A Conception of Ontology[1]

Tony Lawson
Faculty of Economics
Sidgwick Avenue
Cambridge CB3 9DD
E-mail: Tony.Lawson@econ.cam/.ac.uk

(Version: December 06 2004)

My purpose here is to describe and defend a programme in social ontology. It is a programme being carried though by a group of researchers in Cambridge. I start by defining some of my terms.

Ontology

The term ontology[2] derives from Greek, with "onto" meaning "being", and "logos" usually interpreted as "science"; so that ontology, as traditionally understood, is the science or study of being[3].

The word being has two senses:

1) Something that *is*, or exists; an entity a thing
2) What it is to be or to exist; what all the things that are have in common.

It follows that if ontology is the study of being it is then both:

1) The study of what *is*, or what exists; the study of entities or things; and
2) The study of what it is to be or to exist; what all the things that are have in common.

Certainly this twofold conception is adopted here[4]. Clearly, so conceived, ontology amounts to the study of anything and everything; for everything is a part of being. But ontology is only the study of anything under the aspect of its being, of what is involved in its existing. Even so any particular ontological project must clearly adopt a particular focus of study.

---

[1] For helpful comments on an earlier draft of this paper I am very grateful to members of the Cambridge social ontology group.

[2] 'Ontology', or rather 'ontologia', appears to have been coined in 1613 by two philosophers writing independently of each other: Jacob Lorhard in his *Theatrum Philosophicum* and Rudolf Göckel in his *Lexicon Philosophicum.* Its first occurrence in English seems to be in Bailey's Dictionary of 1721, where ontology is defined as 'an account of being in the abstract'.

[3] As such ontology should be distinguished from both epistemology, which is a concern with knowledge, and methodology proper, a concern with method.

[4] In recent years the term ontology has also been widely used in the field of computer and information science. It is used to denote a formal language purposefully designed for a specific set of practical applications and contexts or environments. The aim is usually something like the construction of a formal representation of entities and relations in a given domain that can be shared across different contexts of application. This recent interpretation of ontology is not one I am especially concerned with here (for good discussions see especially, Smith…).

The strategy adopted in the project I am describing, at least for that strand of ontology concerned with what exists, is to prioritise the study of those entities or things that are regarded as in some sense the most basic or significant. Of course, which things or entities, etc., are to qualify as significant will depend on context and will always be historically relative.

Scientific and philosophic ontology

Now the things or entities that are most widely regarded as basic or significant are typically studied across the range of sciences. For this reason the branch of study concerned with what is or what exists can reasonably be distinguished as s*cientific ontology* (it is easily extended to include significant objects of extra-scientific thinking).

In contrast, the second strand of ontology, the study of what it is to be or to exist, with all the things that are have in common, is designated *philosophical ontology.*

Ontographology (or opology)

Notice that although *scientific ontology* is the study of the sorts of entities that are posited or presupposed in scientific and other theories, it is not to be confused with the study of those theories *per se*, or interpreted as a concern with the fact that, or manner in which, certain entities are posited and/or treated within those theories. To suppose that the study of being can be reduced to the study of theories and their presuppositions (about being) is to commit the epistemic fallacy, to reduce ontology to epistemology.

It is true that in some natural science contexts the only way to study certain posits has been via the theorising of natural scientists. Super string theory provides an example. But still there is an extra conceptual step required to move from 1) *identifying* or *recognising* the presuppositions of such theories and 2) *accepting the plausibility* of those theories and so their ontological presuppositions. Indeed many natural scientists do not at this point accept super-string theory as a plausible theory.

If it is essential to distinguish the study of being (ontology) from the study of knowledge and its presuppositions (about being), it seems sensible to give a name to the latter activity. The terms of art accepted here are either *ontographology*, where 'graphy' means (the art of) writing or describing or representing, or *opology*, where the op stands in for **o**ntological **p**resuppositions (incorporating **o**ntological **p**remises and **o**ntological **p**osits).

Social Ontology

In the ontological project I am outlining a focus on the social realm serves further to narrow the scope of enquiry. By the social realm I mean that domain of phenomena whose existence depends at least in part on us. Social ontology, then, is:

1) the study of what *is*, or what exists, in the social domain; the study of social entities or social things; and

2) the study of what all the social entities or things that are have in common

I have already suggested that when considering what is or what exists, it is necessary to narrow the focus in some way, and reasonable to consider those entities regarded as somehow most central or significant. This of course means that within social ontology specifically it makes sense to focus on categories (currently) widely considered to be significant in social life. As a consequence I emphasise the following two projects:

1) *Social scientific ontology*: the study of the most basic or significant entities or things of the social domain; and

2) *Social philosophic ontology*: the study of what all the social entities or things that are have in common

Notice that in the social domain, at least, to study something that exists it not only to be concerned with its properties but typically also to identify and elaborate its conditions of existence.

An Ontology

A further convention adopted here is to refer to the specific results of ontological study as "an ontology". The ambiguity involved of having the same word for both a form of study and its results is not uncommon; the same duality arises with such categories as history, explanation, geography, truth and much else, and the appropriate meaning will usually be clear from context. Thus if a goal of ontology is to produce or elaborate a sustainable ontology the subject matter of ontographology, or opology, is to identify or elaborate an ontology presupposed by some community or conceptual field.

Metaphysics

The term ontology is often (but not always) treated (as here) as synonymous with *metaphysics*. The term "meta" in Greek means over, but it can also be interpreted as denoting behind or after[5]; whilst "physis" translates as nature.

It is the interpretation of meta as 'after' that most commentators take as significant in the morphology of metaphysics. For the latter term is usually said to owe its origins to the fact that the relevant part of Aristotle's *The Metaphysics* (ta meta ta phusika) (concerned with "being qua being") was placed immediately *after* the part of the book called Physics[6]. However, it seems just as likely that the term had immediate intuitive

---

[5] Apparently this is because when X passes *over* Y it ends up either *behind* or *after* X.

[6] Of course, Aristotle (384-322 BC) never himself used the term metaphysics (when he wishes to refer to the relevant part of his study he uses such terms as 'wisdom' (*sophia*), 'first philosophy' [*prōtē philosophia*] or 'first science [*prōtē epistēmē*]). Nor even did he assemble the work we now know as *The Metaphysics*. The latter consists of a series of fourteen books, all or most of which were written by Aristotle, and corresponds to the latest period of his work. Specifically they were written after his leaving the Academy, Plato's school in Athens (Aristotle became a pupil of Plato [427-347 BC] at the age of seventeen, and remained for twenty years, first as a pupil and later as a relatively independent researcher, leaving after Plato's death), and following his founding (in 335 BC) his own school of

appeal (and thereby achieved ready acceptance) as denoting the *purpose* of metaphysics, which is (or includes) reaching above or beyond nature (physis) as we immediately perceive it, to uncover its most basic components or fundamental features.

Why Bother?

Why the interest in ontology so conceived? Notice first that the results of ontological enquiry are first and foremost taxonomic rather than explanatory. Whilst scientific ontology seeks to elucidate the entities or structures posited in, or presupposed by, science or some conceptual field, philosophical ontology seeks a classification that is exhaustive in the sense that all types of entities are consistent with (and manifestations of) the entities or features included within its classification[7].

