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► **To cite this version:**

Bjørn-Ivar Davidsen. Methodology and the practice of economists - a philosophical approach. Journal of Philosophical Economics, 2008, Volume II Issue 1 (1), pp.55-75. 10.46298/jpe.10569 . hal-03704453

HAL Id: hal-03704453

<https://hal.science/hal-03704453v1>

Submitted on 24 Jun 2022

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Methodology and the practice of economists – a philosophical approach

Bjørn-Ivar Davidson

Abstract: Practicing academic economists are reported to pay little attention to work being done by economic methodologists. This is an unfortunate situation for the sub-field of economic methodology as well as for the discipline of economics at large. If the sub-field of economic methodology does not succeed in communicating with practitioners of the larger discipline of which it is a part, its rationale is seriously brought into question. And when practitioners of a scientific discipline do not pay heed to methodological questions, the discipline is destined to stagnation and possible degeneration.

In order to contribute to an amelioration of the noted unfortunate state of affairs, this paper argues the case for purposeful philosophically informed approaches through which economic methodologists may prove themselves helpful and valuable to the practitioners of the discipline. A scheme of descriptive-critical analyses of economic texts is set forth as a means of enhancing academic economists' awareness of, and interest in, philosophical questions embedded in, and vital to, their practices. Moreover, it is argued, and exemplified, how philosophically minded methodologists may contribute constructively to processes directed towards establishing and developing economic theories and analyses.

Keywords: methodology and academic practice, philosophical sub-fields, analyses, guidance and advice

Introduction [1]

Methodological questions have been at the centre of many heated debates throughout the history of economics. Economic methodology as a sub-discipline in

its own right, however, was not properly established until the late 1970s or early 1980s. From this time on the sub-field of economic methodology has successfully functioned as a forum or network for contributors and debaters sharing a common interest in these matters. This, of course, should be considered a substantial achievement. The noted success does, however, come with some major qualifications. As several commentators have pointed out, academic practitioners within the discipline of economics have so far paid little attention to the on-goings within economic methodology (Caldwell, "Economic"; Lawson, "Why"; Frey). And if methodologists fail to effectively communicate with academic practitioners within the broader discipline of economics, the *raison d'être* for economic methodology as a sub-field within economics is seriously brought in question.

Dow addresses the above concern head on and asks from the perspective of the practising academic economist: "what does modern methodology have to offer?" (Dow, "Methodology" 31). To her credit, Dow not only argues her case at a general level. She actually specifies a set of purposes and objectives for economic methodological work aimed at rendering economic methodology relevant to academic practitioners within the discipline: "1) to inform debates in economics which have methodological origins; 2) to reveal issues in economic practice as yet unaddressed; 3) to guide progress in economics; 4) to construct an analytical account of economic methodology" (35). This purposeful and specific strategy for the future development of economic methodology as a self-contained and relevant branch of knowledge within economics should be contrasted to the more post-modern meta-methodological suggestions advocated by Hands when he defines what he calls the 'new economic methodology' as "... *any* work involving the intersection of economics and contemporary science theory." (Hands 52; italics added)

In what follows some arguments and suggestions are offered, intended as a contribution to developments along the lines suggested by Dow. Such endeavours may, of course, be made from different points of departure. Traditionally, philosophical considerations have been of central concern in matters methodological within the discipline of economics. More recently, however, other kinds of approaches have become increasingly influential. The rhetorical approach, sociological approaches to knowledge and various post-modern approaches exemplify this trend. [2] Fully acknowledging the potential that may be embedded in all such approaches to economic methodology, the focus of this paper remains firmly within the more traditional philosophical realm. The

arguments advanced will be developed from a philosophical point of view and they will relate in particular to points 2) and 3) on Dow's suggested agenda.

In order to ground methodological reasoning along these lines, the following section starts out with some reflections upon the relations between philosophy and scientific practice within the discipline of economics. In the subsequent sections these more general reflections are turned into concrete suggestions for methodological undertakings of relevance to the ongoing academic practice within the discipline of economics. This will be materialised as a scheme of philosophically informed descriptive-critical analyses aimed at uncovering less reflected issues embedded in economic academic practice, and an approach of philosophically based guidance and advice that may support future development of economic theories and analyses. The arguments of the paper are then summed up in a concluding section.

