

Meta-metaphysics

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Article Summary

Meta-metaphysics concerns the nature and methodology of metaphysics and metaphysical inquiry. The emergence of meta-metaphysics as a systematic area of study is relatively recent, going back to the late 1990s. But the issues pursued in meta-metaphysics are certainly not novel: an age old question about the nature of metaphysics is whether it is possible to obtain knowledge about metaphysical matters in the first place, and if it is, how this knowledge is obtained.

The contemporary trend in meta-metaphysics was largely inspired by a well-known debate between Rudolf Carnap and W.V. Quine. This debate focused on the notion of existence and the seemingly problematic commitment to the existence of things that, on the face of it, do not exist, such as fictional entities or abstract entities such as numbers. But important as this issue is, contemporary meta-metaphysics has a much broader focus: it attempts to situate the field of metaphysics both within philosophy and within human inquiry more broadly speaking. Hence, meta-metaphysics has close ties to epistemology and philosophy of science, given that a central question in this area is how, or whether, metaphysical inquiry differs from scientific inquiry.

One issue that may cause confusion is that the terms ‘meta-metaphysics’ and ‘metaontology’ are often used synonymously. But there are good reasons to distinguish them. Metaontology has a somewhat stricter focus and continues the tradition of the Quine-Carnap debate; it concerns issues such as the problems related to quantifying over abstract or non-existent entities. Meta-metaphysics also involves other themes than those already mentioned (see Tahko 2015). These include the definition of metaphysical and ontological realism, the discussion surrounding metaphysical grounding and fundamentality (see Bliss and Trogdon 2016), and the epistemology of metaphysics more broadly conceived.

1. Meta-metaphysics vs. metaontology

The term ‘meta-metaphysics’ is sometimes used synonymously with another term, ‘metaontology’. Indeed, those who find the term ‘meta-metaphysics’ somewhat ugly often replace it with ‘metaontology’. However, there is a principled reason to distinguish between these terms in contemporary use. The reason is that meta-metaphysics may be understood to be a broader term than metaontology. More precisely, meta-metaphysics encompasses metaontology, but also covers other issues. The distinction can be straight-forwardly made by following the distinction between metaphysics and ontology.

The term ‘metaphysics’ has an Aristotelian origin and is sometimes described as the “the most general investigation possible into the nature of reality” (see the entry on “Metaphysics”). The term ‘ontology’, however, has a more specific Aristotelian origin, as the Greek ‘*onta*’ refers to ‘being’, hence ontology is the study of being “as it is in itself”, as Aristotle might have put it. So, ontology could be thought to concern what exists, whereas metaphysics also concerns *how* it exists (see the entry on “Ontology”). The distinction between metaphysics and ontology is, however, vague at best, since many authors use the terms interchangeably. Accordingly, similar vagueness affects the distinction between metaontology and meta-metaphysics.

But what is metaontology? The first systematic use of the term is thought to be Peter van Inwagen's 1998 article of the same title (see van Inwagen 1998). In van Inwagen's usage, the term 'metaontology' is closely related to Quine's work. Quine considered the central question of ontology to be 'What is there?' (see Quine 1948). Van Inwagen's question is what it is that we are asking when we ask 'What is there?', and this seems to go beyond the ontological question, hence *metaontology*. This Quinean origin of metaontology is widely recognised, but van Inwagen's understanding of the term 'metaontology' is quite strict: it concerns quantification and ontological commitment (we will return to these in section 2, see also the entry on "Ontological commitment").

Although the common understanding of the term 'metaontology' is Quinean in spirit, it is worth noting that if one disagrees with Quine about the task of *ontology*, then the area of metaontology might also have to be reconsidered. Since metaontology concerns the methodology of ontology, changing the task of ontology might also entail a change of methodology. One alternative approach, perhaps more Aristotelian in spirit, would be to give a more central position to a type of inquiry known as *formal ontology*. This term of art does not refer to ontology conducted with formal methods (although it could involve such methods), rather, it refers to the study of *ontological form*, which concerns the structures and relations that ontological elements (such as objects) stand in. The terminology has a Husserlian origin (see Smith and Mulligan 1983). More generally, ontology understood in this fashion involves an examination of the categorical structure of reality – a task which goes back to Aristotle's *Categories*. One contemporary example of the systematic study of ontological categories in this sense is E.J. Lowe's *four-category ontology* (see Lowe 2006, see also the entry on "Categories").

The most influential contribution to meta-metaphysics is perhaps the 2009 *Metametaphysics* anthology (Chalmers, Manley, and Wasserman 2009). The focus of this anthology is, by and large, the area of Quinean metaontology as defined above, although the Aristotelian (or neo-Aristotelian) understanding also receives some space.

