Development of the Theory of Exchange

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John Creedy, *Development of the Theory of Exchange* (Cheltenham: Edward Elgar, 1998, pp. ix + 186, ISBN 1 85898 920 5. £55, hardback), John Creedy, *The History of Economic Analysis. Selected Essays* (Cheltenham: Edward Elgar, 1998, pp. vii + 348, £59.95).

These books can be seen as companion volumes, since they review aspects of developments in the theory of exchange, largely from the mid-nineteenth century to the early twentieth century. Both volumes do this by reprinting previously published work combined with a (larger or smaller) introduction. The collection of Creedy's essays does so explicitly; that on *Developments in the Theory of Exchange* reprints extracts from the work of Cournot, Whewell, J.S. Mill, Jevons, Walras, Marshall, Edgeworth, Launhardt and Wicksell as well as from three pre-marginalist authors, Cantillon, Turgot and Hearn. These extracts are prefaced by two introductory sections, of which the second discusses the developments of the theory in terms of non-utility approaches (Cournot, Mill, Whewell, Walras, Edgeworth, Marshall), then utility approaches (Jevons, Walras, Edgeworth, Launhardt and Wicksell). The introduction contains some historical flaws. One example is its treatment of the Marshall-Whewell connection, which is left in a rather inconclusive state, unnecessarily, since there is clear evidence that Marshall knew Whewell's *Mathematical Exposition of some Doctrines of Political Economy,* as published in *The Transactions of the Cambridge Philosophical Society* for 1829 and referred to in one of Marshall's early notebooks (see Groenewegen, 1995, p. 148 n.*). Creedy's remark on Marshall and Todhunter is just as historically inept. Todhunter was not only Marshall' Tripos moderator in 1865, Todhunter also wrote a testimonial in support of Marshall's application for the position of Professor of Political Economy and Principal of Bristol University College in 1877. Cournot's mathematical economics was also known in Cambridge mathematical circles during the 1860s, and Marshall bought his copy of Cournot in 1868.

There are other unsatisfactory comments on affiliations in the book. Take the case of Lionel Robbins on the back-bending supply curve of labour. Creedy only discusses this in terms of potential influence from Wicksell, Wicksteed or Walras with Wicksteed named as the most likely candidate. This ignores the strong possibility of influence in this context from writers on sixteenth or seventeenth century labour economics, such as E.S. Furniss' *The Position of the Labourer in a System of Nationalism,* which was published in 1920 and of which Robbins was well aware. He mentioned it, for example, in the lectures on the History of Economic Thought at the London School (at least when I attended them in the early 1960s). Moreover, this book had been very favourably mentioned by Robbins' close friend, Jacob Viner, in the last's magisterial *Studies in the Theory of International Trade*, a favourite book of Robbins, as he conveyed to me in conversation during 1965 after he had read part of my PhD thesis.

A minor error on Marshall may also be noted. *Economics of Industry* (written with Mary Marshall and published in 1879), went through two editions by 1882, but after publication of Marshall's *Principles* went out of print. It was replaced in 1892 with a paraphrase of the *Principles*, called *Elements of the Economics of Industry*, a similar but yet differentiated title. I bought my first copy of this book many years ago (when Berkelouw's, the second hand book dealer was still in King street) and well recall how disappointed I was then when I realised that this was not the rare, joint-authored volume. I am happy to say that the last is included with the eight volume set of Marshall's work I edited some years ago for Thoemmes Press; particularly since it was also decided to omit from this edition the later, and much inferior *Elements* paraphrase of the *Principles*.

In many ways, such errors are not surprising in a book which concentrates on the technicalities of exchange theory, within the formative period of the new marginalist economics. This exposition, as is to be expected from an author of the quality of Creedy, is both clear and generally accurately executed, qualities of his writing which the collection of essays enable us to observe over a period of more than two decades. The twenty-three previously published papers included deal with Pareto (1), Edgeworth (3), the early use of Lagrange multipliers in economics, developments in neo-classical public finance theory and aspects of the economics of Marshall, Wicksell, Whewell, Wicksteed, Jevons, Cournot, Launhardt and Walras. The common element here is *mathematical* contributions to marginalist economics in its wider sense. It is therefore not surprising that Creedy, as far as I know, has not written anything on the distinctly non-mathematical contributions of the Austrian school to this type of economics. The last omission further highlights the highly specialised nature of Creedy's work.

There is much that is useful and interesting in these essays. One example is the point made about Wicksell's skill in a giving a "remarkably succinct summary of a mathematical problem which is not entirely straightforward, yet he adapted the model in such a way that only basic algebra is required.' (p. 139) Economists with little mathematics such as I have always greatly appreciated this quality in Wicksell's work which is so strikingly evident, particularly in his *Lectures*. I studied this book in considerable detail, chapter by chapter, in the company of Frank Dunn, Paddy McGuinness and the late Ian Parker during the early 1960s, a study, incidentally, which greatly benefited my early appreciation of the theoretical significance of the now virtually forgotten Cambridge controversies in the theory of capital.

Creedy's commentary on Edgeworth in an earlier essay (pp. 38-42) is also interesting to the historian. Creedy there correctly criticises Viner (the difficulty of which is acknowledged by the strategic use of 'even' in the text) for neglecting Edgeworth's *New and Old Methods of Ethics* in the context of the history of using the Weber-Fechner Law in economics. A subsequent comment on the quality of sophistication of Edgeworth's applied mathematics allows an instructive generalisation on success in such applications,

> ....the original application of techniques which have been developed in one science, to the study of another subject, can really only be made effectively by those with a sound training in technique, *and* with very strong interest and aptitude for that other subject. Mathematical ability, as for example in Whewell, has never been sufficient. The mathematical ability of Jevons and Walras was certainly adequate for their pathbreaking work, but it required the capabilities of Edgeworth, Fisher, Pareto, and later Hotelling for its extension. It should really be no surprise that some of the most original, if sporadic, contributions to mathematical economics have been made by the 'engineers' such as Antonelli, Dupuit, Ellet, Isnard, Launhardt, Pareto, Gidrat and more recently Justin (pp. 41-42).

In the appendix to a paper on Jevons (pp. 283-84), Creedy notes further mistakes by some of the 'greats' in the history of economics, such as Schumpeter, George Stigler and Bill Jaffe who, although claiming that Jevons was deficient in his mathematical ability on certain, often unspecified, points in the theory of exchange, can themselves be shown to have similar serious deficiencies in mathematical argument (a case, or rather, some cases, of the pot calling the kettle black). However, Creedy himself is not always perfect in his accuracy, as already indicated. A further instance relates to his account of when Jevons introduced the notion of trading bodies (p. 31). Prior to Jevons's famous correspondence with Fleeming Jenkin in 1868, Jevons had already dealt with this concept in his first published economics book, *The Coal Question* (1865), where one of the final chapters is devoted to the 'Problem of the Trading Bodies' (Chapter XVI).

Enough has been said to indicate that there is much of interest in these books. Those desirous of learning more about the theory of exchange in the formative period of marginalist economics can benefit considerably from Creedy's essays, here conveniently reprinted in the one place. Those who lack the originals on their bookshelves, whose work Creedy discusses, or who cannot easily obtain them from their university libraries, will find the selections reprinted in the companion volume quite handy. In short, these are useful collections to order for your library and to place on the reading list of your history of economics course if it deals in depth with the early marginalists. This is a quality contribution from a good specialist historian of economics.

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