On the relations between philosophy and economics

Any philosophical approach to economic methodology must rely upon some perceived relationships between philosophy and academic economic practice. In recent years, quite a few projects with different views on such relationships have been launched in the economic methodological literature. Hausman has introduced what may be designated as a sort of 'empirical philosophical' approach to economic methodology; (Hausman, "Essays" chs. 16 and 17, "Inexact"). Boylan and O'Gorman argue what they call 'causal holism', a position developed from, and based upon, Quine's holism and especially van Frassen's 'constructive empiricism'. Mäki has in a series of articles developed a methodological position which, among other things, aims at tailoring a philosophical realism to the peculiarities of economics. [3] Another realist project with a somewhat different purpose, based upon the position of 'critical realism', has been introduced to economics by T. Lawson and others. [4]

It is beyond the scope and intention of this paper to rehearse or evaluate all these contributions in any detail. What does characterise all of them, however, is the fact that they take a particular position within philosophy or philosophy of science as their point of departure. The approach to be developed in what follows then differs from all these projects in the sense that it will be argued from the bottom up, so to speak, without leaning towards any specific philosophical position. The arguments will be elaborated from what is considered to be the basic

philosophical stances embedded in all scientific work within economics. As will subsequently be made clear in sections to follow below, however, the approaches set forth in this paper will have affinities with the noted projects of Mäki and Lawson, respectively.

In order to ground the approach of this paper, philosophical questions of relevance for scientific, or academic, practice within the discipline of economics need to be reflected briefly upon. Perhaps the most obvious questions that come to mind then, are those related to the philosophical sub-field of *epistemology*; questions pertaining to how we may acquire knowledge and how claims to knowledge may be evaluated. Historically two broad positions have competed for the epistemological mantle; rationalism and empiricism. In-between the limiting positions of pure rationalism and pure empiricism there are, however, various epistemological positions that combine elements of the two in different ways. To the extent that economists and economic methodologists have explicitly addressed questions of a philosophical nature, they have mainly been preoccupied with matters epistemological. The reason why seems to be that these matters have been considered pivotal in granting economics a sought-after scientific status. For a long period of time economic methodology was dominated by precepts for evaluating and choosing among theories and models. These precepts were more often than not taken from positions within the philosophy of natural science, like positivism, Popper's falsificationism and Lakatos' methodology of scientific research programmes. [5] Traditionally then, economic methodology has been prescriptivist and empiricist. The success, and even appropriateness, of this approach to economic methodology has, however, been seriously questioned in recent decades.

Important as it may be, epistemology does not in any way exhaust philosophical questions of relevance for scientific work within economics. Closely related to epistemological concerns, but yet worthy of separate treatment, is the question of how to make inferences in various forms of scientific practice. Issues of this kind belong to the philosophical sub-field of *logic*. The main difference brought in here is that between deductive and inductive arguments; i.e. between inference from the general to the particular and inference from the particular to the general. But as S. Pearce and D. N. Hanson, and more recently T. Lawson, have reminded us, there is a third category of logical argument or inference that may play a significant role in scientific work, variously referred to as abductive or retroductive logic (Hanson; Hookway; Lawson, "Economics"). These are arguments

characterised by inferences from allegedly known facts to possible explanations of these facts at a deeper or underlying level. Moreover, there are various forms of ordinary or human logic around, which apply to circumstances where classical forms of logic are inappropriate (Chick and Dow; Davis). These various forms of logic have different properties regarding the soundness of the argument and what kind of analysis they support. Consequently, the questions of how inferences are made in scientific work may turn out to be quite crucial in many respects. Most economic academic practice today, at least within what is usually termed mainstream economics, is to a large extent dominated by a strong preference for arguments based upon deductive reasoning.

