Internal and External Questions Revisited

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Ontology is the branch of metaphysics concerned with existence. Debates about existence are at least as old as philosophy and probably much older. And since very few of the old debates have been resolved and a number of new ones have been added, it's fair to say that ontological debates are more prevalent and varied at present than ever before. Philosophers debate the existence of numbers, sets, tables, chairs, holes, propositions, properties, universals, fusions, people, works of art, money, fictional characters, nonexistent objects(!), and more besides. But philosophers don't have a monopoly on debates about existence; non-philosophers also debate the existence of God, Satan, Zeus, yetis, the Loch Ness Monster, time, space, fundamental particles, lost Shakespeare plays and more besides. Call the existence debates engaged in by philosophers *ontological* and the existence debates engaged in by non-philosophers *common*.

Sometimes there is overlap between ontological and common existence debates. When this happens, it's natural to wonder whether the common folk and the ontologists are asking the same questions. The Rudolf Carnap of 1950's "Empiricism, Semantics, and Ontology" (ESO) gave a negative answer to this question.[1] ESO distinguishes between existence questions that are settled by linguistic rules plus empirical evidence (*internal questions*) and existence questions not so-settled and asked only by philosophers (*external questions*). Carnap argues for this meaning difference against the backdrop of a controversial philosophical position involving theoretical baggage that many philosophers reject—a philosophically substantive analytic/synthetic distinction, a simplistic non-holistic view of confirmation, and, at least tacitly, crass verificationism.[2] It is widely thought both that rejecting any of these theses suffices for rejecting the position of ESO and that each of these theses should be rejected.[3] Accordingly, many philosophers reject any distinction between ontological and common existence ques-

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[1]Carnap (1950), reprinted with minor revisions as appendix A in Carnap (1956).

[2]I am perhaps being uncharitable to Carnap, but here I am concerned not with exegesis but with philosophical folklore.

[3]This type of response to Carnap was pioneered by W.V.O. Quine in the 1950s and has been extremely influential; see Quine (1951).

tions simply because they reject ESO's theoretical apparatus.[4]

Against this consensus, I think we can successfully argue for something like the Carnapian internal/external distinction solely on the basis of uncontroversial interpretive principles. Charitable interpretations of both common and ontological existence debates involve the recognition of a semantic distinction in many cases of overlap. Every initially promising alternative explanation collapses under scrutiny. The Carnapian internal/external distinction, or something very much like it, is back and it's here to stay. This paper gives a sustained argument for the internal/external distinction and defends it from a number of objections. The internal/external distinction is worth drawing because it clears the way for a proper understanding of both common and ontological existence debates and assertions. In particular, it will show that certain criticisms of ontology are misbegotten while, at the same time, opening the door to new criticisms. In the paper's final section I'll return to this theme and discuss where, exactly, the internal/external distinction leaves the philosophical discipline of ontology. There I will briefly argue for a version of error theory about ontological claims.

1   The Internal/External Argument

This section gives arguments for drawing an internal/external distinction in three particular cases.

1.1   Setting the Stage

In the course of both common and ontological existence debates, certain sentences are uttered, e.g., 'Are there numbers?', 'Does Bigfoot exist?', 'There are properties that are uninstantiated', etc. Of these sentences, some are of the form: ⌜Are there Xs?⌝ or ⌜Do Xs exist?⌝ (where X is a sortal predicate, i.e., a predicate for which it makes sense to ask how many Xs there are), call these sentences *existence questions*, and call the corresponding assertions (⌜Xs exist⌝, ⌜There are Xs⌝) *existence claims*.[5] Both common and ontological existence debates are replete with existence questions and claims. Some existence questions can occur in both common and ontological existence debates; call such sentences *dual existence questions* or *dual sentences*.

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[4]Full or partial exceptions to this include Chalmers (2009), Dorr (2005), Hofweber (2005), Sider (2009), van Inwagen (1990), and Yablo (1998); in addition Alspector-Kelly (2001), Bird (2003), and Chalmers (2009) among others have argued that the standard reasons for rejecting Carnap's internal/external distinction, mostly stemming from Quine (1951), are faulty.

[5]As my terminology indicates, in this paper I will not be distinguishing between existentially quantified claims and existence claims.

It's important that we define "dual sentences" as those sentences that "can" occur in both common and ontological existence debates, rather than as those sentences that "do" occur in both kinds of debates. The reason for this is fairly simple: the existence questions most often asked by philosophers in the course of doing ontology are very general questions about whether any entities of a given general sort exist, e.g., numbers, properties, sub-atomic particles, etc. By contrast, common existence debates generally question the existence of particular objects or more specific sorts of objects.[6]

Yet if taken at face-value, answers to common existence questions often *logically imply* answers to philosophical existence questions. If there are tables, then there are material objects; if there is a largest twin prime pair, then there are numbers, etc. Of course, many metaphysicians don't take these claims at face-value, instead analyzing an apparent common existence claim like "there is a largest twin prime pair" as having a different logical form. I will discuss the relevance of non-face-value interpretations below in section 2.3, for now though, let's take things at face-value. Once we do so, we can say that if a question is either asked in or answered by sentences (together with basic logic) used in both common and ontological existence debates, then it is a dual question.

As the introduction noted, it's natural to wonder whether dual existence questions mean the same thing in both ontological and common existence disputes. Before attempting to answer this question, let's look at three examples of dual questions.

1.2 Three Examples

My first example of a dual question is the, 'Are there numbers?' This question is paradigmatically mathematical and has a straightforward mathematical answer. In the *The Elements*, Book IX, proposition 20 Euclid proves that:

There are infinitely many prime numbers[7]

Using this result, the following basic argument can be constructed (call it *the Euclidean argument*):

1. There are infinitely many prime numbers (Euclid's result)

2. *So*: There are prime numbers (1)

3. All prime numbers are numbers (from the definition of "prime number")

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[6]It is important to note that "common" here does not mean widespread or not requiring specialized knowledge; for present purposes, "common" means non-philosophical.

[7]Actually what is proved there is that the prime numbers are greater in number than any assigned multitude of prime numbers.

4. *So*: There are numbers (2, 3)

Since the Euclidean argument is mathematically and logically unobjectionable, it shows that the answer to the *mathematical* question, 'Are there numbers?' is 'yes'.[8] However, it would not be taken to conclusively answer the *ontological* question, 'are there numbers?'. Philosophers who debate mathematical existence are well aware of the basic mathematical results and their proofs but they don't take them to settle the ontological status of numbers.[9]

A second example is provided by questions about moderate-sized specimens of dry goods. Philosophers sometimes ask questions like, 'Are there tables?' in the course of debates about material constitution and mereological composition. If such a question were asked in an ordinary context, i.e. the context of a common existence dispute, the answer, "Yes, of course!" would be forthcoming. If ordinary speakers were asked to provide evidence to support their answer, they would most likely point at what they take to be a table and say something like, "*That* is a table!" In common debates this settles the question, but such displays are of little help inside the philosophy room (though they do occasionally occur).

A third and final example is provided by questions of scientific ontology. Philosophers and scientists both ask and attempt to answer questions like, 'Are there electrons?' If a student were to ask this question in a science classroom, they would most likely be provided with pointers to experimental data and results, perhaps accompanied by a brief sketch of the standard model of particle physics. By contrast, the relevant experimental results are well known by participants in philosophy room debates about the existence of electrons, but such results aren't taken to conclusively settle the matter.

In each of these examples philosophers and non-philosophers provide answers to the same question (syntactically individuated) in radically different ways; they also take different considerations to settle (or fail to settle) the same questions. These examples put pressure on us to distinguish between the meanings existence questions have in philosophical contexts and the meanings they have outside of philosophical contexts. By stipulation, following Carnap, let's call the meaning a dual sentence has in the philosophy room its *external meaning*, and let's call the meaning it has outside of the philosophy room its *internal meaning*. This terminology follows Carnap but it shouldn't be simple-mindedly interpreted in light of his usage; my reasons for adopting Carnap's terminology are familiarity and suggestiveness, the wisdom of this will be

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[8] I'm ignoring doubts about infinity; my claim is only that the Euclidean argument is unobjectionable as a piece of classical mathematics.