The value of ontology, whether philosophical or scientific, lies in bringing clarity and directionality. These attributes follow because, in theorising, it is helpful to know something of the nature of whatever it is that one is attempting to express or investigate.

In its turn, ontographology or opology can help us understand the practices and belief systems of varying cultural systems or tribal communities. In addition, it allows the identification of inconsistencies and other inadequacies in scientific and other forms of reasoning. This is possible just where the ontological presuppositions of different aspects of specific theories or practices remain unexamined by their scientific creators and so are not compared either to each other or to any explicitly expressed worldviews.

---

philosophy in Athens: the Lyceum or Peripatos. But only after his death, and probably between 200 and 100 BC, were these fourteen books arranged and published in the order with which we are now familiar. In fact the title itself, ' the Metaphysics' was probably provided by Adronicus of Rhodos when he assembled the Collected Works of Aristotle in the first century BC.

[7] Whitehead sets out a version of philosophical ontology which accepts this goal in describing his approach to "metaphysics" identified explicitly as speculative philosophy:

"Speculative philosophy is the endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our system can be interpreted. By this notion of `interpretation' I mean that everything of which we are conscious, as enjoyed, perceived, willed or thought, shall have the character of a particular instance of the general scheme." (Whitehead, 1978[1929])

A similar position is taken by Mario Bunge who, as well as distinguishing philosophical (or speculative), from scientific, ontology, also, if somewhat unusually for a philosopher, notes that ontology can (as in social ontology, which I turn to be below) be "domain" or "region" specific. Thus Bunger writes of ontology that it is

"The serious secular version of *metaphysics*. The branch of philosophy that studies the most pervasive features of reality, such as real existence, change, time, chance, mind, and life. (...) Ontology can be classed into general and special (or regional). *General* ontology studies all existents, whereas each *special* ontology studies one genus of thing or process-physical, chemical, biological, social, etc. Thus, whereas general ontology studies the concepts of space, time, and event, the ontology of the social investigates such general sociological concepts as those of social system, social structure, and social change. Whether general or special, ontology can be cultivated in either of two manners: speculative or scientific. The ontologies of Leibniz, Wolff, Schelling, Hegel, Lotze, Engels, Mach, W. James, H. Bergson, A. N. Whitehead, S. Alexander, L. Wittgenstein, M. Heidegger, R. Carnap, and N. Goodman are typically speculative and remote from science. So is the contemporary *possible worlds* metaphysics."

Other uses of ontology and ontographology/opology can be elaborated as well, though I postpone discussion of them until the section on social ontology below, where such matters can be discussed less abstractly. Suffice it to say at this stage that ontology (in conjunction very often with ontographology/opology) serves not as a substitute for science or substantive theorising but as a Lockean under-labourer for such activity[8]. Its essential contribution lies in helping clear the ground a little so that substantive theorising can proceed more fruitfully than would otherwise be the case.

In the Cambridge project, as we shall see below, it is philosophical ontology that has figured most to date. And this emphasis, which is seemingly uncommon, certainly appears in need of some defence. For many contributors, and in particular various twentieth century philosophers working in the analytic tradition, have accepted that the second programme involving the elaboration of the content of scientific theories is the only defensible way of proceeding. Even within this group it is only the theories of natural science that are thought to be usable. Actually, I understate the justificatory task here. For, in truth, many contributors to modern analytic philosophy take the view that any kind of ontology is out of the question. According to this group all that we can achieve is what I am here terming ontographology/opology, which they sometimes refer to, if somewhat misleadingly, as internal metaphysics.

Let me now address the arguments of these sceptics. I do so first by providing a defence of scientific ontology against those who reject even the possibility of this, and subsequently by making the case for philosophical ontology a well.

In defence of scientific ontology

To the extent that twentieth century analytic philosophy has accepted the project of ontology at all this is usually associated with the contributions of Quine, particularly his "On What There Is". In this paper, Quine (1953) argues that to be is be a value of a bound variable. Bound variables are terms like 'thing', 'everything' 'something'. Quine's contention amounts roughly to the claim that to be is to be in the range of reference of a pronoun.

If (to use Quine's example) a person declares "some dogs are white" that person is actually saying that some things that are dogs are white; and for this statement to be true the things over which the bound variable 'something' ranges must include some white dogs. So in making the original utterance the person is accepting white dogs are part of her or his ontological commitments

Now when using a phrase like "to be is to be a value of a bound variable", Quine gives the impression that he is talking of what exists. However it must be accepted

---

[8] The interpretation of philosophy or methodology as an under-labourer for science can fairly be attributed to Locke. It is found, albeit almost as an aside, in the 'Epistle to the Reader' of his *An Essay Concerning Human Understanding*, where Locke writes:
"The commonwealth of learning is not at this time without master-builders, whose mighty designs, in advancing the sciences, will leave lasting monuments to the admiration of posterity; but everyone must not hope to be a *Boyle* or a *Sydenham*; and in an age that produces such masters as the great *Huygenius* and the incomparable Mr. *Newton*, with some others of that strain, it is ambition enough to be employed as the under-labourer in clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge" (Locke, 1690 [1947], pp. xlii, xliii).

that, first and foremost at least, he is indicating only how we determine whether someone (the author of a text) is committed to an existence. At this point, it can reasonably be argued, Quine is not doing ontology but ontographology or opology. This has led some interpreters of Quine to argue that he is merely laying out a strategy which scientists and others should follow in order to clarify their ontological commitments (see e.g.,).

If this was as far as Quine was prepared to go he would indeed seem to belong to that strand of twentieth century philosophy, inspired by Kant, and including the likes of Carnap and Putnam and Strawson, that has conceived all ontology as properly concerned not with any ('external') world in itself but only with human concepts, languages or systems of beliefs.

For this group the objective is simply to elucidate the ontological commitments of those language users or belief holders on which they choose to focus. Traditional ontology aimed at the world beyond is considered impossible; it is said to necessitate an "external metaphysics" resting on a neutral perspective or "God's eye view" capable of comprehending reality as it exists independently of our knowledge frameworks and language. In rejecting such a metaphysics the group in question argue that the most that can be undertaken is a study of the presuppositions or ontological commitments of specific theories or systems of belief, an activity termed "internal metaphysics".

Traditional ontology is thus replaced by the ontographology/opology, the study of how a particular community or individual conceptualises a particular domain. The goal is merely the conceptual presuppositions of sets of beliefs systems, languages and so forth. In contrast to the traditional ontologist's endeavour to uncover features of the world beyond conceptions, the proponents of "internal metaphysics" seek to uncover features of subjects or their beliefs or theories; their goal is an account not of the broader reality but of such features as the taxonomic system presupposed by speakers of a particular language or by researchers working within a scientific discipline.

But Quine does seem to go further than is. Not only does he see himself as doing 'internal metaphysics', in accepting certain theoretical claims as reliable, he seems to be accepting the posited ontology as reliable as well. Further Quine suggests that the way in which we accept an ontology is similar to the way we come to accept a scientific theory, that is by seeking to accommodate in a simple conceptual scheme all the relevant facts in the domain, albeit with the proviso that ontologists seek to accommodate not empirical facts but 'science in the broadest sense':

"Our acceptance of an ontology is, I think, similar in principle to our acceptance of a scientific theory, say a system of physics: we adopt, at least, insofar as we are reasonable, the simplest conceptual scheme into which the disordered fragments of raw experience can be fitted and arranged. Our ontology is determined once we have fixed upon the over-all conceptual scheme which is to accommodate science in the broadest sense" (Quine, 1953, pp 16, 17.)

