CARNAPIAN ONTOLOGY AND WHY IT WORKS

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Abstract. I argue that, in order to have a proper understanding of Carnap's views on ontology in his 'Empiricism, Semantics, and Ontology', one must take into account an assumption explicitly formulated elsewhere regarding what should be taken as 'real'. Approached in this manner, his views are a lot more powerful than may seem otherwise. The proper role of ontology is considered and some misunderstandings regarding facts and language are cleared away. An explanation of the separation of linguistic frameworks in terms of functional categories is briefly discussed and a few observations are made about the relation between ontology and metaphysics.

Keywords: Carnap, ontology, philosophy of language, pragmatism

I. Introduction

Carnap's treatment of ontology in his 'Empiricism, semantics, and ontology' may be regarded as one of the most trivial treatments of the subject, yet it is still considered by many philosophers as unsatisfactory. What I wish to argue is that the usual grounds for rejecting Carnap's theory are misguided and that the theory can be formulated in such a way as to be internally consistent and powerful in dealing with ontological issues. I will not stress the points of agreement and disagreement between my reconstruction and other recent interpretations of Carnap's position (in most points, I agree with Soames and Price's papers, while the opposite is true of Eklund's paper), since that would make my paper much longer than it needs to be and would also probably distract the reader from the more important issues. In what follows, I will

assume the reader is familiar with Carnap's article and also with some of Quine's papers on ontology.

II. The fundamental assumption and the job of ontology

One striking feature of Carnap's ontology is that it basically says that, in order to have whatever kind of entities, all we need to do is to introduce a linguistic framework or, in other words, to enrich our language. But then one may ask, with Soames, 'how can the mere introduction of words… guarantee the existence of entities…?' (Soames 2009, p. 433), which is a very legitimate question, if Carnap's ontology is taken to involve only languages. Carnap himself does not even mention if or what else there is to be taken into account in ontology besides language, at least not explicitly. Some hints may be taken from his idea that external questions should be considered pragmatically (Carnap 2004, p. 14), but this doesn't tell us much by itself. However, we don't need to speculate about this problem: an answer to it can be found in Carnap's philosophy. There is an assumption, not mentioned in 'Empiricism, semantics, and ontology', but in the Vienna Circle Manifesto, which runs like this: 'For us, *something is 'real' through being incorporated into the total structure of experience*' (Carnap, Hahn, Neurath 1973, p. 308; I will call this 'the fundamental assumption of ontology'). I take this to be Carnap's own position. This means, in short, that the introduction of words need not guarantee anything: the existence of entities is guaranteed by their being part of the 'total structure of experience'. Our problem becomes a false one: it is not the job of the introduction of words to *make* entities exist. But then, what is their job?

It is difficult to express and explain the fundamental assumption of ontology in a noncommittal way, since any attempt at saying something involves reference and, therefore, a framework. But I believe that the intuitive idea gets across anyhow: the assumption amounts to the claim that there is something given to us in experience. Still, we might give it a try. By Carnap's recipe,

we would have to introduce a framework specifically for this purpose: it would be a most basic and trivial framework, with only one word in it, which would refer to everything at once, without dividing it. Natural language already includes this framework, in which the only possible internal question would be 'Does the *world* exist?', and its answer is 'Of course!'; answers don't get any more trivial than that. Obviously, I am not using the word 'world' to refer to something like the physical world or whatever: it is meant to refer *indiscriminately* to everything that can be referred to. I believe that this is exactly the point Quine was trying to make when he answered the question 'What is there?' with 'Everything' (Quine 2004, p. 4). Of course, these observations are meant only as elucidations of the fundamental assumption, since the world is logically prior to any framework, but this is another issue. The important lesson here is that the entities the existence of which is asserted by the various frameworks do not appear out of nowhere: all of them are already there (we might add 'in the world', but the world itself is one of those entities), it's just that they are not separated from each other. Trivial as the fundamental assumption may be, it is nevertheless of great importance if we are to understand Carnap's position; however, it received surprisingly little attention, and many misinterpretations appeared because it was ignored (some of them will be discussed below).