[9] There are some exceptions to this, e.g., Burgess (2004), Schiffer (1996), Thomasson (2009), and Wright (1983).

discussed in more detail below in section 2.4.

The considerations adduced while discussing the examples above together with some plausible interpretive principles can be turned into an argument for the claim that for some dual existence questions ϕ: the internal meaning of $\phi \neq$ the external meaning of ϕ.

1.3 Two Interpretive Principles and How to Understand Them

Here are two basic interpretative principles I'll use to argue for the internal/external distinction:

1. ANSWERS PRINCIPLE: If question ϕ is answered by considerations $p_1, ..., p_n$ and question ψ is not answered by considerations $p_1, ..., p_n$ then ϕ and ψ mean different things (are different questions)

2. METHODS PRINCIPLE: If the methods that can be used to resolve question ϕ differ from the methods that can be used to resolve question ψ, then ϕ and ψ mean different things (are different questions)[10]

Here by "consideration" I mean anything that could ordinarily be taken to settle a question, e.g., a proof, facts about the arrangement of matter, experimental results, etc. It isn't meant to be a technical term: I don't want to haggle over the nature of proofs or evidence or the like. Similarly, I intend for "methods" to be understood according to ordinary standards. The *a priori* methods used by mathematicians differ from the empirical methods used by scientists and ordinary speakers. The answers and methods principles aren't reliant on tricky or non-standard terminology.

It is worth stressing that the considerations and methods appealed to in the principles are not simply the considerations and methods that are currently held to settle the questions. To illustrate this distinction, consider the question, "How intelligent was Descartes?". Around one hundred and fifty years ago, during the heyday of phrenology (also known as "craniology") the size of Descartes's brain was a consideration that was taken to settle the question, and the method used to acquire the relevant information was measuring Descartes's skull. Around 50 years ago, the consideration that would have been taken to be most relevant to the question was how well Descartes would have done on an IQ test, and the method used to ascertain this would have been to study reports of Descartes's early life to see how precocious he was (since IQ tests weren't invented

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[10]The methods principle allows us to draw an internal/external distinction for existence questions that haven't been settled even in the non-philosophical contexts in which they occur.

until long after Descartes's death).[11] If the answers and methods principles are read according the considerations and methods that are believed to settle a question at the time of utterance, then we should say that, "How intelligent was Descartes?" meant something different when uttered 150 years ago than it did when uttered 50 years ago. But that's absurd; differing beliefs about what settles a question shouldn't necessarily result in meaning differences. The correct reading of the answers and methods principles concerns the considerations that actually do settle the relevant questions, not those that were mistakenly taken to settle the questions.

Understood correctly, the answers and methods principles are difficult to deny. We can now use them to argue for the I/E distinction for each of dual questions of 1.2.

1.4 The Argument(s)

With the answers and methods principles in hand we can craft a simple argument for drawing an internal/external distinction for each of the examples considered above (numbers, tables, electrons). The first two arguments use the answers principle, the third uses the methods principle. Here's the number argument:

1. The question 'are there numbers?' as asked in a mathematical context is answered by the Euclidean proof.

2. The question 'are there numbers?' as asked in a philosophical context is not answered by the Euclidean proof.

3. *So*: 'are there numbers?' as asked in a mathematical context, and 'are there numbers?' as asked in a philosophical context, mean different things, i.e., they are different questions. (1,2, Answers Principle)

4. *So*: the internal meaning of 'are there numbers?' $\neq$ the external meaning of 'are there numbers?' (follows from 3 by definition)

Here's the table argument:

1. The question 'are there any tables?' as asked in a common context is answered by facts about the spatiotemporal arrangement of matter

2. The question 'are there any tables?' as asked in a philosophical context is not answered by facts about the spatiotemporal arrangement of matter

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[11]Cox (1926) is a famous attempt to ascertain the IQs of famous men in history by using surviving reports of precocity.

3. *So*: 'are there any tables?' as asked in a common context, and 'are there any tables?' as asked in a philosophical context, mean different things, i.e., they are different questions. (1,2, Answers Principle)

4. *So*: the internal meaning of 'are there any tables?' $\neq$ the external meaning of 'are there any tables?' (follows from 3 by definition)

Here's the electron argument:

1. The question 'are there electrons?' as asked in a scientific context is resolved by performing certain experiments

2. The question 'are there electrons?' as asked in a philosophical context is not resolved by performing said experiments

3. *So*: 'are there electrons?' as asked in a scientific context, and 'are there electrons?' as asked in a philosophical context, mean different things, i.e., they are different questions. (1,2, Methods Principle)

4. *So*: the internal meaning of 'are there electrons?' $\neq$ the external meaning of 'are there electrons?' (follows from 3 by definition)

Despite my usage of the definite description ("the" *X*-argument), my arguments for these conclusions obviously aren't unique. It's also worth noting that the latter two are somewhat underspecified when compared to the former; still, the general idea behind them should be clear. In any case where an argument like this goes through, we have reason to accept an internal/external distinction.

1.5   Taking Stock

I've now given arguments for drawing an internal/external distinction for three particular dual sentences.[12] But as of yet I've said nothing about why we should accept the first and second premises of each of the above arguments, nor have I considered serious objections to my arguments. The next section of the paper turns to these tasks, but first I want to step back for a moment to take stock.

I *think* that Carnap had something like the above arguments in mind when he first drew the internal/external distinction, but it's difficult to be sure. All he says on the matter in ESO is:

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[12]Again, my use of Carnap's terminology will be discussed further in section 2.4 below.

What is now the nature of the philosophical question concerning the existence or reality of numbers? To begin with, there is the internal question which, together with the affirmative answer, can be formulated in the new terms, say, by "There are numbers" or, more explicitly, "There is an *n* such that *n* is a number". This statement follows from the analytic statement "five is a number" and is therefore itself analytic. Moreover, it is rather trivial (in contradistinction to a statement like "There is a prime number greater than a million", which is likewise analytic but far from trivial), because it does not say more than that the new system is not empty; but this is immediately seen from the rule which states that words like "five" are substitutable for the new variables. Therefore nobody who meant the question "Are there numbers?" in the internal sense would either assert or even seriously consider a negative answer. This makes it plausible to assume that those philosophers who treat the question of the existence of numbers as a serious philosophical problem and offer lengthy arguments on either side, do not have in mind the internal question. And, indeed, if we were to ask them: "Do you mean the question of whether the framework of numbers, *if* we were to accept it, would be found to be empty or not?", they would probably reply: "Not at all, we mean a question *prior* to the acceptance of the new framework".[13]

Stripped of the theoretical commitment to analyticity and linguistic frameworks, here Carnap seems to be pointing out that philosophers couldn't mean what mathematicians mean by, "Are there numbers?" and, "There are numbers" unless they (the philosophers) were guilty of some obvious error of understanding. The main difference between Carnap's argument and mine is that I am appealing to mathematical practice and the considerations within that practice that are taken settle the existence of numbers, while by contrast Carnap is proposing a grand interpretation of mathematical practice involving his own philosophical paraphernalia. In a sense, this difference is less than it might seem, because just as Carnap faces the challenge of vindicating his interpretation of mathematics, I face the challenge of arguing that the considerations mathematicians take to settle internal questions really do settle these questions. I attempt to rise to this challenge in the next section of the paper.

In the above quote, Carnap also appeals to the self-understanding of ontologists, claiming that ontologists would, if asked, deny that they are concerned with the internal question of the existence of numbers. This is an empirical sociological claim and I'm

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[13]Quoted from Carnap (1956), page 209.

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not sure it's correct. Nor am I sure that it's incorrect. To find out we'd have to engage in an extensive empirical project. Fortunately, we can sidestep such burdens: it matters very little how ontologists interpret their own practice because people—ontologists included—can be mistaken about the meanings of the terms and sentences that they employ.[14] In order to interpret the words of ontologists, we cannot simply ask them what they mean and be done. Instead, we must take in all of the data, including their self-conception, and then engage in the difficult project of interpreting their words.

