A Refutation of Ontology[1]

By Chris Wright

Ontological questions have a venerable history, having been in circulation among philosophers for 2400 years. Nevertheless, in this paper I shall argue that they are pseudo-questions. More specifically, the question whether abstract entities exist—whether there are 'in reality' such entities as numbers, relations, properties and propositions—is based on confusions. Surely this claim ought to be uncontroversial. When a philosophical problem is actively debated for nearly one thousand consecutive years, refusing to be resolved despite the best efforts of the best minds, the possibility that it has been incorrectly formulated ought to be considered a probability. Ontologists should thus change their focus from attempting to answer the question directly to trying to explain in what sense it may be an illusion.

Of course, there is not just *one* question. There are many. Indeed, upon glancing over the contemporary ontological literature, one is struck that there may be an *infinite* number of questions. Literally: there seems not to be a limit to the number of questions that can be posed, nor the number of ways they can each be dealt with. New problems are constantly being brought to light, and each proposed solution is merely fertile ground for the sprouting of new problems. The more that ontology progresses, the less it does. Any disinterested observer who read all the books, all the journal articles, all their rejoinders, all the rejoinders to the rejoinders, would decide that the participants had given up the attempt to find answers and had resolved,

[1] [This is an old paper of mine from a previous lifetime. In some respects it's crude and inadequate, and even funny. But it has strengths, including its refreshing ambitiousness, its useful framing of certain issues, and its unusual approach to the subject-matter. I continue to believe that the field of ontology consists largely of pseudo-questions.]

consciously or unconsciously, just to continue writing for the sake of writing. "Alas!" he might cry, "philosophy has degenerated into scholarship!"

Obviously there's something wrong. Ontological theorizing ought not to be so technical that only a few specialists can understand it, nor should answers to its questions appear farther away the closer one gets to them. Wittgenstein once wrote that the purpose of philosophy is to show the fly the way out of the fly-bottle. With regard to ontology, I agree. In this paper I'll try to explain the source of all the confusion, thus, hopefully, freeing the fly. Or at least uncorking the bottle.

An overview of ontology

I find myself already confronted with a dilemma. I have to provide some background for the reader, but the relevant 'background' is the whole of ontology. Which is a large subject. So I'll have to compromise: I'll try to give the reader a sense of the issues at stake, but I won't be able to touch on *all* the issues.

A good place to start is David Armstrong's formulation of what he calls the "Problem of Universals": What distinguishes the classes of tokens that mark off a type from the classes that do not?[2] (A token is an instance of a type. For example, a single banana is an instance of the type 'banana'.) This is an ontological question because whatever it is that distinguishes things from each other must obviously *exist*, and it must also be the fundamental organizing principle of our experience. So in asking for an account of it, we're asking for an account of arguably the fundamental class of existents, the class that structures our experience.

[2] David Armstrong, *Universals: An Opinionated Introduction* (London: Westview Press, 1989), p. 13.

Each traditional answer to this question falls under one of two categories: nominalism or realism.[3] Penelope Maddy characterizes the realist position as follows:

> We all agree that there are many red things—red roses, red houses, red sunsets—but the ancient question is whether or not there is also, over and above this lot of particular red things, a further thing they share, namely, redness. Such an additional thing—redness—would be a universal. The most basic difference between particulars and universals is that a universal can be present ('realized', 'instantiated', 'exemplified') in more than one place at a time, while a particular cannot.[4]

Thus, properties and relations are universals, in that the same property or relation can be shared by many particular objects. Now, this ontology suggests the *substance-attribute* theory of Locke and (arguably) Aristotle: particulars are substances, while the universals that are exemplified by particulars are attributes of the substances.[5] For instance, Aristotle called an individual thing, together with its properties, a substance.[6] But this begs a question: what is it that distinguishes a given substance (i.e., a particular) from another? Why is this banana different from that one, if they both instantiate the same universals? Clearly a particularizing element is needed; this is what Locke called the "substratum".[7] So, a substance is a substratum plus the universals it instantiates. But what is a substratum? It must be a "bare particular", a particular without

