Metaphysical Problems and Methods

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Abstract. Positivists have often been antipathetic to metaphysics. Here, however, a positive role for metaphysics is sought. Problems about reality which may not be resolved by the methods of the deductive or empirical sciences are considered. In this domain, the identification of meaningful problems, or of plausible methods is itself an achievement, and is the main purpose of this essay.
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This monograph is presented in three parts.

The first sets the philosophical context. It is technically superfluous but may help the reader to understand the motivation for the considerations which follow. The second describes the language to be used in formulating the problems. It is logically essential to an understanding of what follows. The third part is the description of certain philosophical problems.
Part I

First Philosophy
This section is intended to put this work in context, primarily to assist in understanding the problems formulated later.

2. What is Philosophy?

I'm going to sketch here a conception of philosophy and of the philosopher.

When I began first to study philosophy at University I recall that some effort was made to disabuse students of common misconceptions about the nature of philosophy. This was not so very long after the heyday of “linguistic philosophy”, philosophy was still considered to be primarily concerned with conceptual analysis, and it was important for students to understand that analytic philosophy did not tell us how to live our lives, what political institutions we should adopt or in any other domain what was right or good.

In diverse philosophy of the twentieth century there have been a number of very narrow conceptions of philosophy. By contrast we may find closer to the origins of western philosophy, much broader conceptions of the nature of philosophy in classical Greece.

What I would like to say is that the philosophy which interests us here is of the more classical variety, but when we follow through the logic of some of these classical conceptions we come perilously close to slipping into one of the more narrow modern conceptions.

I propose therefore to begin with some ideas drawn from Aristotle and Plato, contrast these with some modern conceptions of philosophy and to pull some kind of compromise from this melee.

2.1. First Philosophy in Aristotle

Aristotle begins his *Metaphysics* with a discussion of what he variously and revealing calls first philosophy, philosophy simpliciter, and wisdom, and which we might today regard as a classical conception of metaphysics, very different to modern conceptions.

He does this partly by mentioning the concerns of this kind of philosophy, viz. first causes or principles, but also by several attempts to describe linear spectra at one mysterious end of which this kind of philosophy can be found.

First philosophy is concerned with particularly exalted kinds of knowledge which Aristotle calls wisdom. We get a grasp of what kind of thing this is by considering the differences between various more mundane kinds of knowledge and extrapolating. The most primitive kind of knowledge is that which we have from our senses of what is
here present to us. The next is the broader knowledge which admits not only what is now present to our senses but also what has been so present in the past and has been committed to memory. Next we have *experience*, which consists of an aggregation of this memorised sensory knowledge in some domain followed by *art* or *science* (which seem to be used interchangeably) which is arrived at by generalisation from the particulars of experience and is distinctive in involving universal judgements.

Now that we have reached science the spectrum continues by progression from lower to higher sciences, the lower being those practical arts which are most necessary for survival through from the practical to the theoretical then to those which are not necessary but recreational and then to those which are studied neither from necessity nor for pleasure but simply for their own sake, for the sake of knowledge.

### 2.2. Notes

Modern philosophy seems to have left behind this desire for a deep understanding of the true nature of reality. The study of nature has become the province of science, and the deepest questions about the nature of reality are now the province of fundamental physics. Philosophy, having become in the 20th Century, with the emergence of analytic philosophy, painfully aware of how philosophers have underestimated the significance of language for their work, has become engrossed in language, and unwilling to trespass on the domain of any other science.

### 2.3. Notes on Aristotle’s Metaphysics

Spectrum of knowledge:

- sensory
- memory
- experience
- art = universal judgement i.e. generalisation
- inventors of arts are wiser and superior to others
- inventors of recreational arts are wiser than those of arts concerned with necessities
- when necessary and recreational arts have been discovered we come to arts which are concerned neither with utility nor pleasure.
− masterworkers more honourable than manual workers because they know why
− masterworkers are wiser in virtue of having the theory and knowing the causes
− art more truly knowledge than experience, for artists can teach, men of mere experience cannot

"the point of our present discussion is this, that all men suppose what is called Wisdom to deal with the first causes and the principles of things; so that, as has been said before, the man of experience is thought to be wiser than the possessors of any sense-perception whatever, the artist wiser than the men of experience, the masterworker than the mechanic, and the theoretical kinds of knowledge to be more of the nature of Wisdom than the productive. Clearly then Wisdom is knowledge about certain principles and causes."