It's important to stress that my semantic claims concerning the internal/external distinction are rooted in interpretive claims. I am concerned with how we can best understand and interpret the existence claims made by ontologists in the philosophy room. I am not making any claims about what ontologists should mean when they make existence claims and ask existence questions. That is, at present, I'm not concerned with any normative questions concerning ontology: my project is hermeneutic. Accordingly, the next section will have to wade into general metasemantic issues of interpretation in order to justify and defend my arguments.

2 Defending The Argument

This section supports and defends the arguments of section 1.

2.1 Interpretive Charity

In each of my arguments for the internal/external distinction, the first premise claims that certain considerations settle (or certain methods can correctly be used to settle) the relevant questions in non-philosophical contexts. Why should we think that premise one is true in any of the arguments? Because the best interpretation of discourse in non-philosophical contexts vindicates the first premise in each of my arguments. In each of my arguments for the internal/external distinction, the second premise claims that certain considerations fail to settle (or certain methods cannot correctly be used to settle) the relevant questions in philosophical contexts. Why should we think that premise two is true in any of the arguments? Because the best interpretation of discourse in philosophical contexts vindicates the second premise in each of my arguments.

The key point supporting these claims is that interpretation is normed by charity, and interpretations that deny the first or second premises in any of the above arguments

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[14]Some may find this denial of the transparency of meaning to be controversial. The first subsection of section two below endorses a metasemantic principle that is incompatible with any kind of simplistic epistemological transparency thesis concerning meaning.

fail to be sufficiently charitable. The term "charity" is an overused word in the theory of interpretation. Some charity principles entail that speech communities that fall into widespread error are *a priori* impossible (cf. some of Donald Davidson's formulations).[15] And other charity principles force us to project our idiosyncratic cognitive architecture onto those we are interpreting, even if they are biologically and sociologically quite different from us (cf. David Lewis's version of charity and Richard Grandy's related "principle of humanity").[16] But there are weaker charity principles that don't fall into either of these traps.

The general idea of interpretive charity is rooted in the famous but vague idea that *meaning is use*.[17] I think the best way to understand this slogan is an explanatory metasemantic claim, i.e., the slogan claims, plausibly, that the semantic content of sentences is determined and explained by human dispositions to utter and mutter and produce sentence tokens. Use-based metasemantics of this kind are extremely popular in the philosophy of language and mind. Several philosophers—including Ned Block and Paul Horwich—have pointed out that these use-based or conceptual role metasemantic theories are intimately connected to charity principles in interpretation.[18] Use-based metasemantic theories take the truth conditions of our sentences to be largely determined by our dispositions to accept and reject sentences in various circumstances— charity is simply the other side of this coin.

Let an *error* be a disposition to accept a false sentence and let an *attribution of error* be an interpretation according to which those we are interpreting are in error (i.e., they have a disposition to accept false sentences). The following weak charity principle is what I'll use to defend my I/E arguments:

> **Minimal Principle of Charity** (**MPC**) : when interpreting, minimize the attribution of inexplicable errors, i.e., *ceteris paribus*, the interpretation that minimizes the attribution of inexplicable errors is to be preferred.[19]

To explain an error, in the relevant sense, amounts to pointing to linguistic dispositions and information possessed and showing that the agent we are interpreting lacks some worldly information that, if they possessed, would lead them to correct their error. In order for this to have any content, we need to be able to specify these worldly situations in a non-question begging way, e.g., *any* error could be so explained if, when *p* was

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[15]See the essays in Davidson (1984).

[16]Lewis (1974) and Grandy (1973).

[17]This rough idea dates back, at least, to Wittgenstein (1953).

[18]See Block (1998) and Horwich (1998), page 72.

[19]Cf. Dennett (1987) and Cherniak (1986) where principles of this kind are propounded and defended; see also the essays in Hirsch (2011). Some of Davidson's later formulations of charity also suggest something like the MPC.

false and believed by *S*, we could simply say that *S* lacks the information that not-*p*. This is to say that our explanations of error must be non-trivial.

To illustrate the general idea: if someone utters "it is raining" when it is not raining, we can interpret homophonically and thereby attribute an error to them if they would normally be disposed to utter or assent to "it is raining" just when it is raining *and* the information they possess at the time of utterance explains their deviation from their pattern in this particular case, e.g., perhaps they saw someone carrying an umbrella or looked out the window just as someone outside was spraying water on it, etc. In detail, a non-trivial plausible explanation of error can take many forms, e.g., the speaker might be uttering falsehoods in the course of acting in a play or they might be uttering falsehoods because given their perceptual capacities they mistake *X*s for *Y*s in non-ideal perceptual conditions (for them) and they happen to be in such perceptual conditions, etc. For understanding how to apply the MPC, it's essential to note that not all errors are created equally. Some errors are very difficult to plausibly explain, while others are quite simple. Attributing errors to speakers about matters they consider obvious, basic, or simple requires meeting higher standards than attributing errors to them about complex matters that they regard tentatively.

The MPC ties semantic content closely to language use, so that there must be some special genealogical story to tell when things go wrong; the default assumption is that things have gone right. Something like this principle has been explicitly endorsed by Ned Block, Donald Davidson, Daniel Dennett, David Lewis, W.V. Quine, and many others.[20] I also think the MPC—or something very much like it—would be accepted by almost any philosopher who accepts a use-based or inferential role account of linguistic or mental content, even those who generally bridle at mentions of "charity". With the MPC in hand, we can now justify the premises of each of my arguments for the internal/external distinction.

2.2   The MPC and the I/E Arguments

Accepting the minimal principle of charity is a fairly modest theoretical commitment, but it's enough to justify the first premise in each of the arguments given above. If the Euclidean argument doesn't conclusively settle the mathematical question, "are there numbers?", then mathematicians are mistaken about the correctness of a basic mathematical proof, i.e., they are mistaken about a proof that involves only a small number of obvious logical steps. But Euclid's proof of premise one of the Euclidean argument is one of the gems of elementary number theory, and the Euclidean argument itself in-

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[20]See Block (1998), Davidson (1984), Dennett (1987), Lewis (1974), and Quine (1970).

volves only basic logical steps that are regarded as obvious in orthodox mathematics. Attributing errors to speakers about matters they regard as obvious without a convincing explanation of their failures is a charity violation of the most egregious kind.[21]

The justification of premise one in the table argument is similar. The answer to, 'Is there a table?' in a particular context is 'yes' if and only if 'there are tables' is true in that context. A speaker demonstrating a table is pointing out certain facts about the spatiotemporal arrangement of matter that are taken to settle questions about the existence of tables. Why should we accept that the spatiotemporal arrangement of matter conclusively settles the question of whether there are any tables in common existence debates? I've framed this question in this way so that we can helpfully table (sorry) merely epistemic or skeptical worries. In skeptical scenarios (situations where a subject's evidence is systematically misleading about the nature of the world) the parties in the debate are mistaken about the considerations they take themselves to be adducing, but that isn't what's happening here; what matters here is whether certain physical considerations (e.g. qualitative features of the world, the arrangement of micro-physical particles, etc.) settle the facts about tables.

So, ignoring skeptical worries, ordinary speakers could only be wrong about the existence of tables if we interpret them as speaking a language in which the spatiotemporal distribution of matter doesn't settle the truth of the sentence, "there are tables". But this would involve attributing errors to ordinary speakers about their basic perceptual beliefs. Worse than that, it means attributing error to them about a *large number* of *extremely basic* perceptual beliefs made in *perceptually ideal* circumstances even though these reports *would not be retracted* by the speakers even given further information about the state of the world.[22,23] Rejecting the first premise in this case once again involves charity violations of the most egregious kind.

In the case of premise one of the electron argument, the force of charity isn't quite as strong. The relationship between experimental evidence and facts about the existence of subatomic particles is far from obvious. Still, the existence of electrons isn't a disputed scientific result, and the methods used to establish the existence of electrons are generally agreed upon. To attribute widespread error to scientists and scientifically

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[21]Cf. Quine (1970) on charity to obviousness.

[22]Cf. Hirsch (2008a) on charity to perception and charity to retraction.

