Book Review

Neil Hart. *Alfred Marshall and Modern Economics: Equilibrium Theory and Evolutionary Economics*. Basingstoke: Palgrave Macmillan. 2013. Pp. xiii + 271.

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This book examines the basis for Marshall's drive to take a biological perspective on economics, how the way that he pursued it allowed equilibrium-based economics to supplant his evolutionary perspective shortly after his death, how important aspects of his way of thinking have resurfaced from time to time, and how his vision complements the more Schumpeter-inspired work of Nelson and Winter that underpins the thriving field of modern evolutionary economics. In charting how economics has evolved, Hart meticulously examines a huge literature. Naturally, this includes the somewhat different approaches to evolutionary economics offered by Marshall, Veblen and Schumpeter, as well as covering the imperfect competition 'revolution', the Oxford Economists' Research Group, capabilities-based approaches to the firm and the role of routines in modern evolutionary theory. But he also relates his theme to the development of macroeconomics, the Cambridge Capital Controversies, cumulative causation and New Growth Theory.

Hart is very good at exposing how the equilibrium-based method always runs into difficulties if knowledge is not taken as given, and that underpinning

Marshall's grand vision was a sense of how the economy gradually evolved as consumers and producers developed their knowledge. In Marshall's vision this process of knowledge development takes time and improvements in productivity depend upon firms accumulating resources and developing larger-scale systems and making them work effectively. Though poorly informed economists might believe Marshall's contribution to be as a pioneer of partial equilibrium analysis, his vision was antithetical to the reversible thought experiments that typically characterise that mode of analysis. Had he enjoyed modern computational resources, his vision would have taken him in the direction of simulation models but, as it was, when he wanted to offer something more formal than his strongly evolutionary verbal analysis, equilibrium-focused tools were all he had at his disposal.

Mainstream equilibrium economics emerges in a very poor light in this book. Marshall's historical view of the economy and his emphasis on causal chains lends weight to the logical victory of Robinson, Kaldor and Pasinetti from the English side of the Cambridge Capital Controversy, yet growth models based on aggregate production functions are still popular. So, too, are general equilibrium models that lack any causal substance and were discredited by the 'palace revolution' (p. 158) of the Sonnenschein–Mantel–Debreu theorems. Some did switch to game theory to try to develop models with more causal content on how market forces work, but typically they did so by making assumptions about rationality that would not apply in the real-world of complexity and change. Their obsession with finding determinate outcomes via formal models limits the appeal of modern simulation models to them, whereas Hart's book demonstrates that, in principle, modern evolutionary economists and heterodox approaches are natural complements.

Two theoretical insights will particularly stick with me from this book. The first is the incompatibility of evolution with long-run equilibrium. It is not merely that the process by which the economy gropes its way towards an equilibrium keeps changing the potential equilibrium by changing the knowledge that economic agents have, but also that even a situation in which demand and supply happened to balance in all markets would lead some economic agents to want to change their behaviour, for example by seeing whether they could do even better via innovation: order can promote change (p. 168). Secondly – and entailing a lesson about the importance of reading Marshall first-hand and/or studying what experts such as Hart have gleaned from doing so – is Marshall's view that external economies are knowledge-based. I had previously tended to think that external economies in Marshallian business districts arise via greater specialisation in subsidiary service that is made possible by a larger market, reduced marketing costs from operating in a location that is widely known for specialising in a particular product, and easier access to market intelligence and well-qualified workers. However, what Hart teaches us is that Marshall saw external economies generally as arising via the acquisition of knowledge consequent on being in the midst of rivals engaged in a related line of business (for example, knowledge embodied in a worker that a firm poaches from its rivals), and because the scale of activity is conducive to creative thinking and problem solving. Subsidiary activities thus are not simply blueprints that become viable to implement when the scale of business reaches a particular size. Rather, they are operations that first have to be devised and implemented by those who perceive bigger potential for the division of labour.

Of the few issues that I have with the book the one that really frustrated me was how exhausting it was to use in its hardcopy version. It looks neat and has a high-quality tactile feel, but Palgrave Macmillan's design model is simply not suited to books for historian of economic thought written by scholars of Hart's calibre. Having endnotes rather than footnotes make it look very tidy but makes it challenging to use, especially in conjunction with the main text's font size. This book has 34 pages of endnotes and I found it so tiresome to find the many notes of potential interest, and then find where I had been in the main text, that I gave up on the review copy and armed myself with one from Amazon's Kindle store, The e-book version can be used much more efficiently, as well as giving the reader more of a sense of making progress with the book compared with the experience of each page of dense text in the printed version taking an inordinate amount of time to read. Given how little the physical production of a book costs, Palgrave would have done well to allow the number of pages to expand somewhat by returning to the far more usable format of Marshall's *Principles*, with a more generous font size, wider line spacing and footnotes instead of endnotes.