In processes of establishing or developing economic theories practising scientists also somehow have to take a stand on what basic 'things' or phenomena they find to exist within the realm attended to, what properties these 'things' are supposed to have and how these 'things' may be influenced or caused by other 'things' or phenomena. Do non-observables like aggregates, structures, norms and relations have real existence? What is the nature of causality; is it just some kind of psychologically imposed interpretation of event regularities or should it rather be viewed as something having a potentially real existence in the form of generative mechanisms? Do human beings have a free will? May society be viewed as a closed system where all relevant variables and relationships are knowable or is it best pictured as an open system where "the nature and range of its constituent variables and the structure of their relationships are not predetermined?" (Dow, "Methodological" 90). Questions of this kind belong to the philosophical sub-field of *ontology*. Again these are questions that may be explicitly reflected upon by academic practitioners and argued decisions made accordingly, or they may be answered indirectly and unreflectingly for example as a consequence of the restrictions implied by other decisions in the research scheme. A strong preference for deductive logic may, for example, influence the ontological stances explicitly or implicitly made in a research undertaking. The same goes, as another example, for strict adherence to an empiricist epistemology.

Finally, it should be realised that *ethical* aspects, almost unavoidably, are part and parcel of every economic theory and economic analysis. Economic theories are quite likely to contain ethical stances of some sort. Moreover, the use of economic theories for analytical and practical purposes tends to entail consequences that are loaded with ethical implications. As Rothschild has noted, these matters are seldom paid attention to by economists due to, among other things, the fact that "...

ethical aspects often creep in quite unintended and may not be easily recognized as such." (Rothschild x). Ethics, therefore, is yet another philosophical aspect of academic economic practice that is in need of more explicit consideration.

To sum up then, the argument so far implies that academic work within the discipline of economics generally will be based upon, and hence incorporate, philosophical stances and theories within the sub-fields of epistemology, logic, ontology, and ethics. Now, there are two important aspects to add to this observation. First of all, as already indicated, within each of the mentioned philosophical sub-fields there are several possible stances that can be subscribed to and defended. The literature of philosophy supplies us with arguments *pro et contra* various positions but it does not provide us with any clear-cut or conclusive answers as to what stances are to be preferred. There simply are no 'objective' or 'neutral' criteria for picking out the 'best' or 'right' stances. Consequently, in establishing and developing economic theories economists have to make choices among competing and contested philosophical arguments and theories. This may not be widely realised among practitioners, and hence not done consciously or in a reflected way, but it will be done somehow as a matter of necessity.

Secondly, as academic economic practice invariably will involve stances within most or all of the four philosophical sub-fields, a need for consistency will emerge. There has to be an internal consistency among the stances made in an economic text or analysis. Stances made within the realm of ontology will have to be compatible with stances made within the sub-fields of epistemology, logic and ethics, and so on. The stances made within the different sub-fields will, in other words, to some extent be interdependent. Consequently, if priority consciously or unconsciously is given to stances within one of the philosophical sub-fields, this may severely restrict what stances may possibly be subscribed to within the remaining areas.

From a methodological point of view, a crucial question then is whether the choices made matter to scientific or academic practice within economics. Does it matter if an open system view of society is adopted rather than a closed system approach? Does it matter if atomistic individuals are conceived of as having real existence while social structures and aggregates are not? Will a preference for deductive over retroductive forms of inference make any difference to the explanations contained in an economic analysis? Does it matter if any of the relevant philosophical sub-fields consciously or unconsciously are given priority in

the course of an economic analysis or theory development? It is hard to see how the answer to these, and multitudes of similar questions that might be posited, could be anything but in the affirmative. Philosophical stances and theories adhered to in academic practice within economics will, for several reasons, heavily influence the basic properties of economic theories and analyses. They will, among other things, influence what problems a theory may shed light upon and what issues are left out, and they will open up for certain kinds of explanations to problems analysed while precluding or overlooking others. The philosophical elements embedded in any form of academic work within the discipline of economics, therefore, ought to be paid more explicit attention to than what seems currently to be the case.

Methodological tasks to be addressed

From what is argued above it should now be granted that practitioners who take part in processes and activities directed towards establishing and developing economic theories have to take a stance on philosophical questions of an ontological, epistemological, logical and ethical nature. Philosophical stances made in such processes will then become an integral part of economic theories. But if all economic theories thus comprise a set of contested philosophical material, the applied scientist who typically makes use of some already developed economic theory for analytical purposes, tacitly gives his or her support to the philosophical stances ingrained in the theory in question. The same goes for the university lecturer who passes on to the students the basic ideas of some chosen, ready-made economic theory.

