economic activity. It seems that Ricardo and James Mill agreed to avoid the publication of Bentham's manuscript (Sraffa ed. 1962, III: 261).

In conclusion, the aim of questioning the received opinion is welcome and the richer picture that the book achieves is a precious addition to our historical reading of culture in the Victorian era; but the overall result is not balanced, since the author substitutes the conventional wisdom on the divide opposing the 'dismal' science and Victorian literati, with a new encompassing paradigm of 'Utilitarian political economy' that is neither convincing nor historically sound.

Bruna Ingrao
University of Rome 'La Sapienza'

REFERENCES

Connell, P. 2001. *Romanticism, Economics, and the Question of 'Culture'*. Oxford: Oxford University Press.

Robbins, L. 1964 [1970]. 'Bentham in the Twentieth Century'. In *The Evolution of Modern Economic Theory and Other Papers on the History of Economic Thought*. London: Macmillan.

Sraffa, P. (Ed.) 1962. *The Works and Correspondence of David Ricardo* (with the collaboration of M.H. Dobb) Vol. III. *Pamphlets and papers, 1809–1811*. Cambridge: Cambridge University Press.

Sraffa, P. (Ed.) 1962. *The Works and Correspondence of David Ricardo* (with the collaboration of M.H. Dobb) Vol. IX. *Letters, July 1821–1823*. Cambridge: Cambridge University Press.

doi:10.1017/S0266267111000289

Economic Methodology: Understanding Economics as a Science, Marcel Boumans and John B. Davis (with contributions from Mark Blaug, Harro Maas and Andrej Svorencik), Palgrave Macmillan, 2010, x + 209 pages.

Writers on economic methodology may be likened to Pirandello's eponymous 'Six Characters in Search of an Author'; what economic methodologists seek, though, is not an author but an audience. As the area of economic methodology has developed over the last 30 years or so into a sub-discipline of economics (with its own JEL classification), it has created an audience of those for whom, as Marcel Boumans and John Davis describe them, 'economic methodology is an end in itself' (p. 5). Creating a philosophical discourse which takes place between economic methodologists who see their pursuits as an end in itself, however, bespeaks a modest goal which most methodologists, I suspect, wish to transcend; for methodologists are in search of an audience of practising economists in the hope that the latter will produce 'better economics' (*ibid*.). By directing their book to undergraduate students, Boumans and Davis hope that economists of the future, by familiarizing themselves with economic methodology, will do a better job than those of the current generation. I return to the matter of audience in closing this review but first ask how apt Boumans and Davis's book is for engaging undergraduate economists.

The book's strongest (and longest) chapter is its second – 'Methodologies of positive economics' – which looks at methodological debates in economics before 'economic methodology' existed as a sub-discipline. The chapter examines debates amongst practising economists between the 1930s and 1960s, the outcomes of which still influence the way economics is done; these are not debates amongst 'methodologists' who see their pursuit as an 'end in itself' but controversies amongst economists about the future course of their discipline. Much of the chapter is dedicated to the emergence of econometrics in the 1930s, and Boumans and Davis deploy their knowledge of the history of economic thought adeptly in their account. The exchange between Tinbergen and Keynes is reviewed (33–35), and the latter's concerns about Tinbergen's statistical methods for analysing business cycles are lucidly presented. The reader is then taken through Haavelmo's 'probability approach' (36–38) and, subsequently, to the exchange between Koopmans and Vining on the role (or need) of 'theory' in econometric work (38–41). The pinnacle of chapter two is the discussion of Friedman which starts with the latter's 'comment' on business cycle research published in the NBER's *Conference on Business Cycles* (1951). Friedman's contribution to economic methodology is placed into the context of the foregoing methodological debate of the 1930s and 1940s and is presented as a response to, and critique of, the Cowles Commission's strivings to construct ever more complex models which capture the influence of ever more independent variables. At the same NBER conference, Carl Christ showed that simplistic or 'naive' models could better predict more variables than their complex and more 'realistic' counterparts produced by Lawrence Klein for the Cowles Commission. The entry of Friedman's 'Methodology' essay could not have been better prepared, and Boumans and Davis are to be commended for thus contextualizing Friedman. Their depiction of Friedman's position in his 'Methodology' evinces considerable insight (42–51) and issues in the conclusion that Friedman is not an 'anti-realist' (in contrast to those who foist an 'instrumentalist' position on him): 'He is only opposed to any approach which aims to produce realistic models as 'photographic reproductions' of the economy' (50).

Chapter two is economic methodology at its best, for it demonstrates the import of economic methodology even for those who do not pursue it as an end in itself; indeed, the debates reviewed in the chapter demonstrate the primacy of methodology at those junctures at which new methods are introduced into the discipline. The student discovers that today's taken-for-granted tools for conducting economic research were once contested and controversial, and the terrain of controversy was methodology. Today's widely adopted methods were not, from their inception, 'transparent' devices (in Simon Schaffer's sense): for gaining access to and representing economic reality, as they are now held to be (see Schaffer 1989). Boumans and Davis's discussion also confirms something Thomas Kuhn noted with respect to natural science, namely, that, in extraordinary times (and usually only therein), scientists 'have turned to philosophical analysis as a device for unlocking the riddles of their field' (cf. Kuhn 1962: 87–88). Economists likewise turned to methodological discussion in the 1930s and 1940s.