Quine, then, at least in his influential 1953 contribution, appears seriously to engage in traditional ontology, the project of investigating the nature of reality. He

treats it not as the study of scientific language, or some such, but of the world beyond (that does not merely reduce to) conceptions[9].

Problems arise for Quine through his strategy for acheiving his (pragmatic) goal of limiting the scope of ontology. If Quine clearly does always believe that some posits, some ontological commitments, are informative of the way the world is, with time at least he is suggesting that this is true only of some very special forms of reasoning. Thus by the time of his "Word and Object", Quine (1960) is suggesting that the entities we quantify over, and certain predicates we use, are indeed indispensable in everyday language, but have no ontological significance.

Rather he distinguishes a top rate conceptual system (basically natural science "properly formalised") from a "second grade conceptual system" and simply rules that only our first grade conceptual system provides a serious or reliable account of what the world contains. Thus Quine (like Blackburn, Churchland, Williams and others) insists that only our best scientific theories about the world say anything seriously about what there is. Later, describing his position as naturalism, Quine writes:

> "Naturalism looks only to natural science, however fallible, for an account of what there is and what there is does. Science ventures its own tentative answers in man made concepts, perforce, couched in man-made language, but we can ask no better. The very notion of object, or of one and many, is indeed as parochially human as the parts of speech; to ask what reality is *really* like, however, apart from human categories, is self-stultifying. It is like asking how long the Nile really is, apart from parochial matters of miles or meters" (1992 a).

Putnum (19xx) amongst others thinks this signals the death of ontology. He observes that many of us (including apparently Quine) say things like: "Some passages in Kant's writing are difficult to interpret". According to Quine's earlier paper such assessments commit us to the existence of such things as "passages that are difficult to interpret" as well as correct and incorrect interpretations of passages. According to Putnam, because the interpretation of text is not part of our best scientific theories, the later Quine, along with Williams, Blackburn and Churchland, must conclude that "passages which are difficult to interpret do not exist" (Putnam, 19xx, p. 13). Finding such a conclusion to be absurd, Putnam concludes that ontology has had it.

There are, though, various less than compelling features of Putnam's line of reasoning:

First, even if we were to accept that only theories belonging to a top rate conceptual system (natural science properly formalised) provide serious or reliable accounts of what the world contains, it would not follow that things posited in a "second grade conceptual system" need not exist. To argue otherwise is to commit the epistemic fallacy once more, to reduce being to our knowledge of being. It is one

---

[9] Of course, if Quine is a realist, his emphasis on the empirical underdetermination of theories and of the underdetermination of translations means that he is very cautious about allowing that anything can actually be known, as opposed to being capable of being ranked according to pragmatic use.

thing to suggest that only our best theories give us *reliable* access to what there is; it is another to say that nothing exists that are not posited by these theories, and in particular that the posits of other second grade theories must not exist. After all some entities posited in first grade science may also be posited in some "second grade" conceptual system or theory as well. Where the second grade system emerged first the reasoning of our philosophers would mean that the entities so posited did not exist until the first grade theory brought them into existence. This is hardly an implication that these would-be scientific realists would want to endorse. In short, even accepting the dualistic thinking of these philosophers the mere fact of an entity being posted in some "second grade" theory implies nothing of necessity about its existence.

Second, who is to say that the interpretation of texts is not part of our best scientific theories? This presupposes a conception of best and scientific that is not provided.

Third, who is to say, or by what criteria are we to stipulate, that theories considered (by whom?) to be our "best scientific" ones, are the only ones suitable for the (ontological) task at hand? None of the philosophers in question provide any insight. It is true that many theories formulated in the social science academy, particularly economics, are unreliable. But the same is not true of lay theorising.

(Indeed, I would suggest that, when we eventually turn to the social realm, we will find that it is the insights of lay theorising that inform the theories of economists and not the other way around; it is lay theorising and understanding that constrain economists to posit certain real world categories/entities such as: markets, money, firms, institutions, technology etc.)

Fourth, what anyway is the problem of allowing that things like "passages that are difficult to interpret" are real, are a part of being? Why should our accepting their reality signal the death of ontology? Clearly it does not; Putnam is simply wrong. Quine clearly does not want to grant existence to too many things. But this is merely an *a priori* or pragmatic preference. Of course, if we refuse to takes Quine's (arbitrary) stance (and I think we should refuse it) we must accept that ontology so conceived has an enormous field of enquiry. Indeed, it is the whole of being, as I earlier acknowledged. But this merely means that in order to progress it is necessary, as here, to delimit any particular ontological project pursued. I see no problem with this. It just entails that w need to be clear about our field-delimiting strategies.

So I conclude that ontology is not yet dead. At least a version of scientific ontology is not. As long as we are in possession of theories widely regarded as reliable, whose content can serve as premises for ontological analysis, there is reason to suppose that the presuppositions uncovered can relate to reality beyond conceptions. Where this is not so then we can accept that, when employing the method of Quine, we are learning only about the presuppositions of scientists.

I should indicate that I will be looking to move beyond Quine's approach, even within scientific ontology. For to the extent that the objects of scientific theories are discipline or even sub-discipline specific the relations between such entities inevitably fall outside the domain of ontology as Quine perceives it. But these are matters to which I will turn in due course. To this point I have sought only to establish that

scientific ontology is not everywhere ruled out on principle. I now want to make a defence of philosophical ontology. And this may seem to be the harder task. For it is widely held that this sort of philosophy at least is necessarily *a priori* and transcendent. I believe this not to be so. And is essential to my overall strategy that it be not so.

Philosophical ontology

Now my contention here is that philosophical ontology need not be dogmatic and transcendent, but rather that it can be conditional and immanent. Quine allows that the theories of natural science constitute a legitimate entry point for scientific ontology just because, or where, they are taken as reliable. But we not constrained to consider, with Quine, only those reliable claims etc. that express the content of theories; we can, for example, just as legitimately commence from any feature of experience regarded as reliable or adequate to the relevant domain of reality, including those concerning human practices. And if philosophical ontology aims, as it does, at generalised insights we can seek reliable conceptions of human practices and so forth that too are reasonably generalised[10].

For example, it seems to be a relatively non-contentious assessment that, in well-controlled laboratory experiments, event regularities are produced that would otherwise not occur. What are the preconditions of this? Let me refer to a sphere of reality

1) in which an event regularity is produced, or occurs, as *closed*,
2) that comprises more than one ontological level (e.g., that does not reduce to the level of events) as *structured;* and
3) in which some parts can be insulated from others as *separable*.

Making sense of the experimental production of an event regularity presupposes that the experimental activity is successful in a) isolating b) an intrinsically stable, and separable, causal mechanism from countervailing factors, and c) triggering the mechanism under these conditions, thereby observing a correlation between its triggering conditions and effects.

In other words, reflection on the conditions of experimental control reveal the domain of reality in question to be open (allowing the possibility of experimental closure), structured (constituted in part by causal mechanisms irreducible to events and their patterns) and separable.

Notice, then, that whilst reflection on a specific theory of science will inform us about a specific causal mechanism (or whatever), philosophical ontology allows more general insights into such real world properties as *structure, causality, separability* and *openness/closure*.