− the wise man knows all things, as far as possible, although he has not knowledge of each of them in detail
− he who can learn things that are difficult, and not easy for man to know, is wise
− he who is more exact and more capable of teaching the causes is wiser
− that which is desirable on its own account and for the sake of knowing it is more of the nature of Wisdom than that which is desirable on account of its results
− the superior science is more of the nature of Wisdom than the ancillary
− the wise man must not be ordered but must order, and he must not obey another, but the less wise must obey him

And yet another approach:
− Now of these characteristics that of knowing all things must belong to him who has in the highest degree universal knowledge; for he knows in a sense all the instances that fall under the universal
− the most exact of the sciences are those which deal most with first principles; for those which involve fewer principles are more exact than those which involve additional principles, e.g. arithmetic than geometry
the science which investigates causes is also instructive, in a higher degree

understanding and knowledge pursued for their own sake are found most in the knowledge of that which is most knowable (for he who chooses to know for the sake of knowing will choose most readily that which is most truly knowledge, and such is the knowledge of that which is most knowable)

the first principles and the causes are most knowable

the science which knows to what end each thing must be done is the most authoritative of the sciences

and this end is the good of that thing

“Judged by all the tests we have mentioned, then, the name in question falls to the same science; this must be a science that investigates the first principles and causes; for the good, i.e. the end, is one of the causes.”

3. Scepticism

Sceptical ideas appear very early in the history of “Western” philosophy, which is generally considered to have begun in Greece around 600 years before Christ. It is the distinctive feature of this philosophical tradition that it is, or purports to be, rational. Mathematics is also held by mathematicians to have begun at roughly the same time, and is distinguished from (mere) arithmetic (and more generally the Greek “logistic”) by being a theoretical rather than a practical discipline. The litmus test for the practice of this kind of mathematics is the concepts “theorem” and “proof” which turn mathematics into a deductive science.

The startling feature of deductive mathematics (as later to be codified in “the axiomatic method”) is its very high levels of reliability and stability. To a high degree mathematical proofs inspire confidence, and results once established by uncontroversial proofs are rarely later overturned. Philosophers have frequently envied mathematics this definitive rigour, and many have sought to philosophise in like manner, with little success.

The failure of philosophy to emulate the rigour of mathematics may be analysed into two main elements. The first is that philosophers
sometimes seek knowledge about the physical world, which they base to a greater or lesser extent upon observation, but the process of observation is unreliable, and the results even if true, provide an insufficient basis for deductive inference to the kind of general laws which were of interest to early philosophers. The second is that deductive inference, while highly productive and reliable in certain domains (notably mathematics) proves less satisfactory in other domains (and perhaps least satisfactory of all in philosophy).

These two areas of weakness may be associated with the earliest known sceptical thinking, in the writings of Heraclitus and Zeno. Heraclitus was sceptical about the senses and build his philosophy on this scepticism.

Pyrrhonian scepticism is supposed to arise from the failure of an earnest and ongoing search for truth. However, the literature is unconvincing, appearing to represent an exclusive interest in the refutation of dogma, with little evidence of a genuine attempt to seek truth.

In general, philosophical movements which are claimed to be sceptical have similar characteristics. When elements of scepticism are combined with significant amounts of positive theory the result is rarely called scepticism, except perhaps by its opponents. Descartes’ system in which systematic and radical scepticism lays the ground for a dogmatic metaphysical system is called, simply, Cartesianism. Hume’s radical scepticism is called “empiricism” or “positivism”.

There were before Hume in the seventeenth century, philosophers such as Mersenne and Gassendi, who combined a respect for sceptical arguments with a positive attitude toward science, and sought to reconcile these in a mitigated or constructive scepticism. These may be thought of as precursors of many subsequent philosophies in which the same ideals are sought but are described not as varieties of scepticism but rather as kinds of empiricism, positivism or pragmatism.

My enterprise here is broadly similar in character. My primary motivation is speculation about our futures which encompasses consideration of how various kinds of knowledge can best be sought and applied. In this it is recognised that ill-founded dogma has a disutility offsetting the benefits of applicable knowledge, and that a balanced and open-minded attitude may be of greatest value.

My concern in this essay is only with scepticism and how it can be encompassed within a positive weltanschauung.

4. Speculative Scepticism

I think of myself as an extreme sceptic.
In the sense intended a sceptic is one who seeks knowledge, fails to find any, but continues to seek. He therefore retains an open mind and is to be contrasted with someone who believes that he has found knowledge and no longer has an open mind.

Would-be skeptics often fall of the rails and slip into a negative dogmatism. A would-be sceptic has in fact already fallen off the rails, if he thinks scepticism a desirable condition.