[23]If I were trying to use the MPC to ground a fully reductive metasemantic theory here, then I would need to say a lot more to ensure that semantic notions like truth weren't being used in the statement or explanation of the MPC. The worry, roughly, would be that given higher-order evidence *any* claim could be retracted in certain circumstances, e.g., even basic arithmetical beliefs might be retracted by a speaker if the speaker were convinced that they had been given a pill that made them form false arithmetical beliefs. So dispositions to retract can't be used blithely when interpreting, but for my purposes here, these concerns can be sidestepped by building in a condition to the effect that the further information about the world relevant to retraction must be veridical.

educated laymen about the existence of electrons is not something that should be done lightly. All else being equal, an interpretation of scientific discourse that makes premise one of our argument true is to be preferred to one that makes it false. So even in this case, the MPC pushes us toward accepting premise one.

The MPC also supports each argument's second premise. The second premise claims that, e.g., the Euclidean argument does not settle the existence of numbers in the philosophy room (here I think the three cases can be treated together). Rejecting this doesn't involve taking any first philosophy stance, but it does involve charity violations of the same general type that we saw when discussing the first premise, viz., it involves charging a large number of intelligent, diligent, and honest investigators with widespread and simplistic misunderstandings. This can occasionally be done (perhaps craniologists were intelligent, diligent, and honest?), but it requires meeting a high burden of proof. Attributing widespread basic errors to a large group of intelligent people should not be done lightly even when those people are philosophers. It's a major cost to say that so many philosophers are in error about what settles the questions they ask. For this reason, the MPC supports accepting the respective second premise in each I/E argument.

With each argument's first two premises defended, the intuitive interpretive principles and our definitions suffice to generate the arguments' conclusions. In other words, the MPC enjoins us to accept an internal/external distinction, at least for the three dual questions we have considered. While I think there is a strong charity-based case in support of these arguments, nothing I've said here is absolutely conclusive or unassailable. However, enough has been done to nudge the burden of proof onto those who want to reject the I/E distinction. Opponents of the internal/external distinction can reject my arguments with a clear conscience provided that they provide a convincing explanation of the error that mathematicians are committing when they accept both the Euclidean proof and basic logical reasoning or of the error that philosophers are committing when they, in full awareness of the Euclidean proof, go on to argue at length about the existence of numbers. I will consider several attempted explanations in the next subsection.

2.3 Objections and Replies

This subsection considers and replies to seven objections to my arguments.

(1) It might be thought that premise one of the number argument is false because the Euclidean Argument simply *assumes* that numbers exist and therefore does not settle the question of whether there are numbers. The key worry behind this objection

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is something like this: the axioms of number theory state that numbers exist, so the Euclidean argument can't *establish* that there are numbers. In other words, you might doubt that somebody could have justification for believing that there are numbers simply by following the reasoning of the Euclidean argument because the argument is somehow circular.

The criticism here is simply mistaken: the standard axioms of number theory don't include among them some version of the claim "there are numbers". The standard axioms of number theory do, on a standard reading, trivially entail that there are numbers. The Euclidean argument was only meant to dramatize the trivial entailment from the standard axioms for number theory to the claim that numbers exist. The Euclidean argument doesn't beg any questions, it just shows how *mathematically* trivial it is that numbers exist. Of course, this trivial entailment depends upon our taking mathematical claims as face-value, and this hasn't yet been defended.

(2) Throughout I have assumed that we can take mathematics room sentences like "there are prime numbers" at face-value. This means that this statement is exactly what it seems, viz., an existentially quantified sentence that logically entails "there are numbers". This assumption was used to characterize "there are numbers" as a dual sentence. Although my assumption is standard, it is not entirely uncontroversial—a longstanding concern of metaphysicians has been to offer paraphrases or translations of apparent existence claims like "there are prime numbers". Some versions of this non-face-value translation strategy undermine the idea that "there are numbers" and "there are tables" and the like are dual sentences, while other don't.

Assuming that in the philosophy room, "there are numbers" is to be taken at face-value, and t is our proposed translation of mathematics room sentences, then if t("there are numbers") $\neq$ "there are numbers", we already have an internal/external distinction.[24] So the only way the translation strategy could be used to undermine my arguments is if t("there are prime numbers") doesn't entail t("there are numbers"). When this entailment doesn't hold, it's possible to deny that "there are numbers" is a dual sentence, since it wouldn't be entailed by standard mathematics room utterances. Translations that block this entailment are non-standard, but not entirely unheard of in philosophy. For a whimsical example, witness the dialogue between Argle and Bargle from Lewis & Lewis's dialogue on holes:

> *Argle.* I did say that there are holes in the cheese; but that is not to imply
> that there are holes.

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[24]This assumes, plausibly, that the translation of "there are numbers" isn't synonymous with "there are numbers"—such a synonymy would undermine the point of the translation strategy in this context.

Bargle. However not? If you say that there are A's that are B's, you are committed logically to the conclusion that there are A's.

Argle. When *I* say that there are holes in something, I mean nothing more nor less than that it is perforated.…I am sorry that my innocent predicate confuses you by sounding like an idiom of existential quantification, so that you think that inferences involving it are valid when they are not.[25]

Of course, Argle doesn't here discuss the translation of "there are holes" *simpliciter*, but it seems likely that it is to be translated homophonically. However, there are reasons for rejecting this kind of translation strategy for "there are numbers" and the other dual sentences considered above.

The master problem is that standard theoretical virtues pressure us toward accounts of language that treat such similar sentences as having the same logical form. At the level of truth conditions (determined according to a Tarski-style semantic theory according to a sentence's logical form) this was famously given voice to by Paul Benacerraf:

A theory of truth for the language we speak, argue in, theorize in, mathematize in, etc. should…provide similar truth conditions for similar sentences.[26]

Benacerraf goes on to argue that this demand counts against those views that don't take mathematical sentences at face-value, as we are inclined to take non-mathematical sentences. It seems uses of English phrases like "there are", should be treated similar—syntactically at least—whether used in the mathematics room or when ordering food.[27]

Benacerraf's point counts generally against translations of mathematics that don't take mathematical sentences at face-value, but a version of the concern counts even more tellingly against the particular type of non-face-value translations required for this objection. Recall that this objection requires alternative translations with the specific feature of blocking the inference from t("there are prime numbers") to t("there are numbers"). Since it is trivial that all prime numbers are numbers, blocking this inference in an Argle-style way involves treating "there are" in these two sentences differently. But these are both *mathematical* sentences, at least superficially in using mathematical notions, so we don't even need to point to syntactic or semantic uniformity in disparate parts of language, for this kind of translation treats "there are"

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[25]Lewis & Lewis (1970), quoted from pages 3-4 of Lewis (1983a).

[26]Quoted from Benacerraf (1973).

[27]*N.B.* that Benacerraf's point isn't an argument against homonyms, so it can't be used to argue against the I/E distinction itself.

differently for sentences with mathematical terminology. Without some kind of serious justification for this, the move is *ad hoc*. Perhaps some linguistic justification for this could be given, but at the very least the burden of proof is on those who provide this kind of alternative syntactic treatment of mathematics. As such, for our purposes here, assuming a relatively straightforward syntactic treatment of existence questions and claims isn't problematic.

(3) It might be thought that a plausible explanation of widespread philosophical error is possible and that this undermines our reasons for accepting the second premises. I'll consider two possible explanations of error, one based on semantic externalism and the other based on the paradox of analysis.

(*i*) *Externalism*. Famous thought experiments presented by Tyler Burge and Hilary Putnam illustrate that meaning is, in part socially determined.[28] Even if I don't know how to distinguish beech trees from elm tress, the words "beech" and "elm" mean, in my mouth, what they mean in the public language of which I am a part. This is because, in part, I defer to botanical experts who do know how to distinguish beeches and elms. Here's a way that this kind of semantic externalism might be used to explain philosophical error: as speakers sharing a common language, philosophers and mathematicians are engaged in the same linguistic practice and the meanings of mathematical terms and questions in the mouths of speakers in this practice, including philosophers, are determined by the usage of experts, and the experts in this case are the mathematicians (these are, afterall, mathematical terms we're considering). Thus, the usage of a mathematical sentence by a philosopher has its *mathematical* meaning, regardless of the philosopher's beliefs about the sentence's meaning. According to this objection, philosophers don't accept the Euclidean argument because they mislead themselves about the nature of mathematical questions by viewing them through the lens of their favored epistemological and metaphysical theories.

