Metaphysics // Fall 2024

Handout 15

Conventionalism: Carnap

The ontological problem. Carnap begins by presenting the ontological problem: certain areas of 249
discourse contain a commitment to abstract entities. In mathematics, we encounter sets and numbers. In physics, numbers again, and mathematical objects generally, and then space-time coordinates. The existence of these entities presents a difficulty for an empiricist, since these entities appear to be not available for observation. In mathematics there is an escape route: we can think of mathematics as a game of symbols. This is the view of *formalism*. However, a similar approach to physics does not seem plausible. Moreover, there is an analogous problem in semantics where there is an apparent commitment to propositions.

Example 1 (Numbers). Consider the sentence 'There is exactly one even number between three and five.' Suppose we have a first-order language that contains variables and individual constants ranging over the domain of numbers. So, abbreviating 'x is a number' and 'x is even' as 'Nx' and 'Ex', we could say:

$$\exists x(Nx \,\&\, Ex \,\&\, x > 3 \,\&\, x < 5 \,\&\, \forall y(Ny \rightarrow ((y > 3 \,\&\, y < 5) \rightarrow y = x))). \tag{15-1}$$

The sentence (15-1) entails the existence of one even number, namely, the number 4. And since (15-1) is true, the number 4 exists.

Question 2. In the Example 1, suppose I were to ask these questions:

> Where are even numbers? Can we be in contact with them?

How should these questions be properly understood, according to Carnap's view?

Example 3 (Propositions). See Carnap's own examples (b)–(d). 253

Carnap claims there is a possible resolution of this problem that would satisfy empiricist intuitions 250
and 'scientific thinking'.

Internal and external questions. The ontological problem was not solved, and no 'progress' was made toward its resolution, according to Carnap, because the way these questions asked so far was bad. Prior to asking any such question we must first lay down a semantic *framework*. On the face of it, 250
this framework is a regimented, at least semi-formalised, first-order language equipped with variables, constants, predicates, quantifiers. In this language we can formulate statements of existence using the available first-order quantifiers. Then we can formulate an *internal question* about the existence of entities in the domain of those quantifiers, or about the entities that the singular terms of that language refer to. The question will be resolved either by empirical or analytic means.

How do we determine which thing is real, then? Carnap's answer is far from trivial. To show that 251
x is real we must 'fit' it into the framework. That is, the adoption of x as real depends on adopting other entities in the framework as real.

Remark 4. In so many words Carnap here outlines the idea of ontological holism. We accept entities not individually, one by one, but together as a collection characterised by some property of internal harmony.

Yet clearly the philosophers were not asking these questions. They queried the existence of the 251
world 'itself'. They wanted thus to ask an *external* question of existence prior to laying down of any particular framework. This can mean that they wanted to know whether the whole talk about numbers, things, or propositions is legitimate. But the legitimacy of the framework is not a cognitive issue that can be resolved with the yes/no answers. It is rather a matter of decision—to use or not to use the given framework. Thus external questions are meaningless, or at least so far have not been shown to be meaningful.

Four kinds of questions. The sketch just given sits pretty well with the text and its general tone. But it is possible that further useful distinctions can be made, though perhaps they were not emphasised by Carnap himself.

Consider the category of internal questions first. We decide whether an even number between three and five exists by tracing the steps of an arithmetical proof. Conducting such a proof was of course enabled by the prior adoption of an arithmetic framework (say, Peano arithmetic). But then we

can also ask questions whether numbers exist in general. You may think that this question is external, but it needn't be. Once you have established the existence of at least one number, you can infer an *internal* answer to the question whether there are numbers at all. Thus we can distinguish between general and particular internal questions.

Consider now external questions. These are the questions purportedly asked by a traditional metaphysician about numbers and things. Yet they cannot be taken at face value. To make sense of them we need a paraphrase. In that paraphrase, Carnap seems to suggest, they will become questions about the frameworks themselves. But then there are two ways to paraphrase: we can take them as questions about the practical usefulness of a framework, or else they can be questions about its theoretical legitimacy. The practical question is totally kosher. It requires an answer that would allude to the utility of the framework and its other pragmatic virtues. What is not kosher is to expect an answer committing us to the rightness or wrongness of any given framework. Those theoretical external questions are, it seems, the questions asked by a traditional metaphysician.

CARNAP'S REASONS. Let's see what actual reasons Carnap gives in defence of his ideas. One argument may be called the ' criterion argument ': in order to formulate a question about the existence of a particular entity we must first formulate the criterion of identity for that entity. We must say, for example, what falls under the predicate ' colour ' or the predicate ' property '. (Notice that this criterion would serve at the same time as a criterion of application for lower-order expressions.) 252-3

Another argument is the ' category mistake argument ': while we can ascribe reality to the elements a framework purports to talk about, we cannot ascribe reality to the framework itself. 251-2

Then perhaps there is the ' pragmatic fallacy argument ': traditional ontologists inferred existence of entities, mistakenly, from the pragmatic decisions to use certain frameworks and from the practical usefulness of those frameworks. 262

RESPONSE TO THE SCEPTIC. Let's see how Carnap's view may be used to deal with the sceptical challenge of the sort we saw in Hume. The sceptic demands conclusive (or simply good) reasons to justify our belief in the external world. Hume argued that no such reasons are to be found, at least within an empiricist framework where every kind of justification, save perhaps for mathematics, must be based on our perceptions. Of course, you might drop the empiricist assumptions and say that reason alone is able to provide us with the necessary justification. But how to reply to the sceptic whilst remaining an empiricist?

Though Carnap's discussion is aimed at dismissing the traditional dogmatist ontologist, it may also be adapted as a response to the sceptic. That's not incidental. The traditional ontologist is a convenient target for the sceptic. First, ongoing disagreement among the ontologists and the ' lack of progress ' in the ontological debate prompts the sceptical outburst: you continue to disagree, and very unfruitfully too, precisely because there are no good reasons to believe in any of your preferred ontologies. Secondly, the sceptic may be even more direct: where is the evidence that your ontological beliefs are on firm grounding? Traditional ontologists are uninterested in epistemology, their reasoning is dogmatic. Thus they constitute a very attractive target for the sceptics.

Carnap, then, can reply that, first, progress can be made, and second, that no epistemological account (to justify specifically existence claims) is necessary. That's because existence-claims follow analytically from ' proposals ' and ' conventions '. Once we have a proposal to adopt number talk, the existence of numbers (as a category!) is analytic. Same for other problematic categories. The sceptic expects some interesting account to justify existence of various categories of things, whether numbers or material objects. But he is missing the point: there is none to give.

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