’s Economic Methodology,” *History of Political Economy* 22 (Summer).
- (1990b) “The Origin of the Schumpeterian Research Programme: A Chapter Omitted from Schumpeter’s *Theory of Economic Development*” *Journal of Institutional and Theoretical Economics* 146 (June).
- Stolper, Wolfgang F. (1982) “Aspects of Schumpeter’s Theory of Evolution,” in H. Frisch (ed.) *Schumpeterian Economics*, New York: Praeger.
- Suppe, Frederick (ed.) (1977) *The Structure of Scientific Theories*, 2nd edn., Urbana: University of Illinois Press.
- Weintraub, E.Roy (1985) *General Equilibrium Analysis: Studies in Appraisal*, Ann Arbor: University of Michigan Press.
- Wolff, Kurt H. (ed.) (1993) *From Karl Mannheim*, 2nd edn., New Brunswick, NJ: Transaction Publishers.

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