---

[10] The fact that my own approach differs from (I might suggest generalises) Quine's on such issues has recently been noted in an interesting paper by Latsis, 2004.

Transcendental reasoning

In the experimental case just examined, the reasoning moved from generalised observations about experimental practices to inferences concerning their conditions of possibility. Any argument that moves from certain generalised features of our experience to their conditions of possibility can reasonably be termed transcendental. Now I mentioned above that the arguments of Putnam, Carnap and others in favour of an internalist metaphysics are inspired by Kant. And this influence stems in significant part from his use of the transcendental argument. Indeed, Kant explicitly employs transcendental reasoning in a project concerned with replacing (what he viewed as misguided) endeavour aimed at disclosing the nature of being by a set of investigations into the presuppositions of our knowledge of being. Hence my acknowledging a reliance on transcendental arguments here may seem confusing.

But as I have already noted these two activities – elaborating the structure of reality and identifying the presuppositions of our knowledge of being – need not be different projects, and specifically that the latter can serve as a means to achieving insights into the nature of being. An incompatibility between the two projects arises for Kant only when, in his doctrine of transcendental idealism, he identifies the task of uncovering the presuppositions of knowledge with that of elucidating the conceptual structures in terms of which any knowable being must be thought. In this, Kant is thus conflating practices that are conceptually distinct. Once we disentangle them[11] we can accept transcendental reasoning just as fallible, practically conditioned investigation into some or other feature of our experience, a practice taking, in philosophical ontology, the form of an investigation into generalised features of our experience, including human activities (see Lawson, 1998).

A point I want emphasise, for it is rarely noted even by those who accept the case for philosophical ontology, is that transcendental reasoning can be employed even where the practices initiating the exercise are considered inappropriate in some sense. For such an exercise can still give insight, albeit into the sort of reality in which the practices being recommended or adopted would be appropriate. In this case the conception of reality in question can be contrasted with any other presupposed by successful practices, and relevant inferences can be drawn. Indeed, such a procedure has been consequential in modern social ontology, especially in relation to the study of the practices of modern economists (see e.g., Lawson, 2003, chapter 1).

---

[11] I am not even sure that the conceptual disengagement of transcendental argument from Kant's specific mode of application is particularly contentious. Thus I note that in the *Cambridge Dictionary of Philosophy*, Brueckner opens his entry on *transcendental argument* as follows:

"**transcendental argument**, an argument that elucidates the conditions of possibility of some fundamental phenomenon whose existence is unchallenged or uncontroversial in the philosophical context in which the argument is propounded. Such an argument proceeds deductively, from a premise asserting the existence of some basic phenomenon (such as meaningful discourse, conceptualization of objective states of affairs, or the practice of making promises), to a conclusion asserting the existence of some interesting, substantive enabling conditions for the phenomenon. The term derives from Kant's *Critique of Pure Reason*, which gives several such arguments" (p. 808).

Of course, although modern familiarity with transcendental argumentation derives from the manner it was taken up by Kant, its employment is found in philosophy stretching back through the middle ages to the ancient Greeks. Over time its interpretation has developed with new understanding just as has the concept of an atom and almost any other notion. And the interpretation accepted here is certainly continuous with that running up to the present day through Kant.

A further point to stress is that I have focussed on transcendental argument to indicate that philosophical ontology can be (and of course I am also suggesting that it must be) conditional and immanent. But I do not suggest that this is the only method of philosophical ontology, and even less define it in terms of (that) method. The argument so far has been illustrative rather than definitional.

The relationship of philosophical to scientific ontology

Before finally turning to see how the issues considered work out in the context of social ontology I ought first to consider the question of how the insights of traditionally conceived philosophical and scientific ontology inter-relate. Specifically, I should address the question as to whether a formal metaphysics of the sort aimed for though the project of philosophical ontology can by itself generate any more specific metaphysics of the sort achieved, or sought for, though scientific ontology.

Many have tried simply to deduce results of scientific ontology from those of philosophical ontology, but none seem to have succeeded. Nor do I think it is possible. The movement from the results of philosophical ontology to the insights of scientific ontology require the former to be supplemented with additional empirical insights. This is not to say that the former cannot inform the elaboration of the sorts of entities that are the objects of scientific or substantive analysis - and this will be important to the project in social ontology I describe below. But the two programmes must be regarded as irreducible each to the other and instead laid each along side the other.

Philosophical ontology explicates the properties common to all objects in the relevant domain; scientific ontology elaborates the sorts of entities, etc., that are found in the domain of interest. Both are historically relative, practically conditioned, and rationally appraisable; each, though, is a separate, non-reducible project.

Social ontology

If my own concern with ontology has been mostly with its traditional interpretation as the study of being as such, my particular or 'regional' concern, which is with social ontology, is not traditional at all, even within philosophy.

By social ontology, let me recall, I mean the study of the nature or structure of social reality, a concern with identifying basic components or fundamental features of social being. By social reality, to repeat further, I mean that domain of phenomena whose existence depends at least in part on us. It thus includes tables, chairs, language systems, pollution, wars, nations and societies, and even social and philosophical reasoning itself: social theory is part of its own field of study.

As noted above I am concerned with the following two projects in particular:

1) *Social scientific ontology*: the study of the most basic or significant entities or things of the social domain; and
2) *Social philosophic ontology*: the study of what all the social entities or things that are have in common

I start by considering the former.

Social scientific ontology, an initial orientation

Now if it is plausible (although erroneous) to suppose that scientific ontology in the natural realm is usually less problematic than the philosophical, there seems little reason *a priori* to hold any apprehension of this sort with regard to the investigation of social being. It is not for nothing that Quine restricts his focus to the (widely-held-to-be) successful natural sciences. For the social sciences are a veritable cauldron of claims and counterclaims devoid of anything approaching consensus. Nowhere is this more obviously the case than economics, the discipline with which I am the most familiar.

However, let me start by stressing an actual advantage that social scientific ontology possesses over its natural science counterpart. This is that whilst the entities of natural science (e.g., super strings, quark, tanon-neutrinos, black holes) are at first unfamiliar, being the objects of conceptions formulated within natural scientific work in the course of explaining observed phenomena and the like, and so in principle discoveries, the explanatory categories of social science, including economics (which will be my primary focus here), are typically already known, at least under some description. This follows just because the social realm, unlike the natural one, depends for its existence on us, including our conceptions.

It does not follow thereby that the latter conceptions are adequate to their objects. But it does mean that we will likely already have an awareness of many, and possibly of most, social objects at some level. Thus, for example, any serious substantive (including lay) account of aspects of capitalism will likely include categories such as markets, institutions, money, firms, production, even if the latter remain ill defined and unelaborated.

The primary problem with social scientific theorising lies not with identifying the categories (although it may yet be that a realistic analysis may throw up hitherto unrecognised categories) but in the fact that such categories as appear vital are treated differently in competing theories.

Thus in some contributions, an institution is a pattern of behaviour, in others a set of rules, in still others a control system, and so on. Notoriously the category money is found to take different meanings in different paradigms, for example as a commodity, a unit of account, a store of value, whilst in the recently dominant paradigm of general equilibrium theorising no place can be found for any notion of money at all, a feature recognised within that project as a failing (see e.g. Hahn, 19xx).