This proposal is an explanation of both how the philosophical question, 'Are there numbers?' could mean the same thing as the mathematical question and also why philosophers are mistaken about the considerations that settle the question. If this social externalism line worked it allows us to reject premise two without sinning against charity, but I think it fails. In standard cases of social externalism, there is either deference to general usage (as in Burge-arthritis cases) or deference to expert usage (as in Putnam-Elm/Beech cases). But in the case of philosophy room utterances of, 'Are there numbers?' we have neither. Philosophers don't semantically defer to mathematicians, nor do they defer to general usage. The practice of asking philosophical questions is a

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[28]See Putnam (1975) and Burge (1979).

free-standing linguistic practice, and to think that a free-standing practice cannot form because of the social character of meaning is to subscribe to a kind of semantic voodoo, where magic social glue sticks particular sentences to particular meanings in a way that defeats all attempts to coin homonyms or ask related but different questions with the same sentential string. This social explanation of error could only work if there were some utterly mysterious and inescapable semantic glue sticking words to their common meanings, but such a picture of language is ridiculous; if it were right, then language could never change and homonyms could not form. Analogous considerations apply when this objection is applied to the table and electron cases.

(*ii*) *Analysis*. Here's another potential explanation of philosophical error: maybe it's true in philosophical contexts that, e.g., there are numbers if and only if, "there are numbers" logically follows from the axioms of number theory, but even if this is a correct analysis of the truth conditions of, "there are numbers" when uttered inside the philosophy room, it need not be *obviously* true. In particular, philosophers don't need to be making any *trivial* or *simple* mistake when they fail to recognize that the Euclidean Argument does, in fact, settle the philosophy room question, "Are there numbers?". As such, attributing error to philosophers here isn't a gross violation of charity.

In response to this it's important to note that the case described above is different from standard cases of successful analyses, e.g., consider Weirstrass's epsilon-delta analysis of the concept of *limit*. It's true that the analysis itself wasn't obvious to everyone who had an intuitive grip on the concept of a limit, but once the analysis was produced and understood it was widely accepted by those who had an antecedent grip on the concept of a limit, viz., serious mathematicians. By contrast, in the case under discussion, every philosopher of mathematics knows and understands the Euclidean proof in addition to having a grip on the intuitive concept of *number* and yet they deny the sufficiency of the Euclidean argument for showing that numbers exist. A truly analogous case would be one in which the ultimately correct analysis was well-known and widely rejected by those with both an intuitive grip on the concept to be analyzed and an understanding of the proposed analysis. In *a priori* domains like mathematics or philosophy, it's difficult to think of a truly analogous example.

In addition, the Euclidean argument is truly simple, so it is difficult to see how the mere fact that some complex analyses might be conceptually opaque (even in *a priori* domains) would show that philosophers weren't evincing obvious conceptual blind-spots in the case that concerns us. For these reasons, I find it hard to imagine a convincing explanation along the proposed lines that comes out equal to the internal/external explanation. I obviously haven't considered every possible explanation of philosophical error here, but I think the explanation from social externalism and the

explanation from the opacity of analysis are two of the ostensibly strongest candidate explanations. They both fail. The burden of proof is on the deniers of the I/E distinction to come up with a plausible explanation of philosophical error to account for the falsity of premise two.

(4) Some philosophers and linguists might be wary of accepting the I/E distinction without having some idea of how the distinction is semantically implemented. There are numerous possible semantic implementations, e.g., perhaps certain key sortals ("number", "electron") are polysemous or semantically ambiguous or perhaps the quantifiers are polysemous or semantically ambiguous or perhaps either the quantifiers or certain key sortals are extremely context-dependent, interest-relative or perhaps one of the questions have a hidden operator of some kind? Below, in section 3.2, I will come out in favor of something like the hidden operator view, but even without giving any account of how the I/E distinction is implemented, the above arguments stand. This is because the above arguments are independent of the particular semantic implementation of the meaning difference between internal and external questions. The arguments were aimed only at establishing that there is such a meaning difference. The lack of an account of how the distinction is semantically implemented is simply not a reason for rejecting the arguments.

(5) A related thought is that the data I appeal to admits of a wholly *pragmatic* explanation, and so the internal/external distinction is not a semantic distinction at all. According to this line of thought, the question, "Are there numbers?" means the same thing in both the philosophy room and the mathematics room, but the differing pragmatic presuppositions of the two contexts guarantees that different considerations are relevant to answering them. Similarly, the statement, "There are numbers" will have the same truth-conditions in both contexts, but different correctness or assertion conditions. The I/E distinction would then be drawn at the level of pragmatic correctness conditions without there being any semantic difference.

Even if this objection is correct, nearly everything that's important about the I/E distinction remains. If the I/E distinction is pragmatic, it would still be inappropriate for philosophers to appeal to the fact that the Euclidean argument settles the number-question in the mathematics room in an attempt to settle the philosophy room version of the question. Likewise, philosophy room claims that there are no numbers, tables, or electrons wouldn't force alterations in ordinary and scientific practices. So, to a very large extent, everything interesting about the I/E distinction remains even if the distinction is pragmatic and not semantic.

But there still might be reason to prefer a semantic explanation. For instance, if it turns out that, philosophically speaking, there are no numbers, and the standards of the

philosophy room are more demanding than all other standards, then when mathematicians say things that imply that there are numbers, they are literally uttering falsehoods. This is the case even if it is a pragmatic presupposition of the conversational context of the mathematics room that there are numbers. Charity would still rule against this interpretation unless mathematicians generally and uniformly disavowed the existence of numbers when in more critical contexts (such as philosophical discussions). But mathematicians do not generally or uniformly do this. And, in fact, if the existence of numbers is a presupposition here it seems to act quite differently than normal presuppositions (e.g., can it be cancelled in the mathematics room?). For reasons like this, I think there is some pressure on us to take the I/E distinction to be semantic and not pragmatic.

(6) It might be thought that there is no distinction between internal and external questions, because it would sound very odd to say, "there are numbers" in a mathematical context and, "there are no numbers" in a philosophical context (and even odder vice-versa). The oddity of such claims, it might be thought, provides evidence that there are trans-contextual semantic links between ontological and common existence claims (and thus trans-contextual semantic links between ontological and common existence questions). But these links, if they exist, are evidence that the two questions are semantically related in certain ways, not that they mean the same thing. Generally, it's important to keep in mind that needing to explain away an apparent conflict does not mean that there is a real conflict or contradiction. Because of the existence of homonymous expressions, we must often take care to explain away apparent conflicts even without there being any real conflict, e.g., consider standard cases of ambiguity ("But you said Ludwig went to the *bank*!") and context-sensitivity ("Yesterday you said Willie was *tall*!). To say that care must be taken is not to deny that there are some inter-contextual links here; nor is it to affirm that there are such links. These links don't suffice to block my arguments.

A related but more specific worry concerns trans-contextual disquotation. It might be thought that there is a presumption that we can disquote in a way that wouldn't be appropriate if the I/E distinction held, e.g., in the philosophy room we might say, "Mathematicians think that there are numbers." And this would seem to attribute belief in the content of a philosophy room utterance of, "there are numbers" to mathematicians on the basis of mathematics room activities and behavior. The I/E distinction does show that blithe use of this kind of disquotation is problematic, but I doubt that this kind of disquotation happens all that often. It's more likely that the expressed philosophical opinions of mathematicians will be cited, rather than the claims they make in the course of their mathematical work and this kind of disquotation isn't problematic, since

it involves importing the claims of mathematicians made while doing philosophy, into the philosophy room.