Consequently, *all* practitioners within the field of economics – researchers, applied scientists and lecturers – have to, and do, take a stance on philosophical questions in their academic practice. Moreover, every practitioner within the field of economics has to accept responsibility for stances directly or indirectly subscribed to. There simply is no way around this fact. And the choices made will have important implications for the development of theories, and for applied studies undertaken. The fact that these insights are not widely recognised, and consequently not seriously taken into consideration in many forms of academic practice within economics, not only ground the importance of philosophical approaches to economic methodological thinking, they also set the stage for more practical tasks to be addressed within philosophically informed methodological work.

In general, problems and questions are dealt with in a more effective and constructive way if they are consciously reflected upon. As a consequence, economic methodologists may make important contributions to the future development of economics as a scientific discipline by raising the practitioners' general level of consciousness regarding relevant and often crucial philosophical questions. The attention of the practitioners of the discipline needs to be drawn to the fact that the alternative to conscious and explicit philosophical reflection is not an academic practice free of any philosophy. The alternative is rather academic work rooted in a non-reflected, and thus unknown, set of philosophical stances and theories.

The question to be answered then is how this can be achieved. How can methodologists stimulate practitioners' awareness of, and interest in, philosophical questions of relevance to their academic practice? How can methodologists come through with the message that every practitioner within the discipline directly or indirectly takes a stance on contested philosophical questions with far-reaching consequences for their academic practice? Will it be possible to make practitioners within economics more prone to actually undertake explicit philosophical reasoning in processes of establishing and developing economic theories and in their employment of already existing theories?

There is, of course, no simple all-purpose and exhaustive answer to this challenge. In the next section the case for philosophically informed descriptive-critical analyses of economic texts will be advanced as one road to this end. The aim of such analyses will be to make practitioners more alert to the fact that they actually do make stances on philosophical questions in their work, and that the choices they make have important scientific consequences. In the penultimate section it will be discussed how economic methodologists may contribute to the future development of economic theories and analyses by highlighting and suggesting philosophical theories that may function as a basis for theory-development and model-building. But first, let us turn to the case for philosophically informed descriptive-critical analyses of economic texts like research reports, monographs and textbooks.

Descriptive-critical analyses of economic texts

According to the arguments set out above, economic texts will always entail stances within some or all of the philosophical sub-fields of epistemology, logic, ontology,

and ethics. The first step in a philosophically informed descriptive-critical analysis based upon the above deliberations then, will naturally be to describe carefully the philosophical stances made within these sub-fields in the text under scrutiny. Now, philosophical stances are rarely explicitly stated in economic texts. In trying to uncover and describe the philosophical stances incorporated in a text one will, therefore, have to search actively for them. This may prove a tedious and demanding task, the difficulty of which should not be underestimated.

The descriptive part of an analysis undertaken should, however, be more than a straightforward account of the philosophical stances and theories embodied in the text. It will also be of utmost importance to look out for more or less hidden 'structures of priority' within the text analysed, meaning by this the question whether stances within some of the four philosophical areas seem to have been given priority. The analyst should try to unravel what priorities, if any, are actually made, and what consequences this may entail for stances within sub-fields that are not given any priority, and consequently for the properties of the economic analyses undertaken. If, for example, deductive forms of inference have been given priority in an economic text or analyses, what consequences follow from this for questions of ontology, epistemology and ethics? Likewise, if an empiricist epistemology seems to be prioritised, will this have consequences for ontological stances explicitly or implicitly made, for what forms of inference it will be possible or natural to employ, and for how potentially relevant questions of ethics are or may be dealt with?

By undertaking descriptive analyses as indicated above, methodologists will be able to demonstrate and illuminate the fact that philosophical stances actually are part and parcel of all economic theories and economic analyses. Publishing the results of such analyses may, of course, in itself contribute to enhanced awareness of relevant philosophical questions among practitioners within the discipline of economics. The possibilities for achieving such effects will, however, be vastly increased if the material from the descriptive analysis is also subjected to some kind of critical assessment. This will, no doubt, give the analyses an extra bite and thus make practitioners within the discipline more prone to pay attention to what the analysts come up with.

