STANDING ON THE SHOULDERS OF GIANTS: CLASSICAL WRITING IN PRICE THEORY

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This is a well-chosen selection of classical writings about price theory, that jewel in the crown of mainstream economic theory, with a number of sparkling introductions to the various phases of its history. As the editor quite rightly points out in his introduction: "For the past 300 years, economists have been working with one version or another of the so-called gravity theory: long-run natural or equilibrium reasoning investigates the logical static determination of relative prices, short-run market or disequilibrium reasoning scrutinise the formation of relative prices (i.e., the dynamic process […] that is necessary to bring about these natural or equilibrium prices) [my italics]" (Bridel, i, p. xiv). In the immortal, endlessly related words of the 'founding father' of economics: "The natural price […] is, at it were, the central price, to which the prices of all commodities are continually gravitating. Different accidents may sometimes keep them suspended a good deal above it, and sometimes force them down even below it. But whatever may be the obstacles which hinder them from settling in this centre of response […], they are constantly sending towards it". This 'gravity theory' remained the fundamental metaphor of price determination, not only in Ricardo, Mill and Marx, but also in Jevons, Marshall and Walras. "The market", as Walras put it, "is like a lake agitated by the wind, where the water is incessantly seeking its level without ever reaching it". Price theory is, and always has been, about the existence, uniqueness and stability of general equilibrium in a regime of perfect competition but existence has always proved more amenable to rigorous demonstration than uniqueness and stability. Once competition has done its work and achieved an end-state, economists ever since Adam Smith have managed to throw light on the nature of "natural price" in long-run equilibrium. But until then, when competition is still grinding 'market prices' into equality with 'natural prices', much less, even of a non-rigorous qualitative kind, has been said about the process of equilibrium. One purpose of an anthology such as this is to demonstrate how long it can take for so simple a distinction about price determination as that between existence and
stability of equilibrium, or between a final end-state and a process of moving towards it, to take hold of the professional community of economists. Perhaps Hayek saw it in 1938 in a paper at the very end of this anthology but even he failed to see it as clearly as we do with the benefit of hindsight provided by the rigorous proof of existence in Arrow and Debreu in 1954, followed by the utter failure of Arrow and Debreu’s followers to provide any proof, rigorous or otherwise, of both uniqueness and stability.

I shall quibble a little here and there with the editor’s selections but, make no mistake about it, this is a splendid piece of work. My only real complaint is the inadequate Table of Contents in the opening pages of Volume 1, which is as much the fault of the publisher as that of the editor. When we examine that Table of Contents, we learn for example that there are selections from Smith’s Wealth of Nations but if we want to know just what was selected from the almost 1,000 pages of that Volume, we have to go to the relevant section of Volume 1, and this procedure has to be followed for every one of the 76 books and articles in the anthology. Since one of the audiences addressed in these reprints is students in the history of economic thought, this attempt to skimp on a complete table of contents is totally unjustified. I shall try to make up for it by now listing (and discussing) every one of the items selected.

We begin, of course, with Aristotle, and the pages on justice in exchange in his Politics and Nicomachean Ethics, the Works of Aristotle, ed. by W.D. Ross (1925), Vol. 9, Bk. 1, chs. 8-10. Although these pages have given rise to intense debates ever since the Middle Ages, their meaning—a mathematical analysis of isolated exchange in a world that lacked a market economy—remains as obscure as hardly to warrant discussion. Next comes the equally famous paragraphs in Thomas Aquinas’s Summa Theologiae that A.E. Monroe reprinted in his Early Economic Thought (1924). It contains the basic scholastic notion of ‘the just price’ to which the market price must ultimately conform if justice is to prevail. As Professor Bridel (p. 28) rightly observes: ‘this is the first time the gravitation method enters a discussion about how prices are determined’.

We then move to the eighteenth century when economics as an autonomous discipline took root for the first time in England and France. John Locke (a few pages from his pamphlet, Some Consideration of the Consequences of the Lowering of Prices, 1691) Nicholas Barbon (brief excerpts from his Discourse of Trade, 1690) and William Petty (excerpts from the Economic Writings of William Petty, ed. by C.H. Hull) stand as representative of English thought on price theory before Smith. Richard Cantillon (excerpts, but not enough excerpts, from his trail-blazing Essay on the Nature of Commerce (1755), François Quesnay (excerpts from his essays on Corn (1756) and on Men (1756) and A.R.J. Turgot (excerpts from his Reflections on the Formation and the Distribution of Wealth, 1766, as well as a crisp letter to Hume in 1767) stand as representative of French thought on the same range of questions. In all these authors, there is a clear distinction drawn between current market prices ruled by demand and supply and “intrinsic”, “fundamental”, “natural” prices dependent on constant exchange with the latter serving as a pivot, a centre of gravity, around which the former fluctuate. In short, there is nothing here, as with Smith’s treatment of the gravity model in Book 1 of the Wealth of Nations. Nevertheless, he stated it as clearly as anyone did in the eighteenth century and, moreover, illustrated its application in the determination of the price of
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by the first chapter of Hicks’s Value and Capital (1939). Hicks’s book crowned the Ordinal Revolution which began with Hicks and Allen’s famous paper, “A Reconsideration of the Theory of Value” (1934) — no paper in economics has ever entered so decisively into the canons of orthodoxy — written in ignorance of Slutsky’s earlier one on “The Theory of Budget of the Consumer” (1915), which said it all before more tersely in the very same mathematical language. One of Samuelson’s first papers — aged 21! — “A Note on the Theory of Consumers’ Behaviour” (1938), topped Hicks and Allen by getting rid entirely of utility and opting instead for revealed preferences. Friedman and Savage’s elegant paper, “The Utility Analysis of Choices Involving Risk” (1948) showed that the old utility theory was rich in unexplored empirical implications. Some pages from the opening chapter of Neumann and Morgenstern’s Theory of Games and Economic Behaviour (1944) resurrected cardinal utility as relevant to choices of risky alternatives that resemble purchases of lottery tickets.