[3] For the moment I'll ignore conceptualism. I'll explain why later.
[4] Penelope Maddy, *Realism in Mathematics* (New York: Oxford University Press, 1990), p. 11.
[5] As Armstrong notes (op. cit., p. 62), this theory would have to be extended to account for relations.
[6] Cf. Armstrong, op. cit., p. 60.
[7] Ibid.

properties, because whatever properties it has can be ontologically distinguished from it.[8] But the idea of a propertyless particular is very strange. Moreover, if substrata have no properties then they are indistinguishable from one another. But in that case, how can there be more than one of them? What is it that distinguishes them? By definition there is nothing that fulfills this role (because they lack properties); therefore, there can be only one substratum. But this is absurd, because it entails that there is only one concrete particular in the whole world.

The substance-attribute theory is subject to many similarly devastating criticisms,[9] but since my purpose at the moment is only to provide a context for my later discussion I'll pass over the others.

Historically, the British Empiricist tradition reacted against Locke's substance-attribute theory by adopting a *bundle theory*, according to which a particular is identified with the bundle of its properties.[10] The idea of the substratum is rejected as unnecessary and paradoxical. Berkeley's phenomenalism had affinities with a bundle theory (though Berkeley was a nominalist), but Bertrand Russell put forward the most famous version. He suggested that properties are universals, and particulars are bundles of "compresent" properties. This means that no two particulars can be composed of the same properties, for if they were, they would necessarily be the same particular. The bundle theory, therefore, is committed to Leibniz's principle of the Identity of Indiscernibles, viz. that if two things have the same properties then they are the same thing. This principle, however, does not seem to be true. There are various counter-examples to it: for instance, Nietzsche's suggestion that the world exists in a cycle of eternal recurrence, in which everything that has happened will happen again an infinite number

[8] Cf. Keith Campbell, *Abstract Particulars* (Oxford: Basil Blackwood, 1990), p. 7.
[9] See ibid., pp. 7 – 16.
[10] Armstrong, op. cit., p. 61.

of times. This may not be true, but it is at least possible. Since it implies that Leibniz's principle is false, the bundle theory must be false as well.[11]

Let's look at versions of nominalism. Keith Campbell describes the main thesis of nominalism as follows:

> There are only concrete particular objects—rabbits and foxes, chairs and tables, and so forth. These objects fall into groups resembling one another more or less closely. Such objects have in common their membership of sundry classes, but no genuinely common univeral element. In a medieval version, all that rabbits have in common is that they are described using the same *common name* 'rabbit'—hence the label 'nominalism' for this group of doctrines. ....*To have a property* reduces to belonging to appropriate classes or glorying in appropriate descriptions. *To be a property* is to be an open class of concrete particulars.[12]

One might with justice say that the unifying thread among nominalist theories is their denial of abstract entities (in particular, universals).[13] Class Nominalism ("the view that for a thing to be of a certain type is nothing more than for it to be a member of a certain class"[14]) and Predicate Nominalism (the view that for a thing to be of a certain type is for it to be named by a certain

[11] See ibid., pp. 70 – 74 for more problems with Russell's bundle theory.
[12] Campbell, op. cit., p. 17.
[13] This isn't entirely true, though. Nelson Goodman's nominalism, for example, differs from the traditional kind in that it countenances abstract entities (because he thinks that these can be construed as 'individuals'). See his article "A World of Individuals" in *Philosophy of Mathematics*, ed. Putnam and Benacerraf (Eaglewood Cliffs, New Jersey: Prentice-Hall, 1964), pp. 197 – 210.
[14] Armstrong, op. cit., p. 8.

predicate) have been effectively criticized by Armstrong,[15] but it would be worthwhile for us to look at one or two other versions. Let's start with Resemblance Nominalism.