But let's take matters further: suppose we introduced the framework which reflects the fundamental assumption and nothing else. In this case, it is obvious that we cannot convey any useful information; we need to be able to say things like 'Watch out for that rock!'. We need more words. Cutting the world into one big piece (which isn't even a proper cutting) is not helpful: smaller pieces are required. So the job of words (and of their introduction) is to slice this 'total structure of experience' into pieces of manageable size (depending, of course, on our purposes). What is really important to notice here is that no matter how we divide the philosophical disciplines (i.e. no matter what task we attribute to ontology, what to metaphysics and so on), this is something that needs to be done. And there is nothing more to it

than introducing names for things (or, better, for portions of our 'total structure of experience'). Obviously, we can introduce names for whatever we want, but I think it is safe to assume that most names in natural language have been introduced because they were useful (now, when it comes to evaluate usefulness, we should be as naturalistic as possible, perhaps tying usefulness to evolutionary biology). This shouldn't come as a surprise: I doubt that anyone can seriously deny that language is extremely useful (and it is useful through naming things or 'picking them out').

Let's turn now to ontology. If we understand ontology as dealing with what there is, or what exists, one obvious way of going about to say what there is is to give a list of all the names we introduced. But, if the earlier point is correct, and names are introduced for pragmatic reasons, then what there is also depends fundamentally on pragmatic considerations. This means that, if we want to make any changes in our answer to the question 'What is there?', we will have to do it on pragmatic grounds, by manipulating language. This makes the choosing of an ontology an entirely pragmatic matter. Quine makes the same point: '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*' (Quine 2004, p. 10, my emphasis); also, 'Our talk of external things, our very notion of things, is just a conceptual apparatus that helps us to *foresee and control* the triggering of our sensory receptors in the light of previous triggering of our sensory receptors' (Quine 1982, p. 1, my emphasis).

III. Language, facts, and pragmatic issues

Now that we've seen what ontology is supposed to do, we need to clarify some issues about how this job should be done. I choose to begin this task with a discussion of Carnap's ideas, since these are the most general. The basic notion is that of linguistic framework:

a framework is a portion of language (or a language-fragment – see Eklund 2009, p. 132) which offers the means of referring to the new type of entities that it introduces. The way to construct a framework is to introduce a general term for the new type of entities, a new type of variable and rules for deciding which statements are true within the framework (Carnap 2004, pp. 14, 17). Now, questions of existence can be interpreted according to their relation to a framework: there are internal questions, which regard the existence of entities *after* the acceptance of the framework, and there are external questions, which regard the existence of entities *before* the acceptance of the framework (Carnap 2004, p. 14). Carnap dismisses external questions as meaningless, but a distinction needs to be drawn: if the external question is meant as a pragmatic question (something like 'Should we accept this framework?'), it is meaningful and it can be answered with the help of pragmatic considerations; but if the question is meant as completely independent of any framework, then it is meaningless (Carnap 2004, p. 14). Eklund calls these two types of external questions 'external-pragmatic' and 'external-factual' (Eklund 2009, p. 132), and I will borrow this terminology.

It is hard to explain what exactly the external-factual questions are supposed to be, since I regard them, with Carnap, as meaningless. But the idea can be made clearer like this: suppose we were to answer an external-factual question with something like 'Yes, abstract entities really exist'. We would then find ourselves in an awkward situation: if we want to remain independent of the framework of abstract entities, then we would have no means of referring to them – 'abstract entities' would be an expression which we haven't yet introduced! On the other hand, if we insist that we actually do refer to abstract entities, then we would find that we have already accepted the framework, and our question was an internal one. So when Soames says that 'what Carnap needs is for statements proclaiming that there are abstract objects to be 'empty of content'' (Soames 2009, p. 437), this emptiness may be interpreted either as meaninglessness, because we wouldn't have the language to express the statement, or as

triviality, because we would be stating within the framework something that is already implicit in the acceptance of the framework.