Also true of economists is the continuation of the passage from Kuhn just cited, namely, that '[s]cientists have not generally needed or wanted to be philosophers. Indeed, normal science usually holds creative philosophy at arm's length'. We need not agree with Kuhn that this aversion to philosophical reflection in normal times be 'probably for good reasons', but we can learn a lesson from such episodes: if economic methodologists wish to make their work more relevant to the concerns of economists, they should use the resources of methodological debate amongst economists to further their field and to show economists that economic methodology matters and does so at those crucial turning points in the discipline's trajectory. This might mean waiting for those rare and 'extraordinary' moments when economists themselves 'turn' methodological in an attempt to unlock the riddles of their field. Between these extraordinary moments, methodologists might have to content themselves with their self-referential, 'methodology-as-an-end-in-itself' discourse which is all but ignored by practising economists.

Chapters one, three and four are in a different key to the second. With these chapters, the book becomes something of a 'standard' text on economic methodology with discussions of the Vienna circle and logical positivism, Popper, Lakatos and Kuhn. Whilst Boumans and Davis do a good job of presenting the material (which is less dry and manifests more subtlety than those of many other texts on economic methodology), one must question the wisdom of repeating the strategy of so many books on the philosophy of science, none of which substitutes for the original sources. The undergraduate audience might bemoan Boumans and Davis's lack of effort to relate the material to debates in economics. The attempt to show the relevance of Kuhn and Lakatos in characterizing the discipline of economics (114–117), for instance, is half-hearted. This is surely grist to the mill of those who are wont to see in economic methodology at best a diversion from the supposedly better strategy of keeping methodological reflection out of economics (especially if methodological reflection consists in reading philosophers who are primarily concerned with the natural sciences and often have little to say about social science). Chapters five and six maintain the genre of one, three and four but their content is focused on the sociology (and economics) of scientific knowledge, rhetoric, post-modernism and pluralism. Here the student will discover some 'home-grown' economic methodology, e.g. McCloskey, rather than the 'imports' from the philosophy of natural science discussed in chapters one, three and four. But a student who enquires into the 'payoff' from studying the content of chapters five and six might again have cause for lamentation, for whilst these chapters offer material from economic methodologists who hail from the discipline about which they methodologize, rather than from philosophers from farther afield, Boumans and Davis fail to forge connections, forged so well in chapter two, to economics as pursued by its mainstream or heterodox practitioners.

If chapter two's approach was 'diachronic', the book's final chapter, its seventh, is 'synchronic'. It is dedicated to the theme of value judgements in economics and demonstrates the infusion of values into economic theory. The chapter is thus 'more sharply focused on the subject of economics' (169), which will come as a relief to those who become disorientated in the parallel philosophical universe of chapters one, three and four, or the economic-methodological debates of chapters five and six. Of greatest note in the final chapter is the discussion and revelation of ethical assumptions in rational choice theory. First, Boumans and Davis advert to the assumption of rational choice theory that individuals' preferences are to be satisfied if they are to be deemed to make rational choices. Second, preference satisfaction is the criterion for making oneself 'better off' (177). Neither assumption is ethically innocent, and, if accepted as integral to rational choice theory, they exclude alternative ethical assumptions, e.g. that rationality consists, not in satisfying one's preferences, but in acting upon good reasons which stand up to intersubjective scrutiny, or that one becomes better off above all (or only) by satisfying higher order preferences, not those which make a fool satisfied. Although economists are not in the habit of judging people's preferences according to particular values or of categorizing them according to their 'higher' or 'lower' nature (à la J.S. Mill), economists' apparent neutrality here is underlain by a value judgement, namely, to suspend judgement toward the content of preferences. The Pareto criterion, too, is revealed to be ethically undergirded, for, despite the seeming ethical agnosticism of the criterion (which urges economists to remain undecided when a change renders some individuals better, some worse, off), this agnosticism rests on a methodological imperative with ethical import, namely: adherence to the Pareto principle is of higher value than the ability to assess changes in states of affairs which have positive effects for some individuals, negative effects for others. Not only is the emasculating effect of the Pareto principle underscored, but so, too, is the value judgement behind its use. The synchronic approach, as

I have called it, works well here; the chapter could have been written diachronically and attended to debates on values from the history of economic thought, but if such had issued in a re-telling of Pigou, Robbins, Kaldor-Hicks etc. which has been done many times previously, it is as well that Bouman and Davis refrained from such an approach (although they do make due mention of Robbins (169, 186–187)).