2. Historical background: Quine vs. Carnap on existence and ontological commitment

The historical origins of meta-metaphysics are typically traced back to the debate between W. V. Quine and Rudolf Carnap in the 1940s and 1950s. We can introduce this debate by considering the status of existence questions such as 'Do numbers exist?'. Given that numbers are typically thought to be abstract objects (see the entry on "Abstract objects"), what does their existence amount to? Moreover, when we ask such questions, are they in fact merely conceptual, to be settled by linguistics rather than genuine metaphysics? Carnap is famously considered as having been sceptical about the metaphysical import of such existence questions, arguing that there is nothing substantial at stake when we ask them. The resulting view is a type of language pluralism, according to which we can choose our ontological framework – our preferred language – liberally (see Eklund 2013). This, at any rate, is symptomatic of the view of some contemporary philosophers who identify themselves as (neo-)Carnapian. As a result of the dismissive view regarding metaphysical questions associated with Carnap, Quine has emerged as the hero in defence of the possibility of metaphysics, because he introduced a systematic way to analyse existence questions.

Quine's famous article 'On What There Is' (Quine 1948) is considered the definitive work against the Carnapian view that ontological questions are a matter of (linguistic) preference. Quine's article is commonly considered to have once again made ontology a respectable discipline after the devastating effects of logical positivism – an approach that Carnap supported (see the entry on "Logical positivism"). However, Quine himself may have had a considerably more deflationary attitude

towards metaphysics than many contemporary metaphysicians and especially the neo-Aristotelians do (see Fine 2009). So, there are some reasons to think that the disagreement about ontology between Quine and Carnap was not as deep as it is sometimes played out to be.

The most important meta-metaphysical theme of the Quine-Carnap debate is precisely the role and interpretation of existence questions in ontology. This theme is still central in meta-metaphysics. Another central theme that we can trace back to Quine and Carnap is the role and interpretation of the first-order existential quantifier. If ontology is the study of what exists, then the answer to Quine's ontological question, 'What is there?', is not very difficult: everything exists. This is the rather anticlimactic starting point of Quine's famous 1948 paper, 'On What There Is'. It might appear that this answer is immediately unsatisfactory. Consider Sherlock Holmes and other such fictional entities that, on the face of it, do not exist, but nevertheless appear to *be* something. The important meta-metaphysical input of the Quinean position is the thesis that being is the same as existence, that is, there are no things that do not exist. On this view, saying that 'There are numbers' is on a par to saying 'Numbers exist'.

Another important aspect of the Quinean view is that all things that exist do so in the same fashion, univocally. So, when we ascribe existence to material objects such as tables and chairs and to abstract objects such as numbers or sets, we supposedly mean the same thing by 'existence'. The supposed argument in favour of this view is simple: it is the same thing, or at least close enough, to say that unicorns do not exist and that the number of unicorns is zero. The upshot of this picture – the Quinean method – is that the core questions of ontology can be answered with a simple formula (see van Inwagen 1998):

- (1) Take your best scientific theory and assume that what this theory says is true.
- (2) Translate the sentences of your theory into a formal language, typically first-order predicate logic.
- (3) The domain of (existential) quantification in your translated theory will give you the ontological commitments of that theory.

It is especially the third point, concerning ontological commitment, which expresses an important and much debated meta-metaphysical position. Quine, being a nominalist, resisted the idea that we could quantify over abstract entities such as fictional entities or universals (see the entry on "Nominalism"). Quine's reason to resist quantification over abstract entities derives from his view regarding the role of quantification itself, namely that quantification is intimately linked to ontological commitment. More precisely, the quantified sentences of a theory express the ontological commitments of the theory. The existentially-committing reading of the first-order existential quantifier can however be challenged (see Priest 2008).

In contrast to Quine, Carnap regarded abstract objects such as numbers unproblematic. Carnap's position relies on his distinction between *internal* and *external* questions (see Carnap 1950). Importantly, only internal questions are to be understood as factual. These are typically scientific questions which we can answer on the basis of empirical methods available in our scientific framework. Questions like 'What is the smallest prime number?' would also qualify as internal, but in this case the answer is analytically true or false. For instance, Carnap would consider all mathematical truths to be analytically true, so true in virtue of meaning, similarly in the case of the famous 'All bachelors are unmarried' (see the entry on "Analyticity").

Carnap's external questions concern the framework itself: they are philosophical or ontological questions about the nature and, perhaps, justification of the whole framework. We might think that external questions should be raised when introducing a new framework, such as a specific scientific theory. Accordingly, on one reading, the problematic question: 'Do numbers exist?' would count as internal, but trivial (because analytic). On another reading, it could count as an external question, but on that reading Carnap would not regard the question as substantive. Even though Carnap thinks that we can freely adopt novel frameworks without an empirical justification, the external questions that we ask outside the scientific framework are to be considered merely a matter of pragmatic preference, without objective true/false answers.