At this point, the reader might get the impression that there is some connection between reference and ontology, and he would be absolutely right. If adopting an ontology is a matter of accepting a framework, and this, in turn, is nothing else than the introduction of means of reference (general terms, variables etc.), then ontological commitment has to be understood in terms of reference. But reference to what? Here is where the fundamental assumption of ontology steps in: ontological commitment is to be understood in terms of reference to portions of the world (or portions of 'the total structure of experience'). However, this is not to say that reference is possible independently of a framework: it is simply meant to show how ontology can be done with frameworks: they are our vehicles of reference. Quine is strikingly clear about these points: 'To ask what the *assuming* of an object consists in is to ask what *referring* to the object consists in' (Quine 1982, p. 2, emphasis in the original); and again, 'reference *is* nonsense except relative to a coordinate system' (Quine 1969a, p. 48), which coordinate system is nothing else than a background language (Quine 1969a, pp. 48-49), which, in turn, is simply a linguistic framework (Quine wouldn't have accepted this terminology, but his reasons were mistaken, see below). Indeed, Quine's famous idea that 'to be is to be the value of a [bound] variable' (Quine 2004, p. 10) is meant to reflect exactly this connection between reference and ontology, since he rejected all the other ways of referring to objects except through variables, and especially proper names (Quine 2004, p. 7). Thus, we find ourselves returned to the idea expressed earlier, namely that what there is depends on what names we introduce: *to introduce a reference (or a referring expression) is the same as to make an ontological commitment*.

We can use the foregoing discussion to resolve the following situation, described by Eklund: suppose we have two frameworks, one which accepts Fs, and one which doesn't – let's call them L_1 and L_2, respectively. Now, we might want to say that the sentence 'Fs exist' comes out true in L_1, but false in L_2, without changing the

meaning of the sentence, or '*while meaning what it actually means*' (Eklund 2009, p. 138). But this is a trap. I will not discuss the issue of negative existential assertions, but it should be enough to notice that maintaining the meaning of a statement like 'Fs exist' amounts to maintaining that the general term F has a reference, which is the same thing as maintaining an ontological commitment to Fs. The difference between the two frameworks can be better illustrated as follows: while L_1 employs the term 'F' to refer to some particular portion of the world (or 'total structure of experience'), L_2 might use different means to refer to the same portion of the world (instead of 'rabbits' it might use 'sets of rabbit-stages'), or it might not refer to it at all. It is important to observe the proper relation between linguistic frameworks and the fundamental assumption in order to describe such situations correctly: when he added the condition that the sentence should maintain its 'actual meaning', Eklund unintentionally started with a biased premise.

However, the trouble doesn't end here: if L_2 would have no means of referring to the portion of the world to which L_1 refers through 'F', then it would seem that L_2 is *expressively impoverished*, and L_1 simply is better (Eklund 2009, p. 139). This conclusion is brought about with the observation that the two frameworks cannot 'describe the world's facts equally well and equally fully' (Eklund 2009, p. 138). Apparently, a language should enable us to describe all the facts. But this is wrongly conceived: the relation between facts and language is different than what is supposed by the above argument. Facts aren't simply out there, waiting to be included in language (or, at least, this is a very misleading way of saying things). Here I submit to Popper's idea that facts 'do not exist *as facts* before they are singled out from the continuum of events and pinned down by statements' (Popper 2007, p. 290). This makes all the more sense if we consider the fact that some facts may be useless to express. If the above discussion is correct, and what there is depends on what language we employ, then facts also depend on language. And, further, if language is introduced according to pragmatic considerations, then why would we adopt a language whose expressive power goes far beyond our needs

(except if this was an accidental consequence)? So my answer to the issue of expressively impoverished languages is that this is not necessarily a bad thing, so long as whatever purposes we may have are not hindered by our lack of linguistic resources. The expression 'all the facts', taken independently of any particular language, is as meaningless as an assertion of existence taken independently of any framework: the class would not yet be constituted for us to quantify over it.