In the critical part of the analysis implications and consequences of individual philosophical stances uncovered in the descriptive analysis should be spelled out in some detail. Attention should also be paid to the structure of priority uncovered

in the descriptive part of the analysis. To the extent that a fairly distinct structure of priority is evident, this may in itself shed considerable light on reasons behind individual philosophical stances made in the text under scrutiny. If, for example, priority is given to an empiricist epistemology, this may indicate possible reasons why the theory focuses exclusively, or at least heavily, on observable phenomena. Moreover, a series of critical questions may be raised regarding the structure of priority in the text under scrutiny: What are the arguments *pro et con* this kind of priority? What must the underlying reality be like for this to be a defensible or futile stance to make? What consequences are entailed by the structure of priority uncovered regarding the properties of economic analyses undertaken or of theories developed?

Methodologists undertaking such analysis should also be aware of possible shifts in the structure of priority within a text under scrutiny. This typically occurs, for example, in many approved economic textbooks. In the introductory chapters the authors of these texts invariably start out by describing economics as a fairly complex subject. This, they state, is due to the fact that within economics one studies human beings who act upon a set of complex and possibly contradicting motivations in an environment of ecological constraints, social norms, relations and institutions, and often in the face of genuine uncertainty. This reflects a rich and stratified reality characteristic of open systems ontology. Further on in the text, however, when the authors turn to more concrete analyses, much of this is dramatically changed. In chapters focusing upon consumer behaviour, for example, the underlying ontology from the introductory chapter is narrowed down to a considerable degree. Ecology, social relations, norms and institutions are now completely in the background or rather considered non-existent, and the consumer's motivations are taken to be one-dimensional rather than complex.

A most likely explanation for observations of this kind would run as follows: In the introductory chapters of economic textbooks the authors naturally pay much attention to ontological questions in their effort to explain what economics is all about. Questions of how to analyse the economy play a subordinate role at this stage. In philosophical terms, questions of an ontological nature are initially given priority over logical and epistemological questions. When the authors turn to actual economic analyses, however, there is a profound change in the underlying structure of priority. The authors now typically, and often implicitly and somewhat unreflectingly, give priority to the use of deductive logic in the form of mathematics. This requires the underlying ontology to be adjusted accordingly,

which largely explains the above- mentioned observations. In a critical analysis such shifts, with their potentially confusing consequences, should of course be highlighted and critically commented upon.

Arguments and deliberations as set out above are based upon the assumption that there is a distinction between philosophy on the one hand and the academic practice within economics on the other. In some of the more recent trends within philosophy, the legitimacy of such a demarcation between philosophy and science has been brought into question. This is, for example, the case with the radical holism of Quine, which indicates that philosophical activities should be seen as a theoretical extension of science rather than a discipline sharply demarcated from science (Quine, "Dogmas", "Epistemology"). Dow has captured the implications of this for economic methodology when she argues: "Philosophy does not emerge from a vacuum, but from a context of which practice is a part. Therefore, while there is a logical hierarchy in that philosophy holds implications for methodology, and methodology for practice, practice in turn can hold implications for methodology and for philosophy" (Dow, "Methodology" 38). This kind of philosophical naturalism is part and parcel of the non-foundationalist approach to philosophy within which modern economic methodology has to be conducted. [6] Due respect has to be paid to the fact that the boundaries between philosophy and science may be hard to define in an absolute and precise manner, and may be subject to change over time. Moreover, in practical methodological work it should be recognized and duly appreciated that stances and theories within the above mentioned philosophical sub-categories might be influenced by practice in various sciences, including economics.