This theory reduces membership in a class (e.g., the class of bananas) to certain relations of resemblance between the members. These resemblance-relations are not reduced to relations between properties possessed by the individuals; instead, they are primitive. They are just brute facts about the individuals.[16] In H. H. Price's version of the theory, yellow things, for example, are called yellow because they sufficiently resemble "a small group of standard objects or exemplars" of yellowness[17]—what is often called the "paradigm group". This paradigm group might be a particular banana, a particular patch of color, and the paint on a particular wall. Other objects are called yellow if they resemble the paradigm objects at least as closely as the latter resemble each other. Properties, or the individuals' instantiation of universals, need not be invoked to explain these resemblances.

While this theory, if fleshed out, may initially seem attractive, it is not. In denying properties, it foregoes a very useful explanatory tool. The positing of properties is necessary in order to explain, for example, causal relations. "Things act in virtue of their properties."[18] Indeed, from what I've gathered while reading about this theory, it actually denies *relations* as well (as indeed it must, if it denies universals and does not replace them with tropes). But I fail to see how a theory that must invoke the relation of resemblance can coherently deny the existence of relations. –In any case, this form of nominalism is refuted by common sense.

Trope theory is a more promising form. A trope is a particular instance of a property or relation. The red of a particular apple—the color that one can actually *see*, as opposed to the

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[15] See his *Universals and Scientific Realism* (Cambridge: Cambridge University Press, 1978), chapters 2 and 4.
[16] *Universals: An Opinionated Introduction*, p. 15.
[17] Ibid., p. 47.
[18] Ibid., p. 50.

concept of the color, or its universal—is a trope; the specific relation of similarity between two particular apples is also a trope. Tropes have often been called abstract particulars, because each exists in a particular spatiotemporal location and yet can be brought before the mind only through a process of abstraction from other localized properties.[19] A concrete particular is nothing but a collection of these properties. It is a complete group of compresent tropes.[20] On this scheme, there is no substratum mysteriously lurking behind appearances, no problematic instantiation of universals (because there *are* no universals), and no reason for the theorist to implausibly deny properties.

Of course, I am again, of necessity, oversimplifying. There are many kinds of trope theory: some retain primitive particulars, others retain universals, others reduce both particulars and universals to collections of tropes. This latter kind, though, is the 'classic' version of trope theory, and it is probably still the most popular. G. F. Stout, Donald Williams and Keith Campbell are well-known advocates of it; they favor it largely because of the theoretic economy introduced by its one-category ontology. This enables them, for example, to analyse the statement "All bananas are yellow" analogously to the Resemblance Nominalist's analysis: the statement means that the yellow trope of each banana sufficiently resembles the yellow trope of every other banana for all the bananas to belong in the same class. Williams and Campbell take this resemblance-relation to be primitive (unanalysable), but they avoid the problems that beset the Resemblance Nominalist because they are willing to invoke properties (since properties are tropes), as he wasn't.

Nevertheless, there are problems with trope theory. For one thing, it seems odd to say that collections of compresent properties are capable of independent existence, in the way that we

[19] I think the term 'abstract particular' is misleading, though, since it can be construed as naming *abstract entities* that are particulars rather than universals. See below for examples of this kind of 'abstract particular'.
[20] Campbell, op. cit., p. 21.

commonly think of concrete particulars as independently existing. For a banana to be *nothing but* a bunch of properties somehow bundled together offends our common sense intuitions. Properties just aren't 'substantial' enough. They need to inhere in something. To get around this difficulty—i.e., to add a little spatiotemporal 'heft' to properties—a trope theorist might try to ascribe shape, size and duration to tropes, but, as Armstrong notes, these are themselves properties and "therefore ought to be tropes themselves alongside other property tropes".[21] Besides, this *ad hoc* solution would still not answer the question of what it is that the properties inhere in. This question, of course, is *necessarily* unanswerable—or unaskable—within the framework of Williams' and Campbell's trope theory, because their ontology recognizes only one category.

Maybe they would reply in quasi-Berkeleian fashion: there is no need to posit an underlying substance or substratum, because no matter how deeply we analyse any concrete particular, all we ever encounter are properties. Even on the subatomic level, we encounter only mass, velocity, electric charge, etc.; subatomic particles are essentially composites of these properties, just as bananas are composites of their properties. Moreover, we have already seen the problems with a substance-attribute view. Hence, it is better to deny substance altogether. – These replies are not obviously flawed. What they show, though, is not that trope theory is unequivocally good, but simply that it may be the lesser of two evils. In other words, we seem to be stuck with a 'Scylla or Charybdis'-situation. And that's a sure sign that something's wrong.