Indeed, the latter 'failing' bears on my assessment indicated briefly above, that by and large it is the insights of lay theorising that inform the theories of economists and not the other way around; it is lay theorising and understanding that constrain economists to posit certain real world categories/entities such as markets, money, firms, institutions, technology etc.

So, in sum, if social scientific ontology possesses a head start on natural scientific ontology in being in possession of a knowledge of relevant categories even before turning to scientific theorising, its problem is that so much social theorising around

these categories is found to be unreliable, and certainly contested, that it is difficult to find claims that can safely be treated as suitable premises for the ontological analysis.

A recognition of the latter state of affairs may even lead us to suppose that social ontology is impracticable, that in the social domain we are necessarily restricted to ontographology/opology. For it may seem that all that enquiry can hope or realistically claim to achieve in such circumstances is to lay bear the presuppositions of economists and/or their theories; it can elaborate only an 'internal metaphysics'.

Now let me immediately acknowledge that investigative endeavour of this latter sort, even if we were confined to it, is not itself without value or insight. For to the extent that social theorists are committed to the content of their theories then, ontographological/opological enquiry, in the manner that psychology or anthropology are (or anyway in principle could be) informative of the worldviews of their subjects, can be informative of the worldviews of social theorists. In this way we can seek to elaborate the worldviews of certain singled-out as significant contributors, or, where a project is shared (and much modern economics, for example, is shared -- encouraging Leijonhufvud to talk of the 'economics tribe'), of particular groups of social theorists.

Actually, by examining a contributor's ontological preconceptions it is often possible to throw further light on the nature and/or meanings of her or his substantive claims and contributions, especially where the latter are found to be otherwise open to a large number of seemingly ill-grounded interpretations.

For example, through examining the relevant author's ontological preconceptions it has proven possible, in economics, to give support to (contested) assessments that Commons did hold a theoretical perspective (see Lawson, C., 1994, 1995, 1996, 1999); that Hayek's position changed significantly over time (Lawson, 1994a; Fleetwood, 1995); that Veblen did favour an evolutionary economics and not merely because making economics evolutionary would render it up-to-date (Lawson, 2003, chapter 9); that Marx's theory (of capitalist tendencies) is not a deterministic theory (Fleetwood, 2002); and so on.

Of course, such a project of clarification presupposes that contributors being studied are reasonably internally consistent. But, not all are as internally consistent as they might hope to be. Indeed, it is conceivable that economists will sometimes profess worldviews that are at odds with those presupposed by their theorising. Here, though, is a yet further (or alternative) way in which social opology can be useful: in revealing such inconsistencies (and possibly stimulating a dialectical process aimed at reconciling them).

Examples of this latter sort of work or approach already exist, of course. Thus, Graça Moura (1997, 2002) focuses on the often-noted inconsistencies in Schumpeter's writings and shows that the explanation is that the ontological presuppositions of Schumpeter's equilibrium theorising are quite inconsistent with the worldview expressed in his vision of economic development. Pratten (1998) similarly shows that the inconsistencies between the ontological presuppositions of Marshall's equilibrium theorising and those of the theories of evolutionary biology that interested him explained Marshall's failure to produce a second edition of his Principles incorporating insights from biology. Further, it is easy enough to subvert the claim of

proponents of general equilibrium theorising that their project is essentially identical to Adam Smith's account of the invisible hand in his Wealth of Nations. (see e.g., Arrow and Hahn, 1971, p. 1 for an example.) by revealing the ontological presuppositions of the two to be quite opposed (see (Montes, 2003; Lawson, 2004).

But still these contributions, and others like them, do not get us as far as we would like. Research endeavour aimed at clarifying how certain contested contributions are best interpreted, or at identifying and explaining inconsistencies in an individual's output, are certainly of value. But it does not provide insight into the basic structure of social reality; it throws little if any light on the world beyond our conceptions of it. It would be preferable to engage in social scientific ontology. But is it possible?

I think that we can do social scientific ontology. But before indicating (and indeed in part in order to indicate) how, I first consider the possibility of social philosophic ontology. For I think the latter may often prove helpful to the former. Of course, I do not wish to suggest that the latter, if possible, could ever be sufficient for social scientific ontology. But, as I say, I do think it will often prove enabling of it. So let me first turn to consider the possibility of social philosophic ontology, to identifying the common properties (if any) of the objects of social reality.

Social philosophic ontology

I have earlier suggested that one fruitful approach to philosophical ontology is to seek (possibly transcendental) arguments starting from premises concerning successful social practices. Although most of the practices of social science may not be said to be (or be recognised as being) reliable I think we can accept that we all of us engage in many successful social practices in our daily going on in life. Our practices are successful in the sense that allow us to negotiate our way round a complex reality, an outcome intelligible only on the assumption that these practices are mostly appropriate to their objects. Let me give some examples.

I start with the simple observation that routinised (reasonably predictable) behaviour is pervasive; indeed all social practice seems to have some or other repeated or routinised aspect.. Now a seemingly necessary condition for this is the existence of *social rules or codes*, which guide the practices people follow (Lawson, 1997a, chapter 12; 2003 chapter 2).

In truth, we already know that social reality is in part constituted by social rules. Indeed I think that identifying them is one of the less contentious contributions of scientific ontology; social rules (or rule systems) may even constitute the most significant and pervasive features of social reality. I think too we know their form[12].

---

[12] Social rules can be conceptualised as *generalised procedures of action*, procedures that, under suitable transformations at least, can be expressed as injunctions of the form:"if x do y under conditions z". For example, "if wishing to speak at a crowded seminar, hold your hand up, when in twentieth century Britain". The stipulation `under conditions z' will often be dropped or unacknowledged in any explicit formulation but will always be implicated. All action, for example, takes place over limited regions of time and space and in specific socio-cultural contexts.
This formulation is quite general and intended to apply equally to semantic, moral, constitutive, regulative, etc., forms, or aspects, of rules alike. The `do y' in other words is to be interpreted widely and to include such injunctions as `interpret ... as', `count ... as' `take ... to mean', and so on. Of course, any rule only carries normative or legitimating or facilitating (constitutive/regulative/moral/semantic)

But there are aspects of these rules and their conditions that warrant elaboration before we can claim to have a conception of them that is at all adequate.

We can start by noting that social rules are ontologically distinct from social practices[13]. A recognition of this follows once we observe, and enquire into the conditions of possibility of, the fact that practices governed by rules are not always, or on average, in conformity with our formulations of these rules.

The (intentional) act of rebelling requires as much knowledge of the rules as does that of conforming. Currently, motorway drivers in the UK *mostly* drive at a speed above that laid down in law, albeit in each case usually not significantly faster than other motorists for fear of getting caught out by traffic police. And workers taking industrial action frequently *threaten* to work to rule. Making sense of the fact that rules are often (or even sometimes) so much, and possibly systematically, out of phase with the practices they condition requires that we recognise the two aspects, rules and the practices, as connected, but ontologically distinct. The ontological distinction between social rules and practices is a (transcendentally inferred) necessary condition of the possibility of the former influencing, whilst simultaneously being often out of phase with, the latter.

But it is not just social rules that are irreducible to the social practices on which they depend. This is true of all other social features. Once such is social positions. Let me quickly elaborate.