Finally possible affinities of, and differences between, the scheme suggested above and a number of admirable and thought-provoking analyses supplied by Mäki over the past decades should be noted and commented upon. In his analyses of various contributions to economic literature Mäki focuses mainly upon uncovering different forms of realism that authors knowingly or unknowingly embrace in their texts. [7] The reflections made above over the relations between philosophy and economic academic practice, however, suggest the importance of paying due attention to the whole range of philosophical stances involved in academic economic practice. And when Mäki seems to engage mainly in descriptive analyses, it has been argued here that methodological analyses should also encompass a distinctly critical element. For this reason the term 'descriptive-critical' analyses has been introduced to designate the proposed scheme. Finally, the underlying

objective of the scheme advanced here is to induce practitioners within the discipline of economics to be more sensitive to, and conscious of, the philosophical stances they do make in all walks of academic practice and to stimulate increased self-reflection upon such questions. Mäki, on the other hand, seems to be more concerned with uncovering various forms of realism, as he sees this as the key-element in economic theories and models that indicate in what sense they may be related to economic reality (Mäki, "Reclaiming" 110). [8] The descriptive-critical analytical scheme suggested above then, may be seen as parallel to, and a possible extension of, the philosophical analytical approach instigated by Mäki.

Guidance and advice

Economic methodologists can also contribute more directly and constructively to the work of practitioners by considering what philosophical theories might prove fruitful and productive in processes directed towards developing economic theories and analyses. More specifically, economic methodologists may see it as a challenge to explore interesting philosophical arguments and theories, evaluate their strong and weak sides and draw the attention of the practitioners within the discipline to the most promising candidates. There may even be room for endeavours of developing philosophical arguments and theories of this sort more specifically tailored to the peculiarities and requirements of the discipline of economics. Through activities of this kind practitioners within economics can be informed of sustainable and potentially fruitful philosophical theories and arguments that may be used in processes of establishing and developing more specific economic theories and analyses.

Philosophically based constructive contributions of the kind suggested here may, in principle, be made within the domain of all the relevant philosophical sub-fields; ontology, epistemology, logic and ethics. The question of priority among these sub-fields is, however, important here. Are there reasons for focusing especially upon one or more of the sub-fields in question as a philosophical basis for more practical scientific endeavours? Depending on the answer given to this question, the next step would be to present and evaluate relevant and potentially fruitful philosophical positions within the sub-field, or sub-fields, thus prioritised.

The above argument is, admittedly, kept at a rather abstract level. Consequently, there are good reasons for introducing an example that may illustrate and illuminate the general arguments made. In this example, a case will be made for ontological priority. Based upon this argued stance, 'critical realism' will then be introduced as a relevant philosophical position to be drawn upon.

Within most of what is considered to be mainstream economics, inferences of a deductive nature are ubiquitous. Moreover statements are usually made, at least officially, in favour of some sort of empirical testing of theories. The word theories has for some reason been split in two. Questions related to what kinds of objects are supposed to exist within the domain analysed, the properties of these objects and the environment in which they operate seem, however, to be given little explicit reflection. The same goes for ethical questions that most certainly are embedded in the analyses conducted. In philosophical terminology then, stances within the sub-fields of logic and epistemology tend to be given priority. Ontological questions of existence, basic properties and causation, and questions pertaining to the realm of ethics are then adjusted in a subordinate way to the logical and epistemological stances made.

This is a position that is not easily defended. Prioritising deductive logic and empiricist epistemology tends to entail a rather exclusive focus upon observable phenomena with properties that lend themselves smoothly to mathematical manipulations. This is hardly the way relevant phenomena of social reality would be described if one were to start out from ontological reflections over what basically exists within this realm. And after all, it is ontological reflection that deals most explicitly with the properties of the subject matter under study. Logic and epistemology deal with questions of how we may obtain knowledge of the subject matter under study. Consequently, giving priority to the sub-fields of logic and epistemology, ending up with ontological questions to be determined in a residual and subordinate way, seems to be a case of turning the process of scientific thinking upside down.

Turning the table around then will open up for a quite different approach. By giving ontological questions priority in the scientific process, practitioners will typically be motivated to start out by systematic reflections over what may have a real existence within the domain under study and what basic properties these forms of existence may be said to have. Questions of how to design arguments of inference and how to validate claims to knowledge will then have to be tailored

and adjusted accordingly. For many reasons this seems to be the most fruitful proceeding of scientific work within economics, and indeed within any discipline.

Taking on board a philosophical priority in favour of ontology, the next task is to consider potentially fruitful and constructive theories or arguments within the philosophical sub-field of ontology. The position of 'critical realism' may then turn out to be a candidate of particular interest. Critical realism, as the term is used here, is a position that has emerged from the philosophical writings of Roy Bhaskar, dating back to the 1970s and 1980s. [9] At the heart of the critical realist project are well-argued ontological theories of the natural and social realm, which is just what we are looking for.