There is much of interest in the endnotes, and the only scholar I was disappointed not to find referred to there after finding him missing from the main text was Richard H. Day, whose work is an intriguing mix, sometimes sympathetic to the mainstream approach but also significant for its contributions to the evolutionary approach. It was Day (1967) who suggested that an economy of satisficing firms might evolve into one populated by firms that optimised, as those with better decision rules would drive out those with less effective ones and eventually, via experimentation, the survivors would stumble upon strategies upon which they could not improve. This long-run equilibrium view was demolished via Winter's Schumpeterian evolutionary analysis, but it remains the kind of argument that equilibrium theorists are prone to wheel out to defend their position. Day's paper should have figured on page 149, in the discussion of Winter's work. Day should also have been noted as a major contributor to nonlinear analysis of growth dynamics in the evolutionary economics literature. He is one of the few in that group who shows familiarity with Goodwin's dynamic analysis, which is discussed in section 7.3.

More surprising than the absence of Day was the fact that Jack Downie and Edith Penrose were relegated to the endnotes rather than being discussed at length in the main text. Downie's (1958) *The Competitive Process* was not merely a precursor to Nelson and Winter's evolutionary analysis (as John Nightingale's work demonstrated, a fact acknowledged by Hart); it can also be viewed as an empirical examination of the extent to which the economy functions in a Marshallian manner, with long-run monopoly tendencies, arising from the advantages of large size, potentially being offset by smaller firms being able to develop new ways to cut their costs. Penrose's (1959) book *A Theory of the Growth of the Firm* is a key reference for many who view themselves as 'Post Marshallians'. It should have been given prominence, not merely for its emphasis on the impact of managerial learning on the capacity of the firm to grow but also because it is widely cited alongside the work of George Richardson on which Hart focuses his discussion of the capabilities-based approach to the firm.

Hart generally concentrates on showing what has happened in the literature and holds back from offering readers a firm impression of what kind of a working synthesis he has ended up with from his knowledge of Marshall and the literature examined in the book. He might have assisted his readers at some points by making further connections. For example, Wilfred Salter's work is only discussed briefly, despite having had a major impact on the thinking of key modern contributors such as Metcalfe via its focus on industrial dynamics in terms of the process whereby new technologies displace older forms in industries in which multiple technology vintages are in use: Salter's perspective provides a powerful route for bringing together Marshallian and Schumpeterian visions and for reflecting on what Marshall was trying to convey with his 'representative firm' idea (which rather points one to a firm somewhere in the middle of a Salter diagram).

As regards the representative firm, deeper reflection on the contribution of Philip Andrews might also have paid dividends. In Andrews's analysis, as Hart explains, market share reflects the goodwill that a firm has built up, as in Marshall's approach, but as far as pricing is concerned, it is the power of potential competition that determines the profit margins that firms dare to charge. Incumbent firms need a way of sizing up how potential competitors will view their industry, but potential competitors need to be able to assess the profits they can make if they pursue a cross-entry strategy. Neither task is straightforward if the industry is populated by a diverse set of firms of different ages, sizes and capabilities. Potential entrants and incumbents alike thus seem to need a workable basis for assessing whether the industry is making merely reasonable profits or is being greedy with its pricing. Having a sense of how well something akin to a Marshallian representative firm is doing provides a way for them to reach a verdict on this matter: if the generation of goodwill and low costs are long-term activities, it makes little sense to gauge an entrant's prospects in terms of the performance of young firms or the biggest, most established players. Focusing on a Marshallian representative firm is a way of making such assessments without having to try to calculate probabilities for an entrant's overall long-run earnings by weighing up information about all the existing firms in the industry.

Overall, this is a very impressive book. It deserves to play a significant role in bringing together evolutionary economists and other heterodox economists, especially those from the Post Keynesian camp. However, it remains to be seen whether the latter's frequently erroneous view of what Marshall actually said will mean that the title deters them from reading it. A clear signal of its importance for the Post Keynesians might have been given if the publishers had promoted it via an endorsement from Geoff Harcourt, who was one of examiners of the PhD from which it arose – there is a clear endorsement for evolutionary economists, in the form of a foreword by Stan Metcalfe, Hart's other examiner. Hart's book also deserves to be widely used in teaching the history of economic thought; indeed, it would make a perfect main source for a final-year course on the history and methodology of economics in the twentieth century, since it opens the doors to such a wide range of significant debates and literatures.

References

Day, R. H., 1967) Profits, learning and the convergence of satisficing to marginalism. *Quarterly Journal of Economics, 81*(2), 302–311.

Downie, J., 1958. *The Competitive Process*. London: Duckworth.

Penrose, E., 1959. *The Theory of the Growth of the Firm*. Oxford: Basil Blackwell.