I'll pass over the other problems with trope theory and proceed to the philosophy of mathematics. The realist position is described by Penelope Maddy as follows: "mathematics is the scientific study of objectively existing mathematical entities just as physics is the study of physical entities. The statements of mathematics are true or false depending on the properties of

[21] Armstrong, op. cit., p. 115.

those entities, independent of our ability, or lack thereof, to determine which."[22] The analogy with realism about universals is clear: as universals are supposed to be abstract entities that have being independently of the mind,[23] so are numbers. It may be asked whether numbers are universals or 'abstract particulars' not capable of multiple instantiation. This question is not easily answered. If numbers are defined as sets (as they often have been)—so that, for example, the number 0 is the set of all empty sets—then they are particulars, because sets are not multiply instantiable.[24] On the other hand, it certainly seems as if, e.g., the number 2 can be instantiated an indefinite number of times. (There are two pencils in front of me, I have two brothers, etc.) Rather than attempting to answer the question here, let's just acknowledge that it's a difficult one and move on.[25] For our purposes, it's enough to note that a realist believes that numbers are independently existing abstract entities.

Gottlob Frege was a famous mathematical realist, who extended some of his ideas to language in general. He suggested that numbers, concepts (or "functions", as he called them) and propositions (or "thoughts") all exist in a "third realm":

> [Frege] thought that these entities [viz., thought contents, numbers and functions] are non-spatial, non-temporal, causally inert, and independent for their existence and natures from any person's thinking them or thinking about them. Frege proposed a picturesque metaphor of thought contents as existing in a "third realm". This "realm" counted as "third" because it was comparable to but

[22] Maddy, op. cit., p. 21.
[23] Cf. Quine, "On What There Is", in Putnam and Benacerraf, op. cit., p. 192.
[24] A set is determined by its elements: i.e., two sets are identical if and only if they have the same elements. Thus, a specific set cannot be instantiated by another entity.
[25] Its difficulty should in itself make us suspicious of it, and thus of the meaningfulness of the categories 'universal' and 'particular'. But more on this later.

> different from the realm of physical objects and the realm of mental entities. ....Entities in the other realms depended for determinate identities on functions (concepts) in the third realm. Since logic was committed to this realm, and since all sciences contained logic, all sciences were committed to and were partly about elements of this realm.[26]

Not all realists have subscribed to this doctrine of a third realm, for it is considered extremely platonistic and somewhat implausible. A common objection to it is that our ability to interact with the third realm—i.e., to have thoughts of numbers or propositions—is inexplicable, since the realm is causally inert and outside our experience. Frege's late paper "*Der Gedanke*" did not do much to clear up the issue:

> Thoughts are not wholly unactual, but their actuality is quite different from the actuality of things. And their action is brought about by a performance of a thinker; without this they would be inactive, at least as far as we can see. And yet the thinker does not create them but must take them as they are. They can be true without being grasped by a thinker; and they are not wholly unactual even then, at least if they could be grasped and so brought into action.[27]

This all seemed very obscure to many philosophers, even some realists. I have to agree with Frege, though. While the details of his formulation may have been flawed, it seems obvious to me that any kind of realism about abstract entities is committed to the doctrine of a third realm,

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[26] Tyler Burge, "Frege on Knowing the Third Realm", *Mind*, Vol. 101, No. 404, p. 634.
[27] Gottlob Frege, "Thoughts", in G. Frege Collected Papers on Mathematics, Logic, and Philosophy (Oxford: Basil Blackwell, 1984); 351-72.

since abstract entities can be neither physical nor mental. If they were mental, they would be merely thoughts in a person's mind, which would mean that any statement about numbers or concepts or propositions would be a statement about the 'intuitions' or 'ideas' passing through a given person's mind at a given moment. To quote Frege: "If the number two were an idea, then it would have straight away to be private to me only. Another man's idea is, *ex vi termini*, another idea. We should then have, it might be, many millions of twos on our hands."[28] This is clearly absurd. Therefore, if we allow that the concept of two exists, it exists in a third realm. Similarly with all universals and propositions.[29] Exactly what this theory *means*, though, is a question that will have to be postponed until later in the paper.