Critical realism was introduced to the discipline of economics during the 1990s with Cambridge economist Tony Lawson playing a pivotal role. In their endeavours to situate a critical realist project within economics Lawson and his close associates have mainly used critical realist ontological theories in sustained critiques of mainstream economics. Moreover the theories in question have been offered as a common philosophical basis for various heterodox economic schools of thought. [10] In what follows, however, a different use of critical realist ontological theories will be suggested. It will be argued that critical realist ontological theories, developed through systematic reflections over what basically exists in the natural and social realm of reality, may serve as a constructive and fruitful basis for theoretical and applied work within the realm of economics. [11]

In establishing and elaborating his ontological theory of the natural realm, Bhaskar introduces a distinction between what he calls the 'empirical', the 'actual' and the 'real'. What goes on at the actual level, and thus may potentially be empirically observed, is argued to be the result of causal powers like generative structures, mechanisms, and capabilities acting at the deep or real level. According to Bhaskar's argument, these underlying causal powers exist and act independently of our investigations of them. As different mechanisms and powers may countervail or reinforce one another, they cannot be readily identified through empirical observations at the actual level. To the extent that we have knowledge of causal powers and mechanisms of this kind within the natural realm, this knowledge has come about through controlled experiments.

The main tenets of these ontological considerations are argued to carry over to the social realm. According to the argument offered, there are few empirical regularities at the actual level within the social domain of reality. However,

human intentional action presupposes some elements of stability or regularity in order to render it possible. Bhaskar argues that this requirement is met by the existence of underlying structures and mechanisms within the social realm – like channels of distribution, banking systems, formal and informal relations of power, norms and rules. Structures and mechanisms of this kind will have to exist previous to the intentional actions they support and thus make possible. Consequently, they cannot be reduced to individual agency. Relevant structures and mechanisms will not, however, be independent of individual actions, as they are reproduced and possibly transformed by such actions. Consequently, Bhaskar's ontological theory depicts a 'transformational model of social activity' in which social reality is understood as made up of intentional individual actors as well as social structures with emergent powers that enable and facilitate, but also restrict and direct, individual action. The theory in question posits, in other words, a social realm in which both intentional individuals and underlying structures and mechanisms have real existence while they at the same time are interdependently related.

Now, there are several reasons why the position of critical realism may serve as a fruitful philosophical basis for scientific endeavours within the realm of economics. The ontological theories central to the critical realist project are argued and developed in a way which complies well with general opinions on how to conduct scientific investigations. They are based on premises or observations of the world in which we actually live that are widely accepted. In this way lofty and wildly speculative accounts of what exists are avoided. Moreover, the theories are developed by answering transcendental questions like: What must the world be like for a given set of observations to be possible or intelligible? The ensuing answers are then considered conditional hypotheses or theories, not dogmatic 'truths' about the world. The theories may accordingly be revised and improved upon, or substituted for better theories, if new insights change the premises of the argument and/or better explanations are supplied for a given set of premises. Being developed in this way, the ontological theories in question are of a kind that fit in well with the general process of scientific inquiry.

Adopting the ontological theories of critical realism as a starting point for economic analyses would, of course, entail certain consequences. The ontological theories in question depict important and fundamental interdependent relations between individual economic agents and social structures. In this perspective the methodological individualism and atomism characteristic of most of mainstream

economics is rendered irrelevant and possibly misleading. The ontological theories of critical realism rather indicate that macroeconomic as well as microeconomic analyses should be based upon economic agents situated in social settings defined by relevant structures and institutions. Moreover, the interplay between agents and structures should be built into the analyses. As a consequence, economic theories and analyses would to some extent be specific with respect to time and place and not universal theories as depicted by mainstream economics.

The suggested ontological theories indicate, moreover, that underlying structures, mechanisms and powers are more stable, enduring and fundamental aspects of reality than are empirically observable surface phenomena. As a consequence, the most rewarding goal for scientific activities within the realm of economics would be to try and uncover basic underlying structures and mechanisms that are operative in the domain under study. It would also have the implication that scientific activities within economics ought be more focused upon explaining and understanding economic phenomena rather than on prediction and control.