A further widely observed fact of experience is that the practices people follow, including routines (which may or may not become habitual), are highly, and *systematically*, segmented or differentiated. It seems we are not in all cases all empowered to do the same sorts of things as each other. Teachers follow routines and other recognisable practices which are different to those followed by students. Similarly there are differences between the regular practices of employers and those of employees, between those of land ladies/lords and those of tenants, and so forth. It is the case, then, that either we do not all follow the same rules, or given social rules lay down contrasting obligations, etc., for different (sorts of) people.

How can this be? Notice, too, as a yet further generalised observation, that practices which can be followed in any context, and so the rules governing the obligations and prerogatives in play, are often independent of the particular individuals carrying them out at any point in time. Each year, for example, I am, as a university lecturer, faced by an array of students who are expected to attend lectures, write essays and sit exams (just as I am expected to give the lectures, etc.). But equally, each year the set of individuals facing me as students is found to be different

---

force. A social rule, in other words, is a formulation of action that, under specified conditions, must, should, or can usefully, legitimately, meaningfully, or advisedly, etc., be carried out, rather than a prediction or observation of an action. It is a (possibly contested) directive, code, convention, or understanding about *how* an act could or should be performed; it is not *per se* a prediction or claim that the performance so indicated in fact always proceeds.

[13] My assessment clearly differs from those accounts that appear to interpret rules as merely generalised features of practices. I think the latter is Giddens' interpretation (see Giddens, 1984; also see Archer, 1995).

from that of the previous year. The practices are continued but the individuals enacting them frequently change.

We can make sense of all this by recognising that the constituents of social reality includes *positions* into which people essentially slot, positions that have rules attached to them governing the obligations and perks, etc., that fall on, or are on offer to, their occupants. This real category of positions into which people slot is required to make sense of (is a necessary condition of the possibility of) the continuity of social life in the face of changing individuals; and it is the association of rules with these positions that explains the systematic segmentation of routines followed. So, we find that the ontology of the social world includes not only social practices and social rules but equally social positions.

It seems from this that social practices and social rules are heavily bound together, via social positions. People access the rules by standing in positions. And social rules seem to bear on (but do not of course determine the outcome) of all spheres of human interaction. Social reality, then, consists in more than one irreducible ontological level. It may be that social phenomena like rules and positions etc. lie at the same ontological level as each other. But they are ontologically distinct from and irreducible to the practices on which they depend and are intrinsically bound. So social reality then appears to consist of complexes (such as rule position systems) that are irreducibly *structured*.

This is not he end to it of course, even in respect to our understanding the manner of functioning of social rules. For example we can take note of (and seek to explain) the further generalised feature of experience that our (rule-guided) practices are not only differentiated according to position occupied but typically systematically and constitutively other-oriented. The defining practices of any one group are usually oriented to the practices of others which, if often to a degree similar to the first set of practices, are typically quite distinct. Thus, the practices of students are oriented towards (though mostly different from) those of teachers, and vice versa. In similar fashion this feature of being other-oriented characterises the practices of employers and employees, land ladies/lords and tenants, parents and children, preachers and congregations, performers and audiences, etc.

A condition of the possibility of this other-orientation of social practices is the existence of *internal relations* in the social domain. These are relations whereby the aspects related, the relata, just are what they are, and/or are able to do what they do, in virtue of the relation in which they stand. Relations whereby the relata are not mutually constitutive are termed *external*. Internal relations hold for the natural world too, e.g., between a magnet and its field. Notice, though, that it is relations between positions (as opposed to people *per se*) that are likely to be of primary importance in the social domain (for an elaboration of the argument see Lawson, 1997a, chapter 12; Lawson, 2003, chapter2). The prevalence of internal social relations suggest a further ontological property: that of *interconnectivity*, that its constituents of social reality are highly *relational*.

More yet can be inferred regarding the socio-ontological picture. Because social structure is found to make a difference (we could not speak as we do without the prior existence of language, drive safely on motorways without knowing the already

existing highway code, etc) we can infer that social structure is both relatively autonomous (it pre-exists our current acts) and also real (it makes a difference to what is possible). Hence voluntarism must be rejected. Because social structure (in virtue of being social) depends on us (i.e., on transformative human agency), structural deterministic accounts must also be rejected.

In short, social structure is both condition of, as well as dependent upon, human action. So it is neither created by, nor creative of, human action. This means we must replace both voluntarist and determinist accounts of social life by a transformational or reproductive account, according to which social reality is continuously being reproduced or transformed. This is the *transformational model of social activity*. Only on such a conception does it follow that social structure is the (often unacknowledged) condition of our actions and its reproduction/transformation the (often unintended) outcome. So the objects of social reality are inherently *processual*.

Notice that such processuality characterises all social phenomena, including such social structures as markets, universities, schools, hospitals and systems of industrial relations. Social entities such as these do not independently exist (and often endure over significant periods of time-space) and undergo change. Rather, change is essential to what they are, to their mode of being. They exist by way of the social practices that they in turn facilitate, processes of becoming (and decline). Although, for example, the university of Cambridge has always supported teaching and research, the form and content of this has (like that of any other aspect of university life) been changing all the time.

Yet more can be inferred. In the discussion of the well-controlled experiment above I referred to a situation in which an event regularity occurred as closed. Any other situation can be referred to as open. The controlled experiment is an intervention designed to close an open structured system, by way of (as we saw) isolating an intrinsically constant and separable mechanism from the effects of countervailing mechanisms. Now because social reality is highly internally related, conditions of separability cannot be generally assumed; and because social reality is intrinsically processual or dynamic, the required intrinsic constancy of social mechanisms cannot be widely expected. Hence social reality can be characterised by openness. From this perspective it is not at all surprising that methods such as econometrics, that require that social reality is in some relevant region closed, are repeatedly found to provide only limited illumination at best.

One final property of any social phenomenon that I want to emphasise is that it is always *emergent*. A stratum of reality, and indeed each of its members or constituents, can be said to be emergent, or as possessing emergent powers, if there is a sense in which it

1) has arisen out of a lower strata, being formed by principles operative at the lower level;
2) remains dependent on the lower strata for its existence; but
3) contains causal powers of its own which are both irreducible to those operating at the lower level and (perhaps) capable of acting back on the lower level.

Thus organic material emerged from inorganic material. And, according to the conception I am defending, the social realm is emergent from human (inter-) action, though with properties irreducible to, yet capable of causally affecting, the latter. For example, a language system has powers irreducible to the human speech, and other communicative, acts on which it nevertheless depends.

It is clear, then, that we are able to make sense of various generalised features of certain human practices, by identifying and elaborating their conditions of possibility. In so doing we are led to a definite conception of social reality. Not only do we find that amongst its existents are social rule-position-practice systems, we also find that social reality is structured vertically (it includes underlying powers and tendencies as well as actualities such as social practices and other events), and horizontally (practices are differentiated), and further characterised by emergence, openness, interconnectivity (or relationality) and dynamism or processiality.

Consequences

Such a conception clearly has numerous implications for many matters including approaches to substantive theorising and ethics. For example, it obviously provides *directionality* to social theorising. In particular, it is suggestive of the sorts of scenarios for which we ought to be methodologically prepared. Because the social world is found to be structured (it is irreducible to such actualities as events and practices) it follows that social research will need to concern itself not only with correlating, or otherwise describing, surface actualities, but also, and seemingly primarily, with identifying the latter's underlying conditions. Indeed it appears to follow that social-scientific research has, as a proper and compelling object, the explaining of surface phenomena in terms of its underlying conditions.