(7) I've claimed that my arguments for the internal/external distinction, unlike Carnap's arguments for his version of the I/E distinction, don't depend upon the assumption of analyticity. But this claim might be questioned. It might be thought, for example, that all the talk of *meaning* and *meanings* being thrown around in formulating the I/E distinction and in my arguments for it requires at least the assumption of synonymy relations. And it might further be thought that synonymy can be used to define *analyticity*, in that a statement *p* is analytic if and only if *p* is synonymous with a logical truth (or can be transformed into a logical truth via substitution of synonyms for synonyms). So it might be thought that with my distinction and my arguments, so too goes the analytic/synthetic distinction, despite my claims to the contrary.

In response to this, I have three points to make. Firstly, while it might be true that talk of meaning allows for the conceptual definition of analyticity via a notion of synonymy, such talk is completely compatible with the notion (of analyticity) being trivial. That is, even if any kind of talk of meaning makes synonymy an intelligible notion, and thus makes analyticity an intelligible notion, talk of meaning does not thereby commit one to the existence of synonymies between distinct sentences (presumably, every logical truth is synonymous with itself, and thus there must be trivial synonymies).

Secondly, even if there are some non-trivial synonymies and thus a non-vacuous notion of analyticity, it is a fairly innocuous notion. This notion of analyticity (being synonymous with a logical truth) is sometimes called *Frege analyticity*.[29] Frege analyticity is a fairly benign and uncontroversial kind of analyticity. Any philosopher who accepts that there are synonymies and that there are logical truths accepts the intelligibility of Frege analyticities; together with some common assumptions about synonymies, this means that virtually everyone accepts Frege analyticities. But the acceptance of Frege analyticities is compatible with a healthy skepticism about their epistemic clout and this skepticism keeps us far away from the Carnapian uses of the notion of analyticity that Quine was reacting to in the early 50s—one can accept Frege analyticities without thinking this notion plays a crucial role in the epistemology of logic or mathematics.

Thirdly, those who are completely skeptical of meaning can still accept my picture and my arguments, at least in broad outline. This claim might seem puzzling, since my entire point has been to argue for a claim about meaning. True enough, but not much is lost if we make the I/E distinction a claim about translation. The reformulated Answers

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[29]See Boghossian (1997).

and Methods principles will now say:

1. REVISED ANSWERS PRINCIPLE: If question ϕ is conclusively answered by considerations $p_1, ..., p_n$ and question ψ is not conclusively answered by considerations $p_1, ..., p_n$ then ϕ and ψ should be given different translations into any language (and should not be translated into each other)

2. REVISED METHODS PRINCIPLE: If the methods that can appropriately be used to resolve question ϕ differ from the methods that can appropriately be used to resolve question ψ, then ϕ and ψ should be given different translations into any language (and should not be translated into each other)

These revised principles allow something very much like the arguments of section one to go through, though the conclusions will be somewhat different. So even for a meaning skeptic, as long as something like canons of correct translation are accepted, some sense can be made of the kind of distinction that I've been arguing for. Even Quine, the arch-meaning skeptic, allowed for canons of correct translation, so even Quine would be forced to admit the intelligibility of something very much like my distinction and arguments.[30]

2.4   Two Loose Ends

This section ties up two loose ends that have been left dangling in the foregoing.

(1) My arguments above applied only to certain dual existence claims, where, recall, dual existence sentences are those that can meaningfully occur in both common and ontological existence debates. However, some sentences that occur in ontological existence debates involve sortal predicates like "universal", "fusion", and "proposition". These words are technical philosophical terms and presumably have no use and hence no meaning outside of non-philosophical contexts, so it's natural for a critic to wonder how the above discussion applies to debates using distinctively philosophical terminology.

This may well be, but there is no problem in claiming that some existence questions only have external (philosophy room) meanings. This isn't problematic since the main point of the internal/external distinction is to block the straightforward mixing of common and ontological existence claims. When there is no internal (common) meaning for a particular sortal term, then there can be no porting over, and so the danger that we were attempting to head off doesn't even arise. Thus, the existence of non-dual existence questions poses no problem for the position developed here.

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[30]In fact, in Quine (1970) we find Quine wielding related arguments.

(2) The second loose end to tie up is terminological: some proponents of something like an internal/external distinction have opted for dropping Carnap's "internal" and "external" terminology.[31] I have maintained the Carnapian terms and this warrants some explanation.

There are several reasons one might think ESO's terminology inadequate. Carnap's view suggests the following picture: you can either ask a question internal to a language and thus subject to a particular meaning which will involve particular rules for settling the question or one can somehow try to ask a question independently of or external to a language, and thus not subject to any rules (unless bits of sounds or funny marks on a page are somehow automatically interpreting). Clearly though, one can't ask a question, any question at all, without speaking some language or other. Carnap's picture claimed that the questions of ontology lacked any agreed upon verification rules and were thus without meaning, but if we divorce accepting a language from accepting verification rules, the above gloss on the Carnapian picture seems to be something like a truism: asking an intelligible question means asking a question with a meaning and that involves asking a question within some language or other. Because it embodies a truism when stripped of verificationist trappings, Carnap's terminology might be thought less than ideal.

Against this, I think there is something *external* about how ontologists are thinking of their questions, in the sense that the entire idea of the philosophical discipline of ontology is that reality has an objective in-built mind-independent fine-grained crystalline structure. And ontologists believe that our total theory of the world can do a better or worse job of reflecting reality's crystalline structure. Metaphorically, ontologists want to stand *outside* of language and compare our language's posits to non-linguistic reality. For this reason, I think that Carnap's terminology is particularly apt and suggestive. I will follow up on and further justify this in the paper's concluding section, where I discuss the interpretation of external questions and opt for a critical view of philosophical ontology.

3 External Questions

What do philosophers mean when they ask questions like, "are there numbers?"? The answer I prefer suggests the possibility of an ontological error theory.

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[31]For example, Chalmers (2009).

3.1 The Normative Interpretation

In ESO, Carnap seems to think that the only coherent questions in the vicinity of external questions are practical questions about which linguistic framework it would best serve our interests to adopt.[32] A natural way of implementing this idea understands the external question ⌜Do Xs exist?⌝ as asking whether we should speak a language according to which Xs exist. Call this *the normative interpretation* of ontological existence questions.[33]

There are several things a proponent of the normative interpretation might say about the external existence claim ⌜Xs exist⌝. One is that these sentences are used to *express* endorsement of a language or conceptual scheme according to which Xs exist. Another is that utterances of these sentences *state* that the speaker endorses such a language or conceptual scheme. Yet another is that the sentence *prescribes* endorsement of such a language or conceptual scheme. Yet another combines elements of these three accounts. There may be things to be said in favor of one of these accounts above the others, but here I'll simply be assuming that the normative interpretation of external questions is coupled with some semantic accounts of external claims.[34]

The problem with the normative interpretation is that it seems to conflict with the practice and rhetoric of ontologists. Ontologists don't attempt to convince ordinary speakers to adopt an ontological position. What's worse, most ontologists don't even attempt to speak using the ontological language that they themselves recommend according to the normative interpretation. The ways of speaking officially endorsed by ontologists are often employed only in the philosophy room, and this fact is hard to square with the normative interpretation of external questions. Perhaps these revisionary ontologists aren't following their own recommendations simply because they wouldn't be understood if they did? Maybe this is right, but revisionary ontologists often don't adopt their favored ways of speaking even when in the company of those who would understand them (other philosophers). I think that a version of this point tells against the normative interpretation of external questions. The mereological nihilist continues to talk about tables, chairs, and other composites when ordering in restaurants and chatting with philosophers. The nominalist continues to speak with the vulgar in the course of doing or discussing mathematics. And the scientific operationalist continues to talk about particles when discussing physics with a friend.

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[32] See pages 214-215 of Carnap (1956).

[33] This is related to the "revolutionary" interpretation of nominalism in Burgees & Rosen (1997).

[34] Of course, proponents of the normative interpretation aren't forced to adopt a non-standard semantics for existence claims. They could simply think that existence claims are standard claims made from *within* particular languages or conceptual schemes.

It doesn't seem like ontologists are too interested in the normative question, though they may think that advocating some particular answer to ontological questions has some normative implications. I agree with Carnap that there are coherent, interesting, and difficult practical questions in the general vicinity of the ontological questions asked by philosophers, but I don't think that contemporary ontologists are best interpreted as asking these questions. The normative interpretation doesn't make sense of the verbal and non-verbal practices of ontologists and it also does extreme violence to the self-conception of most practicing ontologists. Ontologists seem to think that their practice is about discovering some kind of substantive facts about reality and this aspect of ontological practice and debate needs to be taken account of in the interpretation of external questions.