Historically, realism in the philosophy of mathematics was associated with logicism, viz., the attempt to reduce mathematics to logic. More specifically: "according to [Frege's version of] the logistic thesis, the laws of arithmetic and the rest of the mathematics of number are related to those of logic in the same way as the theorems of geometry are related to its axioms."[30] Logicism and realism do not necessarily stand or fall together, though—which is good for realism, because logicism is generally thought to have failed. Still, realism faces difficulties. The objections that can be raised against it are similar to those that can be raised against Frege's "third realm". How should we understand the statement that numbers, or mathematical structures, exist independently of us? How do we acquire knowledge of them? Paul Benacerraf introduced the 'causal inertness' argument against realism (paraphrased by Maddy):

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[28] Frege, *The Foundations of Arithmetic*, trans. J. L. Austin (New York: Harper & Brothers, 1953), p. 37.
[29] I haven't read much about Fodor's representational theory of mind, but insofar as it identifies concepts with mental representations, it surely falls victim to Frege's criticism quoted above. Cf. Eric Margolis and Stephen Laurence, "Concepts", The Stanford Encyclopedia of Philosophy (Spring 2006 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2006/entries/concepts/>.
[30] Stephen Barker, *Philosophy of Mathematics* (Eaglewood Cliffs, New Jersey: Prentice-Hall, 1964), p. 80.

> What makes '2 + 2 = 4' true is the nature of the abstract entities 2 and 4 and the operation plus; for me to know that '2 + 2 = 4', those entities must play an appropriate causal role in the generation of my belief. But how can entities that don't even inhabit the physical universe take part in any causal interaction whatsoever? Surely to be abstract is to be causally inert. Thus, if Platonism [or realism] is true, we can have no mathematical knowledge. Assuming that we do have such knowledge, Platonism must be false.[31]

This argument applies also to realism about *any* kind of abstract entity, not just numbers. All abstract entities are causally inert, since they do not exist in spacetime. Hence, it would seem that if we adopt the realist's point of view, propositions, for example, can play no role in our acceptance of them. But this is absurd, so realism must be wrong. There must be a better account of numbers, propositions and concepts than to say that they are mind-independent abstract entities.

Nominalist theories about numbers are of course analogous to such theories about properties and relations. But if numbers are not abstract entities, what can they be? The most widely accepted nominalist position has been formalism, which Quine describes as follows:

> The formalist keeps classical mathematics as a play of insignificant notations. This play of notations can still be of utility—whatever utility it has already shown itself to have as a crutch for physicists and engineers. But utility need not imply significance, in any literal linguistic sense. Nor need the marked success of mathematicians in spinning out theorems, and in finding objective bases for

[31] Maddy, op. cit., p. 37.

> agreement with one another's results, imply significance. For an adequate basis for agreement among mathematicians can be found simply in the rules which govern the manipulation of the notations—these syntactical rules being, unlike the notations themselves, quite significant and intelligible.[32]

Thus, not only are numbers not abstract entities; strictly speaking, "such questions as 'What do the laws of number mean?', 'How do we know whether they are true?', and 'Do numbers exist?' all evaporate and cannot even be asked, if the view of mathematical systems as nothing but formalized systems is adhered to. The formulas of such a formalized system do not mean anything, they are neither true nor false, they embody no knowledge and no claims about the existence of anything."[33] But this is odd, to say the least. For one thing, it apparently implies that numbers are just *numerals*, i.e., the marks we make on paper. But that can't be right; when we speak of the series of natural numbers, we aren't talking about a series of notations we just made with a pen. We're talking about something else, something more 'abstract'. Moreover, it seems manifestly false to say that numerals are meaningless. Nor is it clear how mathematics could be as scientifically useful as it is if it were nothing but a "play of insignificant notations".