Alternatively expressed, the ontological conception I defend directs us towards considering how, in social theorising, including economics, we might conduct causal explanatory projects[14].

In fact, the conception is suggestive of the possibility that seeking surface correlations in social events and states of affairs may have little application at all. For the conditions of these (closures requiring intrinsic constancy and separability of mechanisms) are precisely those found in well controlled experiments, and as we have seen the social realm is such as suggest that the special conditions are unlikely very to obtain. Given that modern mainstream economics is dominated by a mainstream project which makes an emphasis on methods of formalistic-deductivist reasoning more or less compulsory, a stance which in turn require a ubiquity of correlations or closures, we can at once understand the widely observed (refs) explanatory failings of that project to date.

---

[14] This emphasis, in turn, points to a need to develop modes of inference over and above (the usual forms of) deductive and inductive logic. To pursue causal explanation as interpreted here, we require a mode of inference that takes us behind the surface phenomenon to its causes, or more generally from phenomena lying at one level to causes often lying at a different deeper one. This is *retroduction*. The specifics of the explanatory context will bear upon how in practice the retroductive process might proceed. But it seems likely that it will often be helped along by a logic of analogy and/or metaphor, and rest usually upon ingenuity as well as luck.

Actually the ontological conception in question is more explanatory powerful still. For not only does it explain the widespread continued explanatory failures of much of modern economics over the last fifty years or so, but also it can account for both (i) the *prima facie* puzzling phenomenon that mainstream economists everywhere, in a *manner* quite unlike researchers in other disciplines, suppose that (acknowledged) fictionalising is always *necessary*, and (ii) the types of conditions that prevail when mathematical methods in economics achieve such (limited) successes as are experienced (see Lawson, 2003 chapter 1 for a discussion).

And as indicated, the conception elaborated also bear upon matters of ethics and so on projects of a practical or policy sort. For example, because all human beings are both shaped by the evolving relations (to others) in which they stand as well as being differently (or uniquely) positioned, it follows that all actions, because they are potentially other-affecting, bear a moral aspect, and also that any policy programmes formulated without attention to differences, that presume homogeneity of human populations, are likely to be question begging from the outset. Certainly, programmes of action that ignore their likely impact on the wider community are immediately seen as potentially deficient.

Eventually, of course, such considerations point to questions of power, democracy and legitimacy. They raise questions of who should be taking decisions in a world of different identities where most of us are likely in some way (differentially) affected by actions taken by others. And indeed they invite a questioning of whether anything less than the whole of humanity (and possibly much more) can constitute a relevant unit of focus in the shaping of emancipatory projects and actions.

However, significant though these sorts of issues are, they are not my central concern here (for an elaboration of these and other implications, see Lawson, 2003). The main task awaiting me at this stage is to give substance to my earlier claim that philosophical ontology can aid the project of social scientific ontology, that the results of philosophical ontology applied to social phenomena can facilitate the elaboration of social entities. It is this issue I consider next.

Social scientific ontology once more

Before I proceed further, though, let me restate my earlier cautionary remark, that there can be no direct inference from the results of philosophical ontology to the sorts of entities or categories we are now attempting to elucidate. To reach the latter, additional empirical input is unavoidable. However, I do want to suggest that the social philosophic ontological findings can be helpful to the task before us, and, in the circumstances, probably essential to it.

Amongst the results of the exercise in philosophical ontology described above are the insights that social reality is an emergent, open-ended, structured, transformational process in motion, in which the parts are constituted in and through their (changing) relations to each other.

If we accept these results it follows that social entities of interest to, say, economists, such as money, markets, institutions, firms, social and individual

identities etc., must be made to cohere with this conception. This, then, is a first criterion for any sustainable conception of a particular social entity.

Now if formulations of specific social entities, say, of an institution, money, technology, or a firm, can indeed be made to cohere in a satisfactory way with the above elaborated results of social philosophic ontology, there are likely to be various ways of achieving this in each case. If so how would we decide on the specific formulation to adopt?

The (realist) orientation adopted here, of course, requires that the social category employed also picks out a definite feature of reality, that there is a definite referent. This is a second criterion for any sustainable conception of a particular social entity.

Notice, that from the philosophical ontological picture elaborated, all social entities will clearly be emergent phenomena. It follows that two obvious questions to ask of any conception of a social entity are:

a)   what distinguishes it from anything/everything else?
b)   in virtue of what can it be identified as an entity?

For if everything is constituted through its relations to everything else how do we draw boundaries? Are there, for example, many markets or just one? And can we really distinguish, say, markets from money? Certainly we cannot use the tools of controlled experiment to insulate a particular social form from any other.

Furthermore, if change is fundamental to all social forms, in what sense can anything be identified as the same entity over time? Are the things we call money, Cambridge University, capitalism or the market place the same things that were ascribed the same labels two centuries, or even two decades, ago?

These are questions less obviously, or perhaps less frequently, pertinent to the theorising of natural phenomena, where there is perhaps reason to suppose that hydrogen, quarks and tanon-neutrinos are the same things today as they always were. But in social theory the need to addressing such questions as these seems to be everywhere unavoidable.

I do think that an important third criterion for a formulation of a category to be accepted is that it be consistent in a sense with historical usage. It would be unhelpful to interpret a term in a way that bears connotations that previously have born no relation. But still, how do we decide on the interpretation to give precisely?

An essential part of the answer, albeit one that will always seem unsatisfactory to some, is that it will depend on the context of analysis. We can see that at some level the conceptions resulting from mainstream formalistic-deductivist modelling will be forced into the separable and separated intrinsically constant mechanisms (social atoms), so that the formulation of categories in this literature must be treated with due caution. But there are other literatures as well as everyday lay understandings. It may even be that (many of) these are widely found to be realistic but perhaps dismissed on erroneous grounds, say for not being sufficiently formalised.

For example, some notion of an institution is widely adopted; even a dictionary definition can provide an input to a sustainable conception. Further, before the rise of the mathematical mainstream, the largest tradition in North American economics was that of institutionalism. For this project a conception of an institution was a central category, and indeed remains so. Now I do not suggest that all such conceptions of an institution will be identical or perfectly coherent. But a task of synthesising them can perhaps be undertaken, employing the criterion that the conception defended be consistent with the earlier defended (philosophically derived) emergentist ontology. This synthesising process will typically be dialectical (preserving the insights of all conceptions dialectically developed). In any case, an initial conception will be continually revised to fit with relevant considerations. Put differently, the process will involve what Strawson calls revisonary metaphysics in addition to the initial descriptive metaphysics. Unlike Strawson's conception though, the goal here are categories that express aspects of the basic structure of social reality.

Now if 'revisionary metaphysics' is indeed involved it seems to me that a fourth criterion to employ in formulating our interpretation is that any conception defended has some theoretical or practical utility. It seems pointless transforming the meaning of a term to, say, express something already captured by a further category, or to express something that carries no analytical insight.

I do not pretend that these four criteria will be sufficient, or will always lead everyone to the same conclusion. But they do seem necessary to the process. The process of discriminating amongst any remaining competing conceptions will clearly depend on context specific issues and criteria, though it may sometimes be a relatively simple matter to do so.