Another important point about the theory developed here can be made clear through a discussion of Quine's critique of the distinction between external and internal questions. As noticed earlier, these notions are connected with the notion of linguistic framework, so Quine's objections would be very damaging if correct. The main idea is this: it appears to be a trivial matter, formally speaking, to rewrite a language with many types of variables as a language with only one type of variable (Quine 1951, p. 70; Quine 1969b, pp. 91-92). If the notion of framework depends essentially on having different types of variables, then this would make frameworks indistinguishable and the distinction between external and internal questions would become nonsense, since all questions would be internal. Now, Quine's observation about types of variables is correct and there is nothing we can do about it. But to interpret the division of a language into frameworks as a purely formal or syntactical division is a mistake: each framework is determined by an underlying functional category (Price 2009, p. 330). What makes abstract objects a different category from physical objects is not how we quantify over them, but their respective 'powers' or functional properties. For the several types of needs we have (say, constructing theoretical models and not getting hit by rocks), we have to use several frameworks (various combinations are acceptable, as long as our needs are satisfied). This way, external-pragmatic questions are re-instated and internal questions are returned to their proper place. Also, since frameworks are not to be viewed as a purely formal apparatus, the analytic/synthetic distinction gives way to a pragmatic trivial/non-trivial distinction, but I will not pursue this idea here.

IV. What about metaphysics?

What follows now is not strictly a part of Carnapian ontology, but it will be very useful to see what becomes of metaphysics in this context. The distinction between the two domains would be that ontology deals with what there is, whereas metaphysics deals with how things are (Varzi 2011, p. 407). I will also take the thesis that ontology is prior to metaphysics as established, even though some may not agree with it (arguments for the priority thesis are the main concern of Varzi's 2011; further support for the priority thesis from a Carnapian point of view comes from the idea discussed in the first part of this paper, namely that ontology deals with the introduction of names for portions of the world: this means that we wouldn't be able to ask how things are before saying what there is, since we wouldn't have the language to answer the questions of metaphysics).

Let us retrace a bit what we said before. We've seen that accepting entities is the same as introducing a means of reference to a certain portion of the world, and this is accomplished through linguistic frameworks. This job is done according to our needs, and so there might be labels which overlap over the same portion of the world; in introducing names there is no rule to the effect that each portion should only have one name. Given this situation, the question of how things are can be seen as a question concerning the relationships between labels: which label is more fundamental? This label-sorting activity is just what is involved when we ask whether a nail is just a piece of metal or something more, or whether a statue should be identified with its form, its matter, or both. But metaphysics sometimes does more than this: it introduces new labels to get to some more fundamental facts about things – it sometimes enriches our language. This is the way I see the discussions about distinct indiscernibles or substantial forms. The idea is that metaphysical discussions are not meaningless in this context.

However, meaningful as they may be, metaphysical discussions are often misguided. For one, given that in ontology it doesn't really matter how we choose to pick out a certain portion of the

world, as long as our purposes can be achieved through those words, the importance of metaphysics diminishes accordingly: there could simply have been other things for it to deal with instead of these. Second, the point about facts needs to be remembered: of course we can introduce whatever labels we want in order to express facts as 'fundamental' as we please, but this doesn't have any intrinsic importance. If any need appears for which we lack linguistic resources, ontology will step in and take the proper measures; pushing things further than this is just playing with the immense expressive capacities of language.

On the question of the possibility of giving up metaphysics altogether in favor of ontology I would refer the reader to Varzi's 2011, which I believe fits perfectly with the Carnapian ontology outlined above. But there is a point in his paper that I would like to mention: we should always be careful to distinguish metaphysics from semantics. If cases appear in which we ask what we mean by something before saying if we accept some entities in our ontology, then the answer to that question is a part of semantics: we need only to give a reference-fixing description (whether or not anything satisfies that description), or say what the intended thing is like (Varzi 2011, pp. 411, 414), and this is not properly a part of metaphysics.

V. Conclusion

One important source of confusion about ontology has been the fact that both Carnap and Quine overestimated the importance of variables: they are merely formal tools and we may do with them as we like. The essential points of a Carnapian ontology can be expressed no matter what role we choose to attribute to variables. Another important idea is that, besides the disagreement concerning variables, Carnap and Quine share basically the same view of ontology (the other difference is that Quine gives science a privileged role in choosing frameworks – see Quine 1969a, p. 26).

What I tried to do in the present paper was to make this Carnapian position as strong as possible, through showing what

its underlying assumption was and what it meant, and also how various difficulties can be overcome. The treatment of metaphysics has been a bit too sketchy, but this was because it went beyond my main purposes and also because a more thorough treatment can be found in Varzi's 2011. What I hope to have shown is that this Carnapian ontology has some important (and, in my opinion, fruitful) consequences in metaphysics and that more caution when dealing with metaphysical issues is desirable.

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