In contemporary meta-metaphysics, these issues have been taken up in discussions of *quantifier variance*, the view that there is no uniquely best ontological language for describing the world. Carnap is sometimes interpreted as the grandfather of the quantifier variance view, since it is a close relative of the idea that at least some of our ontological disputes (such as perhaps the one about numbers) are merely verbal or conventional, lacking objective true/false answers (see Hirsch 2009 for a defence of quantifier variance). The competing view, closer to the Quinean position, suggests that there is a single best quantifier meaning. In other words, quantification 'carves at the joints', which is to say that it latches on to the structure of reality in a reliable manner, it tells us something about how things really are in reality (see Sider 2011 for a defence of this view; see also the entry on "Realism and antirealism").

3. The relationship between metaphysics and science

In this final section, we will focus on one important theme in contemporary meta-metaphysics, the relationship between metaphysics and science. The discussion surrounding this theme is often conducted under the rubric of 'naturalistic metaphysics'. This is arguably a topic that has received the most attention in recent meta-metaphysics, especially following the influential book *Every Thing Must Go* (see Ladyman and Ross 2007).

The general pattern of the dialogue is as follows. Philosophers of science (especially philosophers of physics) and scientifically-oriented metaphysicians have raised concerns about the methods of contemporary analytic metaphysics. These concerns focus on the use of non-empirical methods such as thought experiments, intuitions, and *a priori* reasoning. Further, the challenge continues, when input from the sciences is considered, it is typically based on caricatures or results that do not go beyond "A-level chemistry" (again, see Ladyman and Ross 2007, Chapter 1). Accordingly, all the latest results from contemporary science, such as those of quantum mechanics, are largely ignored. Given that metaphysicians pursue questions concerning the nature of change, time, and the ultimate constituents of reality, it would seem that the latest results from contemporary science are not only useful, but necessary for successful inquiry.

There are at least two primary lines of response to this challenge that can be found in the meta-metaphysics literature. The first is to deny an important premise of the challenge, namely, that the methods of metaphysics and science differ significantly. One version of this response suggests that both disciplines rely on tools such as modeling. But how do the disciplines differ if they use the same tools? One difference, it may be suggested, is that metaphysics concerns matters that are prior to science, as it deals with topics such as the categories that physical entities may fall under (see Paul 2012).

The suggested methodological continuity between science and metaphysics is that models are the primary tool of theory-forming in both disciplines (again, see Paul 2012, where this suggestion is developed). The categories involved in metaphysical models may of course differ from those used in science (e.g., one would talk of properties or substances rather than of particles or genes), but metaphysics and science may both be seen as modeling parts of reality. Moreover, both science and metaphysics use *a priori* reasoning to infer to the best explanation, which helps us choose between empirically equivalent models. Theoretical virtues such as simplicity, ontological parsimony, elegance, explanatory power and fertility may also be used to evaluate these models. So, this strategy aims to bring science and metaphysics much closer together than they may have usually been thought to be, via a shared methodology. The subject-matters of the disciplines are however at least partially distinct, given that metaphysics deals with more fundamental categories of being. In a way, this response endorses the naturalistic challenge, but claims that metaphysics can survive it by using the same methods as science.

A different line of response takes it that *both* the subject-matter and the methodology of metaphysics and science are different (see Lowe 2011). On this line, the attempt is to undermine the challenge from naturalistic metaphysics by defending the priority of metaphysics somewhat more robustly. One way to frame this idea is to argue that before we even have a conception of the way things might turn out in science, we must have somehow determined what the options are. In other words, metaphysics can be seen as delimiting the vast space of possibilities so that we can select which ones to focus our efforts on. On this approach, the subject-matter of metaphysics concerns first and foremost the space of metaphysical possibility. This type of view would of course require a precise account of the relevant modal epistemology that enables us to access knowledge about such possibilities and it must hence face the naturalistic challenge regarding the methods of analytic metaphysics, such as the role of *a priori* reasoning and intuitions.

It may be tempting to attempt some kind of a synthesis of these two responses (for one such attempt, see Morganti and Tahko 2017). Perhaps metaphysics could be seen as prior to science in that metaphysics explores a space of metaphysical possibilities, laying the grounds for the interpretation of scientific theories. But simultaneously, some elements of science are prior to metaphysics in that science is needed to define that space of possibilities and also for selecting the most appropriate among them. On such a view, metaphysics could be conceived as telling us something about the nature and structure of reality, perhaps in conjunction with empirical science, but distinct from it in terms of its methods, in virtue of its being an essentially *a priori* enterprise (delimiting metaphysical possibilities).

References and further reading

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(One of Quine's most well-known papers, often considered to have made metaphysics possible again after logical positivism.)

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(The first introductory book on meta-metaphysics, covering both metaontology and meta-metaphysics broadly conceived. Includes a helpful glossary.)
- van Inwagen, P. 1998. 'Metaontology', *Erkenntnis* 48, 233–50.
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