Intuitionism is the third major school of mathematical philosophy. It is associated with the ontological theory of conceptualism, which states that abstract entities exist but are mind-made. In medieval times, this position was a popular attempt to deal with the problem of universals, but its support has dwindled since then. I haven't talked about it because it isn't very influential anymore—and also because, frankly, I have never really understood its analysis of universals. (For instance, I have often read that conceptualism holds that concepts exist only in

[32] Putnam and Benacerraf, op. cit., p. 193.
[33] Stephen Barker, op. cit., p. 98.

the mind. But then how they are to be distinguished from subjective ideas and impressions is a mystery.) Be that as it may, intuitionism, which was developed originally by Brouwer, was inspired by Kant's transcendental idealism. Its association with conceptualism derives from its Kantian thesis that "mathematical objects such as numbers and sets are abstract entities brought into being by thinking".[34] That is, the *intuition of counting* is supposed to be the source of numbers and sets. The process of doing mathematics is a process of creation rather than discovery: the mathematician, guided by certain logical constraints, *creates* mathematical truths.

This doctrine has dramatic methodological consequences. For instance, it has led to the intuitionists' rejection of the law of excluded middle: a mathematical statement is not true or false independently of its proof or disproof; it is true if and only if it has been proven. Statements that have not hitherto been proven, such as Goldbach's conjecture,[35] are therefore neither true nor false. Also, intuitionists reject impredicative definitions, as well as Cantor's important theory of transfinite numbers (because it relies on the intuitively ungraspable idea that an infinite number of mathematical steps has been completed)—and, indeed, much of classical mathematics is thrown out. It is not surprising, then, that the mathematical community has almost universally rejected intuitionism.[36]

The view that numbers are properties of external things was effectively criticized by Frege in his *Foundations of Arithmetic,*[37] and I shall not repeat his criticisms here. The view that numbers are sets or classes has been useful in the philosophy of mathematics, but as we have seen, it conflicts with certain of our intuitions. Sets and numbers just do not seem intuitively identical. (Even analytically—i.e., by comparing a list of their respective properties—numbers

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[34] Ibid., p. 72.
[35] Namely, that every even number can be expressed as the sum of two prime numbers.
[36] Cf. Ernst Snapper, "The Three Crises in Mathematics: Logicism, Intuitionism, and Formalism", *Mathematics Magazine*, Vol. 52, No. 4, p. 211.
[37] See §21 – §25.

and sets can be distinguished from each other. For example, the set of all sets with two members—which is supposed to be the definition of 2—lacks certain properties that the number 2 has, and vice versa. 2 may be *extensionally* equivalent to this set, but intensionally it is not.) — In short, no matter what definition of number is offered, nor in what philosophical framework (the realist, the nominalist or the conceptualist)—and no matter what the nature of mathematical activity is held to consist in (whether in the discovery of abstract truths or in their *creation* or in the manipulation of meaningless symbols)—it seems subject to effective criticism.[38]

I have yet to touch on the problems surrounding the nature of propositions. Above I stated, somewhat offhandedly, that if concepts exist then they must be abstract entities, and hence must exist in a third realm. I would say the same thing about propositions, on the basis of the argument I took from Frege. But there is another argument that appears to establish the mind-independence of propositions:

> The proposition that there are rocks does not entail the existence of any beings that have or are capable of having mental states. It entails this neither in a strictly or broadly logical sense. That is, it is possible in the broadest sense for 'there are rocks' to be true in the absence of all mental states. But now, if this proposition is possibly true in the absence of mental states, then it possibly exists in the absence of all mental states, and so is mind-independent. This is an easy argument for the mind-independence of at least some propositions.[39]

[38] There are a few theories I have not considered, among them conventionalism and fictionalism. But as I warned at the outset, I did not intend to give a thorough analysis of every ontological position. My purpose in this first section is to provide only a background.

[39] Matthew McGrath, "Propositions", The Stanford Encyclopedia of Philosophy (Spring 2006 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2006/entries/propositions/>.