3.2   The Heavyweight Interpretation

Ontologists in the philosophy room often appeal to metaphors about *reality's ultimate structure*, or about wanting to discover the *fundamental nature of the world*, or, following Plato, about cutting *reality's joints*[35] This talk is pervasive enough that there is at least some pressure on us as interpreters to make sense of it in our interpretations of philosophical existence questions and claims. In addition to this longstanding feature of ontological practice, talk of metaphysical *fundamentality* and related notions has recently become a part, not just of ontologists' informal descriptions of their practice, but of their philosophizing. Following influential work by Kit Fine, David Lewis, and Theodore Sider, recent metaphysicians have explicitly introduced distinctively metaphysical primitive notions into their first-order ontological theorizing.[36]

A natural interpretive strategy is to take these new wave ontologists at their word and interpret ontological existence questions by using some type of distinctively metaphysical primitive notion such as *structure*, *fundamentality*, *joint-carvingness*, *naturalness*, *grounding*, etc. I'll fix upon one formulation for the sake of clarity, but everything I say here should be understood as applying no matter which of these metaphysical notions is taken as primitive. Say that *the heavyweight interpretation* of external questions takes the question ⌜Do *X*s exist?⌝ to mean something like: ⌜Do *X*s *really* exist?⌝ where the term "really" doesn't mean "literally" or "non-metaphorically", but instead means something like *metaphysically objectively* or, to employ a metaphor that is almost irre-

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[35]Historically many ontologists have used words like "literally" or terms like "strictly speaking" or "seriously" as interchangeable with terms like "fundamentally" or "really", but intuitively these play different roles, e.g., there is nothing non-literal about the common statement "there are numbers" (though see Yablo (1998)).

[36]See, e.g., Fine (2001), (2009), Lewis (1983b), (1984), and Sider (2001), (2009), & (2011).

sistible here, *from God's point of view* or *according to God's Book of The World*.[37]

According to the heavyweight interpretation, ontological questions and claims use distinctively metaphysical notions in their statement. This interpretation of philosophical ontology is only possible once an internal/external distinction has been drawn, since if there is no such distinction, and this interpretation of ontology was adopted, it would also mean interpreting the existence claims made by ordinary speakers in such a manner. But that would be ridiculous: mathematicians and ordinary speakers obviously aren't employing any distinctively metaphysical primitives in the course of doing mathematics or talking about tables and chairs.

Some may immediately balk at this interpretation of ontology, since it seems to suggest that philosophers who don't accept joints of nature or some other heavyweight metaphysical notions cannot engage in ontological debates. However, this is mistaken. People—including philosophers—are not perfect self-interpreters and may be unaware of all of the presuppositions of some of the discourses they engage in (see below for further discussion of this). In any case, ontologists who explicitly reject metaphysical notions usually think what they mean by "there are numbers" and the like is what the mathematicians mean, but this position is foreclosed by the internal/external distinction. Here we are concerned with how to interpret the distinctly philosophical external questions.

The heavyweight interpretation makes good sense of philosophical practice and since it is only available once we've drawn an internal/external distinction, practicing ontologists should welcome the I/E distinction despite Carnap's use of it in the service of a deflationary metaontology. This is because the I/E distinction, together with the heavyweight interpretation of external questions, shields ontologists from criticisms by ordinary language philosophers.[38] Ordinary language ontologists attempt to use answers to internal existence questions as answers to external existence questions, but once we've drawn the I/E distinction and interpreted external questions in a heavyweight fashion, these criticisms can be shrugged off. In light of the internal/external distinction, ordinary language critics of ontology can be seen as accepting the following inference:

$$\frac{Xs\ exist}{Xs\ really\ exist}$$

but this inference can be cogently rejected by substantive metaphysicians. In fact, the main point of the metaphysical primitive "really" is to allow a distinction between

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[37]Cf. the title of Sider (2011).

[38]See Hirsch (2002), (2008a). See also Schiffer (1996), Thomason (2009), and Wright (1983).

existence and real existence. The heavyweight ontologist can recognize that numbers exist without accepting that numbers really exist.[39]

Let's call someone who accepts the I/E distinction a *Carnapian* and someone who rejects the I/E distinction a *non-Carnapian*. As just pointed out, Carnapians who accept the heavyweight interpretation of ontology have the resources to resist ordinary language criticisms. But just because ontological debates aren't threatened by criticism from ordinary language doesn't mean that they aren't threatened by other kinds of criticism. In particular, even once we've adopted the heavyweight interpretation, we need to ask ourselves whether or not it makes sense to claim that *X*s really exist. At least one Carnapian, Carnap himself, didn't think external questions, understood according to the heavyweight interpretation, made much sense:

> They might try to explain what they mean by saying that it is a question of the ontological status of numbers; the question whether or not numbers have a certain metaphysical characteristic called reality (but a kind of ideal reality, different from the material reality of the thing world) or subsistence or status of "independent entities." Unfortunately, these philosophers have so far not given a formulation of their question in terms of the common scientific language. Therefore our judgment must be that they have not succeeded in giving to the external question and to the possible answers any cognitive content. Unless and until they supply a clear cognitive interpretation, we are justified in our suspicion that their question is a pseudo-question, that is, one disguised in the form of a theoretical question while in fact it is a non-theoretical...[40]

The "really" primitive (or any similar notion) is not one that we have some kind of antecedent conceptual mastery of. Accordingly, ontologists who use such notions must clearly explain them and they must do so in a way that shows that the external questions that employ such notions have objective answers and that ontological claims that use such notions have clear truth conditions. Obviously, when we're dealing with a primitive notion, there is only so much that can be said and whatever is said certainly won't amount to a definition of the notion in other terms—or else it wouldn't be a primitive. Still, when a new primitive notion is introduced to play a substantive theoretical role, it's entirely proper to demand some serious defense of the notion and its ability to play the desired role.

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[39] The converse inference, from ⌜*X*s really exist⌝ to ⌜*X*s exist⌝ can, I think, be reasonably rejected or accepted by metaphysicians depending on which general meta-ontological picture they accept.

[40] Quoted from Carnap (1956), page 209.

Among Carnapians who accept the heavyweight interpretation of external questions, we can distinguish between those who believe that heavyweight questions are coherent and have objective answers and those, like Carnap, who do not. Let's call the first group *Metaphysical Carnapians* and the second *Anti-metaphysical Carnapians*.[41] Like Carnap, I am an Anti-metaphysical Carnapian. I won't argue in detail for a version of Anti-metaphysical Carnapianism here, instead I will briefly sketch three ways to be an Anti-metaphysical Carnapian and indicate a preference for the third way. Once we understand external questions in the heavyweight fashion, we can ask ourselves how the philosophical practice of ontology could come to ruin? Here are three ways:

(1) *Linguistic Fragmentation*: the attempt to ask external questions might lead to linguistic fragmentation. Perhaps the ontologists who argue that numbers exist end up speaking a language in which it is true that numbers really exist and the ontologists who argue that numbers don't exist end up speaking a language in which it is false that numbers really exist. If this is the case, then ontologists end up talking past each other when they attempt to debate and argue about external questions. There are many different ways that this could happen, e.g., maybe each ontological camp ends up meaning something different by "really", so the sentence, "numbers really$_1$ exist" can be true while, "numbers really$_2$ exist" is false. If this, or something like it, is the case, then external questions and claims fragment into many different external questions and claims and each warring party in ontological disputes ends up being right in their own language and the seemingly substantive ontological disputes end up being merely verbal.[42]

(2) *Rampant Indeterminacy*: external questions might be highly indeterminate. Even if all ontologists mean the same thing when they claim that numbers really exist, the claim they are making might be so indeterminate that it lacks clear truth conditions. Since there is so little agreement in ontology and no causal links or semantic deference for externalism to take hold, it is unclear how metaphysical primitives like "really" and the questions asked in terms of it manage to have any determinate content. In particular it is unclear that the notion is determinate enough to decide between the different, competing answers to ontological questions given by ontologists. The linguistic practices that serve to give content to ontological claims may simply fail to give them enough content for ontological questions to have answers.