Sraffa’s “The Laws of Return Under Competitive Conditions” (1926) launched the theory of imperfect competition by showing that failing demand curves were one way to reconcile perfect competition with increasing returns — it is written as a criticism of Marshall but no paper was ever less well directed. Jacob Viner’s “Cost Curves and Supply Curves” (1931) is how we all learned about the external economies of large-scale production and the interaction between plant curves and industry envelope curves. This is followed by Ronald Coase, “The Nature of the Firm” (1937) one of those seminal papers, the source and origins of both transaction cost economics and much present-day Law and Economics which was largely ignored by its early readers. Next we have Hotelling’s famous contribution to spatial economics, competition by means of relocation, misnamed “Stability in Competition” (1929). Then a brief excerpt of Joan Robinson’s Economics of Imperfect Competition (1933), matched by a slightly longer excerpt from the third edition of Chamberlin’s Theory of Monopolistic Competition (1946) on the difference between monopolistic and imperfect competition.

An additional entry from The Theory of Games and Economic Behaviour, the second half of its introductory chapter, extends the earlier analysis of two-person zero-sum games to n players free to enter into coalitions with each other. Neumann and Morgenstern were always convinced that game theory was about co-operative games if only because a rational player would always join with other players if in so doing they could improve their pay-off. It was two short papers (1950; 1951) by John Nash — he of the film The Beautiful Mind — reprinted here that proved that an n person non-cooperative game has a solution, something which Neumann and Morgenstern had denied; we call it now a ‘Nash equilibrium’, namely a set of strategies and concomitant pay-offs such that no player can improve his pay-off by unilaterally adopting another strategy. A Nash Equilibrium is clearly a Pareto-optimal equilibrium, a best outcome for everybody if every player is rational, indeed super-rational. But how do players ever arrive at that maximum maximin? Here we have once again the fundamental distinction between the existence and the stability of equilibrium. It is one thing to be in equilibrium and quite another thing to travel towards it, particularly when it is market forces that are supposed to be driving towards it. We shall see below how the famous paper by Arrow and Debreu, reprinted in Volume 6, employed the notion of
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If only because a negatively sloped excess demand for a commodity is a minimum requirement for the stability of its price. However, in a series of papers—Hugo Sonnenschein, "Market Excess Demand Functions" (1972), Rolf Mantel, "On the Characterisation of Aggregate Excess Demand" (1974), and Gerard Debreu, "Excess Demand Functions" (1974)—it became clear to all concerned that even if individual demand functions are perfectly well-behaved in conforming to all the usual restrictions imposed on them in standard theory, aggregating them does not in general yield well-behaved aggregate excess demand functions; they may take almost any form and thus result in chaos as easily as stability. In the summing up words of Professor Bridel: "Within the strict compass of general equilibrium analysis, it is impossible to demonstrate that market prices oscillate around equilibrium prices; that a privately owned economy is self-adjusting; and that, eventually, the mythical law of supply and demand can be substantiated" (Vol. 6, p. xxii).

We now return to the relationship between game theory and general equilibrium with the deservedly famous paper by Martin Shubik on "Edgeworth Market Games" (1959), which discovered the concept of the core of an economy in Edgeworth's Mathematical Psychics that is followed by Debreu and Herbert Scarf, "A Limit Theorem on the Core of an Economy" (1965) and the first chapter of Hildenbrand and Kirman's book, Introduction to Equilibrium Analysis (1976), which serves to remind us of the intimate but surprising relationship between Neumann and Morgenstern's solution to an n-person game, the notion of a Pareto-optimal core and the competitive equilibrium of an economy.