"This argument seems to rule out any kind of conceptualism about propositions." It is such an easy argument that many philosophers have been convinced there is something wrong with it; however, their attempts to invalidate it have not, as far as I know, been successful. Other philosophers have accepted it but have been so averse to platonism that they have thus been led to deny the existence of propositions. This position is not very plausible, though. As Matthew McGrath points out, it seems *obvious* that "beliefs have sharable objects which bear truth values"—i.e., propositions. 'Snow is white' must express a proposition because it has a truth-value, and only propositions have truth-values. So there would seem to be such abstract entities as propositions. On the other hand, the belief in abstract entities is, as we have seen, not free of difficulties. The Benacerrafian argument cited above is but one such difficulty.

In short, ontologists are in a muddle.

An attempt to think outside the box

I was at pains in the foregoing to ignore common sense—which is generally what one has to do when doing ontology. Contemporary philosophers, unconsciously aware of this, have made an art of ignoring common sense. They are also singularly bad at 'thinking outside the box'. Let's see if we can do any better.

The peculiar nature of abstract objects (or "entities") is at the root of many problems. These objects seem both unavoidable and inexplicable. Our first task, then, should be to explicate them. A good place to start is Saul Kripke's interpretation of Wittgenstein, as expounded in *Wittgenstein on Rules and Private Language*. My conclusion, briefly stated, will

be that the confusion about abstract objects is an inevitable product of the paradoxical nature of 'understanding', which itself is grounded in the paradoxical nature of consciousness.

I'll ignore the question of whether Kripke's interpretation of Wittgenstein is accurate. I happen to think that he gives Wittgenstein too much credit in attributing to him an overarching, coherent plan for the *Philosophical Investigations*[40]—which has always seemed to me little more than a record of confused (albeit occasionally brilliant) gropings around thoughts whose main unifying thread is that they are intended to undermine the apparently natural and obvious world-view expressed by the *Tractatus* and hidden behind the incoherent prejudices of common sense[41]—but this is irrelevant. I am concerned only with the insights into what it means to 'understand' something.

Kripke's book is divided into two parts. In the first part he analyses what it is to understand and to 'mean' words and sentences. He concludes that there is no "fact of the matter" about what such understanding or meaning consists in. My knowledge of how I am supposed to carry out an operation like '68 + 57 = __'—i.e., my understanding of its meaning—is not a denotable fact, introspectively or extrospectively accessible; it is *sui generis*. It cannot be reduced to some such fact as my behavior or the nature of my intentions; it exists neither in my consciousness nor outside it. This is paradoxical because its existence seems obviously inferrable from my behavior: I am said to understand the proposition above because I know how to complete it, namely by writing '125' after the '=' sign. So *obviously* I understand it! But then,

[40] In fact, I think that philosophers in general give Wittgenstein too much credit. He wasn't some sort of semi-divine thinker with a mystical insight into truth. If the *Philosophical Investigations* doesn't prove that, the *Remarks on the Foundations of Mathematics* does.

[41] To clarify my opinion of common sense: there's the good kind and the bad kind. The good kind, which philosophers no longer heed, militates against intellectual perversity. The bad kind is mankind's common stock of wisdom. I.e., it's a collection of idiocies.

where *is* my understanding? It is nowhere. Therefore, there can be no understanding (or, said differently, "there can be no such thing as meaning anything by any word"[42]).

But this is absurd. The paradox must be resolved. Kripke undertakes its resolution in the second part of his book. Since he has effectively shown that language is impossible given our common understanding of meaning, he must revise our understanding in order to account for the meaningfulness of language. Now, common sense takes the meaning of a sentence to be the truth conditions of the proposition expressed by that sentence. For example, because 'Snow is white' is true if and only if snow is white, the meaning of 'Snow is white' must *be* precisely that snow is white!—i.e., the truth conditions of the proposition. Indeed, it seems as if this Fregean/Tractarian account of meaning scarcely needs to be argued for, it's so obvious. Nevertheless, it must be wrong, because it is what got us into all the trouble in the first place. Our conclusion that assertions are meaningless was based on two premises: "facts, or truth conditions, are of the essence of meaningful assertion",[43] and there are no facts about what is asserted (or understood). In order to reject the conclusion, we must reject one of the premises. We cannot reject the second, because Kripke's arguments have established it; therefore we must reject the first. This means that the truth conditional analysis of meaning is mistaken. Kripke replaces it with an analysis based on "assertability conditions": an utterance has meaning if and only if it has been uttered under the right circumstances, or in the right "language game". Truth conditions have nothing to do with meaning. Given this new theory of meaning, we can answer the skeptic as follows: "In a sense, you're right that there is no fact about a person in virtue of which he means one thing rather than another by a given utterance. But in another sense, made possible by our new theory of meaning, you're wrong. A person means, say, addition if and only