Basing the development of economic theories and analyses upon the ontological theories of critical realism would thus influence the direction and focus of scientific work within economics. The ontological theories in question would preclude, or make less relevant, certain approaches to economic analyses. But they would not determine practical scientific work. Rather, the proposed ontological theories may ground alternative, and in some respect even competing, economic theories or analyses. Systematic ontological reflection thus will not render activities directed towards developing specific scientific theories or models superfluous. It may, however, provide a more secure and relevant foundation for this kind of activity. The importance of such procurement can hardly be overrated.

Finally, to avoid any unnecessary misunderstanding it should be stressed that the methodological tasks of guidance and advice argued and exemplified above, are not predicated upon the view that methodologists are, or can be, in the capacity to single out the 'right' or the 'best' philosophical theories or arguments to be employed in establishing and developing economic theories. At present there are no definitive or universal answers to these questions at hand. In conducting methodological tasks as argued above, proposals should therefore be made exclusively as informed guidance and advice, *not* as prescriptions. The ultimate responsibility for philosophical theories and stances actually employed in the scientific work is fully at the door of the practitioners themselves. A co-operative approach as indicated above may, however, enhance the practitioners' abilities to

make fruitful and defensible choices in these respects, which, in due course, may contribute to an enhanced performance of the economics discipline.

Concluding remarks

The suggestions submitted above, in order to enhance the practical relevance of philosophically informed approaches to economic methodology, have been based upon certain conceived relations between philosophy and economics. It has been argued that economic theories and analyses are based upon, and thus entail, contested stances within the philosophical sub-fields of ontology, logic, epistemology and ethics. Moreover, it has been argued that the stances made will have important implications for academic activities conducted within the discipline of economics, and that practitioners of various sorts have to accept individual responsibility for the philosophical stances they consciously or unconsciously subscribe to. These facts do not, however, appear to be well understood among practitioners within the discipline.

Against this background two approaches to methodological work of relevance to practitioners within the discipline of economics have been advanced. Philosophically informed descriptive-critical analyses of various contributions to economic literature have been suggested as a means to enhance practitioners' interest in, and awareness of, philosophical questions embedded in their scientific practice. Moreover, it has been argued that methodologists may enter into fruitful co-operative engagements with practitioners within the discipline by highlighting philosophical theories that may prove fruitful and productive in developing economic theories and analyses. Through activities along these lines methodologists may make themselves more useful and relevant to practitioners of the discipline of economics. If methodologists were to succeed in this respect, both economics as a social science and economic methodology as a sub-discipline in its own right would benefit.

Endnotes

[1] I would like to thank the journal's referees for helpful comments on an earlier draft of this paper. The usual disclaimer, of course, applies.

[2] The best current guide to these developments is W. Hands ("Reflection")

[3] See for example Mäki ("Combine", "Problem", "Friedman", "McCloskey", "Coase", and "Reclaiming").

[4] Lawson, ("Economics", "Reorienting"), Fleetwood (ed), Downward (ed).

[5] This traditional approach to economic methodology is described and discussed in Blaug and Caldwell ("Beyond").

[6] This is discussed in Rosenberg.

[7] See note 3 above.

[8] In his more recent work Mäki seems to have moved somewhat in the direction argued here when he focuses more explicitly upon at least one of the philosophical sub-fields included in the suggested analytical scheme; namely ontology (Mäki, "Economic", "Way").

[9] The most influential contributions are Bhaskar ("Realist", "Possibility", "Reclaiming"). Collier offers a helpful introduction to these works. Moreover, an excellent anthology of contributions by Bhaskar and others is to be found in Archer et al (eds). Archer ("Realist") is considered an important elaboration of some of Bhaskar's original insights. Sayer and Danermark et al represents works that endeavour to develop a critical realist informed position of methodology for the social sciences.

[10] See Lawson ("Economics", "Reorienting"), Fleetwood (ed), Downward (ed), Downward, Dow and Fleetwood and the contributions in Lewis (ed).

[11] See also Davidson ("Arguing"; "Critical") in which the difference between a constructive use of critical realist ontological theories and the approach of Lawson and his close associates is further developed.

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