(3) *Presupposition Failure*: external questions might suffer from presupposition

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[41] According to this classification, merely epistemological skepticism about ontology is not "anti-metaphysical".

[42] This is roughly Hirsch's diagnosis of Sider's attempts to use a metaphysical primitive to save substantive ontology: see Hirsch (2008b) and Sider (forthcoming).

failure. Certain questions only make sense against the background of certain assumptions. The famous lawyer's question, "Have you stopped beating your wife?" assumes, among other things, that the person being addressed has a wife. This sentence can only be given a "yes" or "no" answer if, among other things, it is true that the person addressed has a wife. Consider now the question of what Zeus did five and a half seconds after he vanquished the Titans. Given that neither Zeus nor the Titans ever existed, this question has a false presupposition and is thereby defective. We might say that sentences with false presuppositions are false or we might say that sentences with false presuppositions are neither true nor false, but whatever we say, declarative sentences with false presuppositions are defective in some significant sense and questions with false presuppositions are likewise defective.

Like the lawyer's question and the Zeus question, external questions might be defective via presupposition failure, for they presuppose that metaphysical primitives like "really" are coherent, but this is by no means obvious, for it is by no means obvious what primitives like this mean. What would the world look like if numbers really existed? Presumably it would look just as it would look if numbers didn't really exist. It is unclear what the world would have to *look like* for there to really be numbers and it is also unclear what the world would have to *be like* for there to really be numbers.[43] The only things we can say about this matter are either trivial or circular; this situation is deeply unsatisfying. In the quote given above, Carnap complained about the obscurity of ontological questions, but you don't have to be a verificationist to feel the force of his complaint. It simply isn't clear what it is for something to really exist and so it isn't clear that there are unique and determinate answers to questions about what really exists.

Ontologists often appeal to metaphors to flesh out their claims (and I followed this practice above when introducing the heavyweight interpretation), e.g., perhaps numbers really exist just in case the book of the world talks about numbers and says that they exist? But while this and other metaphors are suggestive, I can't see that they help us here. It would make sense if there actually was a book of the world or something like it, but there obviously isn't. And in fact, the very idea of a book of the world would only make sense if God or Zeus or some panel of deities cooked up the world while thinking finely-grained conceptual thoughts of the kind expressible in language. I think that most ontologists would reject this picture, but if they reject this picture, they owe us some other explanation of the nature and meaning of the questions they are asking. I doubt that any non-metaphorical explanation can be given without

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[43]Cf. the final section of Balaguer (1998).

appeal to the thoughts or scribblings of God.[44]

External questions presuppose that there are facts about whether or not *X*s really exist, but these facts would need to be utterly unlike ordinary facts about the empirical or mathematical world and the only way we've been able to make sense of them is by appealing to the thoughts or activities of God or some other universal designer or designers. So perhaps it is the case that for external questions to have answers, God or something very much like God must exist and have certain very particular features and perform certain very particular actions? If this is right, then external questions are *directly analogous* to the question of what Zeus did five and a half seconds after he vanquished the Titans. Both questions presuppose the existence of deities, but Zeus doesn't exist and, let us assume, neither does God, so both Zeus questions and external questions have a false presupposition. The question, "Are there really numbers?" presupposes that there are facts about what does and does not really exist, and these facts presuppose some kind of book of the world written by a deity figure. But no such deity exists, and if no such deity exists, then external questions suffer from presupposition failure and are thereby defective. At least, this is the line of thinking suggested by the only non-metaphorical explanation given of external questions that I can imagine.

According to this diagnosis, ontology is built upon a mistake. We should accept an *error theory* about ontology. This error theory claims that every ontological claim ϕ suffers from presupposition failure and is thus false (or without truth value, depending on how we treat presupposition failure). An error theory about common existence claims would be extremely problematic; existence questions and claims are too interwoven into the fabric of our general theorizing and thinking about the world to be systematically mistaken, but with the internal/external distinction in hand, we can adopt an *ontological* error theory without catastrophe.[45] I think that ontological error theory is an appealing version of deflationary metaontology, but it is only plausible against the backdrop of the I/E distinction, i.e., it is only appealing as a version of anti-metaphysical Carnapianism.

I won't provide a full defense of ontological error theory here, but I do want to briefly address two related knee-jerk objections to the view. Firstly, it might be wondered whether an error theory about external questions squares with the demands of interpretive charity that I've been stressing throughout the paper. Note first that char-

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[44]See the final section of Burgess (2004) for related thoughts.

[45]My metaontological error theory has much in common with metaethical error theory. Metaethical error theory has been defended by Mackie (1977), Burgess (2007), Hinckfuss (1987), Garner (1994), and Joyce (2001). Some metaethical error theorists (Mackie, Joyce) think that we should retain moral thought and talk because it serves as a useful fiction; I doubt anyone would make the same claim for fictionalism about ontology. If I'm right, philosophical ontology should be abolished.

ity is perfectly compatible with error theory about *some* branches of human discourse, e.g., those debating what Zeus did five seconds after vanquishing the Titans would be falling into error, but their errors are not incompatible with charity because they can be adequately explained. In this case, the explanation is that the participants in the debate have a false belief about the existence of Zeus and the Titans, and this false belief can be fully explained causally, historically, and in terms of the language use of those we are interpreting. Similarly, ontologists have fallen into error because they have a false belief about the existence of God or of some strange facts that make sense only if God's existence is assumed. Philosophical ontology is a recherché human activity seriously engaged in by very few, and like many other obscure areas of human discourse, it may be built on some fundamental mistake. Charity in interpretation is perfectly compatible with all of this.

Secondly and relatedly, it might be objected that I have founded ontological error theory upon an *ontological* claim (the claim being that there are no facts about what really exists). If this were correct, my position would be incoherent, but with the internal/external distinction in hand, the incoherence is only apparent. My error theory is founded upon a common, not an ontological, non-existence claim. To illustrate, suppose that there are no facts about what really exists because God doesn't exist. The claim that God doesn't exist is not a claim of philosophical ontology, or if it is, it is one in which the ontologists and the common folk seem to be asking and attempting to answer the very same question. So in this case, philosophical ontology presupposes an answer to a *common* existence question, a presupposition that is, I claim, in error.

By contrast, imagine that nominalists attempted a similar explanation of the error made by mathematicians—mathematicians are in error because they mistakenly believe that there are numbers, but there aren't. In order for there to be parity here between my account of ontology and the nominalists' account of mathematics, nominalists would need to explain the causal source of this belief in a way that showed it to be in error while also connecting this error to the linguistic practices of mathematicians. This latter task would involve showing what types of evidence would be taken as relevant for determining whether numbers existed and showing why mathematicians mistakenly believe there to be such evidence. This task is rarely attempted by nominalists and for good reason: there is no plausible story to tell. The only way I can see to argue for the nominalist explanation would be by assimilating mathematical existence claims directly to claims about mythological beings, e.g., by claiming that mathematics was initially about some kind of magical realm of numbers that was thought to interact with our world (much like Zeus and God). But I tend to think that such a mythologically robust view of mathematics is a later invention by philosophers, and is in any case

certainly not something subscribed to by today's mathematicians. By contrast, as I have argued, such a view of philosophical ontology is quite plausible and something like it has been explicitly endorsed by many of the most prominent contemporary ontologists (Fine, Lewis, Sider, etc.).

It is perfectly legitimate to explain an error by appealing to some other error as long as that other error can be satisfyingly explained in a non-trivial fashion. This is the case even when we are explaining the problems of *external* questions by appeal to false beliefs or confused pictures of *internal* questions. Philosophical ontology is the lingering residue of a anthropocentric mythology about the world and its features. But the causal, historical, and existential assumptions bound up with this mythology are false and thus ontology comes to ruin and falls into massive and foundational error. How delightfully paradoxical that the great ship of philosophical ontology founders on the puny rock of common ontology![46]

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