Elsewhere (Lawson 2004a) I do look precisely at the notion of an institution. The historical record I draw on is indeed that of the institutionalist tradition. There the common idea is of something that is relatively fixed. After considering limitations of, or objections to, this conception, and in the light of the social ontology defended earlier, this notion becomes transformed into the following: *Institutions are particular forms of emergent social phenomena, mostly social systems, or structured processes of interaction, that are either intended to be (whether or not they are), or are discovered* a posteriori *to be and are recognised as, relatively enduring.*

This conception, I then argue, picks out definite features of reality (for example, Cambridge University, or even the Cambridge realist workshop), and is useful as a modern analytical category. The latter follows just because there is no other term that captures the relatively enduring (and recognised as enduring) structures of society, and because such structures are sufficiently important to warrant identifying in social theory; in uncertain and often perilous, largely open, social systems, such relatively enduring structures facilitate opportunities for planning that would otherwise not be possible.

An alternative project recently undertaken involves elaborating a conception of gender that reconciles both the early (second wave) feminist emphasis on the oppression of women my men with the postmodernist insight that all experiences are unique so that conceptions of men and women based on the category of experience are problematic. The ontological conceptualisation elaborated above allows for a synthesis

of both sets of insights, producing a conception, I argue, that is has as a referent an aspect of most features of society, and is extremely analytically useful in being able, amongst other things, to maintain without obvious tension the intuition that emancipatory projects are worth pursuing (see Lawson, 2004b)

An aim of the Cambridge project is to elaborate many more of such challenging categories, including, perhaps centrally, money, markets, firms, technology, and individual identity, amongst others. Indeed, it seems fair to say that such contributions, though now urgent, and in the process of being carried though, remain to this point in their infancy.

I might emphasis, finally, that I am not all suggesting that the sort of approach just described constitutes the only possibility for ontological elaboration at the level of social entities. It all depends on context.

Where the ontologist does accept a social theory as reliable, there is a case for scientific ontological elaboration along the lines suggested by Quine. Many, for example, accept the theories of Marx as realistic, and much time has been spent elaborating such categories as socially necessary labour time, exploitation, exchange and use value, and so forth. But in modern economics, a widespread acceptance of any theories as even plausible remains a rarity, and is seemingly always contentious.

A further strategy is to borrow categories or theories or metaphors from domains other than the social, to render them consistent with the ontological conception defended here, and then enquire into their usefulness as a social category. In such endeavour, the analysis is modal rather than injunctive, that is it involves investigating the relevance of the borrowed features rather than taking them as given.

An example is the borrowing of (Darwinian) evolutionary conceptions from biology. Obviously, in the light of the social ontology set out above this evolutionary conception needs first to be rendered consistent with, that is formulated as a version of, the transformational model of social activity, before the question is put as to whether it carries social theoretic relevance. The latter issue of course is an empirical one (for a lengthy analysis see Lawson, 2003, chapter 5).

Final comments

In conclusion, my aim here has been to set out the rationale for, and briefly to describe and defend, an ongoing collective programme in ontology.

The features that differentiate this project from most others in ontology are that a) its primary concern is with the social domain and b) its ontological orientation has thus far been first and foremost philosophical rather than scientific.

However, contrary to prominent conceptions of the essential nature of philosophical ontology, the approach adopted is not dogmatic and transcendent but conditional and immanent; indeed it is as situated, fallible and practically conditioned as the more substantive contributions upon which it draws. It does not analyse a world apart from that investigated by science; rather it addresses that self same reality but with different questions, emphases and tools.

To this point in time the project in question has provided, before all else, a conception of the basic structure of social reality, a set of insights into the nature of social being. Less attention has been paid to elaborating basic social categories or entities, the task many allocate to social scientific ontology. For reasons laid out above, insights into these categories may actually be best achieved by way of (dialectically) combining philosophical ontology and socio-substantive accounts (including lay interpretations) in a programme of revisionary metaphysics. The fulfilment of the latter, though, lies mostly in the future. This essay has been concerned to at least provide it with a rationale, and also to set out some grounds for optimism that its realisation is entirely feasible.

References

Archer, Margaret (1995) *Realist social theory: the morphogenetic approach*, Cambridge: Cambridge University Press.

Bunge, Mario (19xx)…

Fleetwood, Stephen (1995) *Hayek's Political Economy: the Socio Economics of Order*, London: Routledge.

Fleetwood, Stephen (2002)

Giddens, Anthony (1984) *The Constitution of Society*, *Polity Press*. Oxford: Basil Blackwell.

Graça Moura, Mário da (1997) *Schumpeter's Inconsistencies and Schumpeterian Exegesis: Diagnosing the Theory of Creative Destruction*, PhD dissertation, Cambridge.

Graça Moura, Mário da (2002) `Metatheory as the key to understanding: Schumpeter after Shionoya', *Cambridge Journal of Economics*, vol 26, No. 6.

Hahn, Frank (19xx)

Latsis, John (2004) "Quine and Critical Realism", mimeo: Cambridge.

Lawson, Clive (1994) `The Transformational Model of Social Activity and Economic Analysis: a reinterpretation of the work of J.R.Commons' *Review of Political Economy*, vol. 6 no. 2, 1994.

Lawson, Clive (1995) *Realism and Institutionalism: John R. Commons, Carl Menger and Economics with Institutions*, PhD dissertation, Cambridge.

Lawson, Clive (1996) `Holism and Collectivism in Commons' *Journal of Economic Issues*, December.

Lawson, Clive (1999) `Commons' Contribution to Political Economy' in Philip O'Hara (ed.) *Encyclopedia of Political Economy*, London: Routledge.

Lawson, Tony (1994a) `Hayek and Realism: A Case of Continuous Transformation', in Maria Colonna Harold Haggemann and Omar F. Hamouda (eds.), *Capitalism, Socialism and Knowledge: The Economics of F A Hayek*, Cheltenham: Edward Elgar.

Lawson, Tony (1994b), `Economics and Expectations', in Shiela Dow and John Hillard (eds), *Keynes, Knowledge and Uncertainty*, Edward Elgar.

Lawson, Tony (1997) *Economics and Reality*, London: Routledge

Lawson, Tony (2003) *Reorienting Economics*, London and New York: Routledge

Lawson, Tony (2004a) "What is an institution", mimeo: Cambridge

Lawson, Tony (2004b) "Ontology and the Study of Gender", mimeo: Cambridge

Locke, J. (1985 [1690]) "An Essay Concerning Human Understanding", *An abridgment selected and edited by Yolton, J.*, London and Melbourne: Dent.

Montes, Leonides (2002) *Phiosophical and Methodological Underpinnings of Adam Smith's Political Economy. A Critical Reconstruction of some Central Components"* Ph.D. Dissertation, Cambridge.

Montes, Leonides (2003) `Smith and Newton: some methodological issues concerning general equilibrium theory', *Cambridge Journal of Economics* (forthcoming).

Pratten, Stephen (1998) `Marshall on Tendencies, Equilibrium and the Statical Method', *History of Political Economy*, vol. 30, no. 1, pp. 121-62.

Quine,

Whitehead, Alfred North. (1978, [1929]) *Process and Reality (corrected edition)*, edited by Griffin, D and Ray, and Sherbourne, Donald. W., New York: The Free Press.