I will mention more specifically some of the pitfalls.

The most obvious is to affirm dogmatically that no knowledge is possible, and this is of course not extreme scepticism, but negative dogmatism.

Pyrrhonian scepticism is associate with the idea that a sceptic affirms no more than that “appearances appear”. A related concept is that of equipollence. One can doubt not only the knowledge of a proposition but even that we can know a proposition to be more likely than not. A proposition is “equipollent” if it and its negation are equally plausible. This translates in some sceptics into a skeptical purpose: that not merely of refuting claims to knowledge but of demonstrating “equipollence”. This is of course, a kind of dogmatism.

5. Constructive Rationalism

6. Positivism

7. Logic and Language

8. Descriptive Language and Semantics

Philosophers have discovered in the 20th Century that language takes many forms and works in diverse ways. Wittgenstein, having in his Tractatus Logico-Philosophicus presented language as essentially involved in saying something about the world, replaced this narrow view of language with the idea that languages are in general more like games, and may follow rules of a different character.

For present purposes, i.e. for the enunciation of the problems in metaphysics of present interest, the kind of language we need is primarily descriptive. For such languages the rules which govern correct usage can be captured by a “truth conditional” semantics.
8.1. Abstract Entities

I’m going make some observations here about how the “game” of talk about abstract entities works.

So far as mathematical entities are concerned, there seem to me to be two kinds of talk. There is the /it mathematical talk and the philosophical.

For the mathematics, to talk about a class of entities it is necessary to that this class be axiomatically characterised or alternatively constructed from other mathematical entities (usually in the context of set theoretic ontology.)
Part II

Philosophical Language
In this section is defined the language which I will use to state the problems. This is not a formal language, and not a language sharply differentiated from ordinary English. It is rather a particular usage of English which is convenient for my present purposes.
Part III

Metaphysical Ontology
Ontology is the fundamental core of metaphysics.

The distinction between "metaphysical" ontology (as I envisage it) and other kinds of ontology is that in metaphysical ontology we are concerned exclusively with what can be known about what in reality there is, as opposed to, what it may be convenient to suppose that there is.

The distinction is difficult to draw, and we may expect the evidence for any claims in metaphysical ontology to be tenuous. My consideration of this problem will be based around a distinction between abstract and concrete ontology which I will describe first, before going on to discuss these two kinds of metaphysical ontology in turn.

9. Separating the Abstract from the Concrete

Before any topic can profitably be discussed we must have appropriate language in which to discuss it. The framework for the discussion which follows is built around the distinction between abstract and concrete ontology. This is not a distinction drawn from prior usage either in ordinary or in philosophical discourse, but one fashioned by me for present purposes.

The distinction derives from the idea that science, which is the name we give to those systematic methods of discovering the nature of the universe which we are inclined to endorse, is, idealised, conducted by the construction of mathematical models of reality. Mathematical models are constructed entirely from abstract entities (typically sets), and what we know from science about concrete entities in the world around us is just that they behave in ways which can be predicted by these abstract mathematical models.

Special rules apply to abstract entities and I will stipulate the rules which apply to abstract entities as they are used in this discussion.

An abstract entity is not something which we discover around us but something which we postulate or presuppose in the course of constructing mathematical models (though such postulation or presupposition may be confined to the rather philosophical activity of laying down a foundation for mathematics making it possible for mathematicians to work only with entities of which they can readily demonstrate the existence by reference to the relevant foundation system).

A statement about existence of an abstract entity only makes sense in a context in which some ontological presuppositions are in place, and is then true if and only if it follows logically from those presuppositions in context. Thus, the claim that there are infinitely many prime numbers is true for number theorists who work in the context of
the presumption that the natural numbers exists and investigate the consequences of that presumption.

Our knowledge of abstract entities, as they are here defined, derives from the definitions which we give of them. They have, by definition, their defining properties.

Our knowledge of concrete entities on the other hand, is obtained by experiment and observation. What that knowledge consists in, is the knowledge that the structure of the world and its transformations through time is similar to the structure of those abstract logical or mathematical models which our science has confirmed.

From this way of talking it follows naturally that the realms of the abstract and the concrete correspond to the necessary and the contingent. This is not to say that the existence of abstract entities is necessary, but rather to say that their existence depends upon logical context, which is a part of the language in which we talk about the world rather than a part of the world of which we speak.

The reader may feel that this introduction to metaphysical ontology has more or less eliminated any scope for metaphysics. The world has been divided into the realms of the conventional and the instrumental, leaving no room for the absolute.

10. Abstract Ontology

11. Concrete Ontology