Is general equilibrium a case of 'emperor's clothes'? Yes, says Nicholas Kaldor in "The Irrelevance of Equilibrium Economics" (1972). No, says Frank Hahn, "On the Notion of Equilibrium in Economics" (1974). In both cases, they gauge not so much "equilibrium economics" but its specific Arrow-Debreu-McKenzie version. Kaldor's attack centres on the non-empirical nature of Walrasian general equilibrium theory. Hahn's defence takes a negative form: general equilibrium theory is valuable for what it forbids rather than what it affirms. This must be one of the most illuminating debates on the significance of an economic theory that we have witnessed in recent years.

The final section of Volume 6 is a strange grab bag of Thorstein Veblen's great paper, "The Limitations of Marginal Utility" (1909), a chapter from John Commons' obscure book on Institutional Economics (1934), Dimitriev's highly original "The Theory of Value of David. Ricardo, an Attempt at a Rigorous Analysis" (1908), and the first two chapters of Piero Sraffa's Production of Commodities by Means of Commodities (1960). Sraffa's course resurrected the classical idea that commodity prices and the distribution of factor incomes are not determined simultaneously by the same principles but that distribution is determined separately from and prior to prices. However, there is the same old classical concentration on long-run natural prices, and unlike Smith and Ricardo, there is no gravity model of price determination in that nothing is said about the process whereby market prices are made to converge on natural prices. Moreover, the method of settling questions by counting equations and unknowns and expressing prices in terms of a single numéraire result in the curious picture of Walras grafted on Ricardo. No wonder then that the real meaning of Sraffa's book remains controversial even now al-
most a half century after it was written.

An excerpt of Michael Kalecki's "Costs and Prices" (1943) underlines the possibility of a pricing theory based on oligopoly and trade unions instead of perfect or even imperfect competition. The book ends with "Economics and Knowledge" (1946) by Hayek, one of the truly profound contributions to twentieth-century economics. It introduced the idea of competition as a discovery process, overcoming the "division of knowledge" among individual transactors, and reconciling their individual plans by facilitating communication.

In his view, the history of price theory demonstrated that economists had long assumed that the very problem they were addressing had in fact been solved: "in our analysis, instead of showing that bits of information the different persons must possess in order to bring about that result [that prices tend to correspond to costs], we fall in effect back on the assumption that everybody knows everything and so evade any real solution of the problem" (Vol. 6, p. 269). It is indeed a fitting comment on the whole of the books and articles included in this Volume.


This is a selection of recent essays by G.C. Harcourt, edited in a beautifully produced volume on the occasion of his 50th intellectual birthday as an economist. The essays are primarily theory-oriented -- a companion volume (Harcourt 2000) is dedicated to policy matters. The book consists of six parts besides an introduction, "50 Years a Keynesian". The topics of these somewhat overlapping parts are the relevance of Keynesian economics today (Part I); intellectual biographies, grouping together Joan Robinson, Lorie Tarshis, Austin Robinson, Karl Marx, and John Maynard Keynes (Part II); tributes to George Shackle, Josef Steindl, Bill Phillips, Piero Sraffa, and Hyman Minsky (Part III); review articles dealing with Joan Robinson and Nicholas Kaldor (Part IV); a survey on Post-Keynesian thought (Part V); and finally a series of general essays (Part VI).

These essays provide interesting and sometimes provocative reading for a variety of audiences. However, here we should ask what makes them interesting from a history of economic thought perspective. And, quite apart from Harcourt's incisive criticism of modern economists that they "seem to think economics began ten years ago with a moving peg" (p. 202), the answer is obvious: Harcourt has simultaneously been actor and audience of a debate that shaped the last 50 years of the development of our discipline, and therefore he sees his own and his contemporaries' contributions as part of a larger struggle between two competing approaches, namely that between classical and neoclassical schemes of thought. The opposition between these two schools pervades most of the articles collected in this volume, and in the following we will look more closely on some of Harcourt's contributions from this point of view.

The subject matter of the classical approach is the creation, extraction, distribution and use of the surplus in a capitalistic economy, as analysed in the classical writings from Smith to Marx, and more recently reformulated by Joan Robinson and Sraffa (pp. 159-160). These theories of the dynamics of accumulation are to be supplemented by those of Keynes and Kalecki, which deal with the problem of the realisation of the potential surplus (pp. 163-165). Thus rephrased, for example, the debates on the effectiveness of wage cuts (in Keynes's as well as in our times) center on the question if and how the potential boost to higher profits (and thereby the incentive to increase production) can be secured by an appropriate level of effective demand. Yet, as attractive as such a synthesis of Marx and Keynes, and probably even more so Kalecki, may appear, it might be asked whether Marx did not frame the question of the realisation problem in real terms and looked for real causes, whereas Keynes's is a theory of an essentially monetary economy and his effective demand failures stem from the monetary organisation of exchange. Or put in another way, can this example of the 'internal contradictions of capitalism' be reduced to a mere problem of the proper conduct of monetary policy, or of a cleverly chosen incomes policy? Anyway, Harcourt's essays are characterised by his manifold attempts to forge these elements into not a grand theoretical system, but an engine of explanation, or still