Chapter seven sensitizes students to the values of economic theory which might otherwise either remain invisible or appear to be 'valueless'. What the chapter lacks is guidance for students who wish to pursue different standards of judgement in economics or who seek instruction on the nature of normative argument, that is, on how one argues for and against ethical values, concepts of well-being etc. The chapter could have led the student onto the terrain of normative political philosophy and ethics (which have, of course, been incorporated into debates in economics) but it scarcely hints at these. Instead, it contents itself with a discussion of how economists 'accommodate' ethical values (180–183), by which the authors mean that economists incorporate individuals' moral values and adherence to social norms as *explanans* of social behaviour. Economists do not, Boumans and Davis write, 'concern themselves with the question of why certain norms exist – this remains the concern of moral philosophers and social scientists – but only with the impact of these norms on the shape of the economy' (182). This claim may be challenged on two grounds: first, some economists do explain the evolution of norms, i.e. why they exist (one thinks of the work of Robert Sugden, amongst others); second, what characterizes moral philosophy is not merely the explanation of the existence of certain norms (a task moral philosophy shares with social science, including economics) but also to ask whether those norms are good norms, i.e. whether they ought to exist. The latter question is indeed usually bracketed by economists, although it would have been useful to students who wish to pursue economics into the realm of normative philosophy had Boumans and Davis introduced them to moral argument about economic affairs.

To conclude, the book offers the student three different approaches to economic methodology, one typified by chapter two, another by chapter seven and the last by chapters one, three, four, five and six. This amalgam perhaps reflects Boumans and Davis's decision to exemplify methodological pluralism in their approach to economic methodology. The approach of the second chapter, for which I have most sympathy, teaches us that *methodology is important*, or at least that it has been, and not only to those who see it as an end in itself but also, as the history of our discipline testifies, to leading practitioners of economics; and the outcome of methodological debates has had a lasting influence on the discipline. It is regrettable that Boumans and Davis do not follow up this approach and apply it to contemporary developments in economics. An ideal candidate would be 'experimental economics' which, like econometric methods in the 1930s to 1960s, has not only 'revolutionised' the discipline but has engendered methodological reflection amongst practitioners and thrown up questions such as: What do experiments tell us about behaviour outside the laboratory? Can experimental results tell us anything about the cognitive and social evolution of human beings? May experimental economists deceive their subjects about the aim of their study (as psychologists regularly do with the employment of 'stooges' amongst their subjects)? One may note, in passing, that economic methodologists have been rather slow in latching onto and developing practising economists' methodological discussion surrounding experimental economics (Guala 2005 being one notable exception). But if they are to press the relevance of methodology to practising economists, economic methodologists should not take their lead from Hegel; for if economic methodology takes flight only as dusk descends on developments amongst practising economists, methodologists will pass up the opportunity to shape methodological debates which might have a lasting effect on the way economics is practised. By using the methodological resources of economists rather than those of economic methodologists and philosophers, Boumans and Davis could have produced a further, and more contemporary, chapter which demonstrates the importance of economic methodology beyond being end in itself. Here we return to the question of audience.

Boumans and Davis's pluralist approach to methodology can be defended when one notes that different approaches appeal to different segments of the audience; the book might be held to offer 'something for everyone'. In support of using philosophical material with no direct relation to economics, one may note that, although this has been done many times before, philosophers, unlike practising economists, are trained in methodology and produce superior methodological insights even if these are not developed in the context of social science. Apparently a 'trade-off' exists, here, between 'relevance' (to economics as it is practised) and 'philosophical sophistication': concentrating on relevance, one would look, as Boumans and Davis do in their second chapter, at methodological debates amongst practising economists; concentrating on philosophical sophistication, by contrast, one would begin at the 'high end' of philosophical debate (as in chapters one, three and four) but thereby sacrifice relevance to concrete concerns of economic theory. Economic methodologists have historically tolerated a high degree of philosophical simplicity (that is, lack of sophistication) by focusing much attention on the methodological pronouncements of economists (consider, for example, the attention given to Friedman's essay). My preference for relevance (and for the approach of chapter two) is congruent with this focus but it is also a strategic preference. A book directed at undergraduates must not only appeal to students, some of whom, thankfully, show interest in economic methodology, but must also convince practising economists of the book's merits; for unless economic methodologists convince their colleagues in economics departments of the merits of economic methodology, the latter will not find a foothold on the undergraduate (or graduate) curriculum. Here we confront the 'politics' of the economics curriculum and the overwhelmingly non-pluralist way in which economics is taught to undergraduates. If economic methodologists are to establish a place for their speciality on undergraduate curricula, relevance is the best way to convince economists, who are sceptical of 'tainting' the curriculum with economic methodology, to employ specialists in that field. Relevance, not philosophical sophistication, seems to offer most hope.

Mark Peacock
York University, Toronto

REFERENCES

Guala, F. 2005. *The Methodology of Experimental Economics*. Cambridge: Cambridge University Press.

Kuhn, T.S. 1962. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.

Schaffer, S. 1989. Glass works. In *The Uses of Experiment*, ed. D. Gooding. Cambridge: Cambridge University Press.