[42] Saul Kripke, *Wittgenstein on Rules and Private Language*, (Oxford: Basil Blackwood, 1982), p. 55.
[43] Ibid., p. 77.

if the community to which he belongs judges that he is following the rules for addition correctly. His use of language is always subject to correction by the community. Communal linguistic practice is what determines the meaning of any utterance, in that the meaning is whatever the community agrees on."

—That's the book in a nutshell. I disagree with much of it, and I'll explain why shortly. But first I have to embellish a few points. The question whether a given statement has meaning or is understood correctly is closely related to the issue of rule-following, because to participate in language is to follow rules (syntactical, semantic, etc.). When I write the equation '68 + 57 = 125', I am following mathematical rules, in particular the rule of addition. The skeptic's argument can be restated in this way: rule-following presupposes that there are ways to check whether the rule is being followed correctly. There must be criteria relevant to determining what counts as 'following the rule correctly'; otherwise the notion of following a rule does not make sense (because if there are no criteria then the rule can be 'followed' in whatever way one wants to follow it, which of course would mean that one is not following the rule). As Wittgenstein says, "To think one is obeying a rule is not to obey a rule. Hence it is not possible to obey a rule 'privately'; otherwise thinking one was obeying the rule would be the same thing as obeying it" (*Philosophical Investigations*, §202). The skeptic, though, says that there are no criteria relevant to determining whether I have done an addition problem the right way, or whether I have understood a proposition the right way. I just go ahead and do the problem, automatically and blindly, following only my own sense of certainty. The same is true when, for example, I say that a given patch of color is green. I am not following any criteria; I am simply, as it were, doing what I feel like doing, while feeling sure, somehow, that I'm doing the right thing. Here again Wittgenstein says that "whatever is going to seem right to me is right. And that only means that

here we can't talk about 'right'" (§258)—i.e., that we can't talk about following a rule. There is no "fact of the matter" about wherein my rule-following consists. This means we can't talk about speaking a language, which means we can't talk about *understanding* a language, or about the language's having any meaning. Thus we arrive at the skeptic's conclusion via an alternative route. (The solution to the paradox, of course, is that it is not possible to follow a rule privately. The criterion for rule-following is communal agreement that the rule has been followed correctly.)

Let me return to the phenomenological aspect of the paradox. This is the most direct and intuitively disturbing way to approach it, because it assaults our most deeply held beliefs and intuitions about what the activities of consciousness consist in. To quote Kripke:

> This, then, is the skeptical paradox. When I respond in one way rather than another to such a problem as '68 + 57', I can have no justification for one response rather than another. ....there is no fact about me that distinguishes between my meaning a definite function by 'plus' (which determines my responses in new cases) and my meaning nothing at all.
>
> Sometimes when I have contemplated the situation, I have had something of an eerie feeling. Even now as I write, I feel confident that there is something in my mind—the meaning I attach to the 'plus' sign—that *instructs* me what I ought to do in all future cases. I do not *predict* what I *will* do....but instruct myself what I ought to do to conform to the meaning. ....But when I concentrate on what is now in my mind, what instructions can be found there? How can I be said to be acting on the basis of these instructions in the future? ....What can there be in my

> mind that I make use of when I act in the future? It seems that the entire idea of meaning vanishes into thin air.[44]

The point behind all this is that it's possible—indeed, necessary—that in the very same moment I have perfect understanding of what I'm doing (viz., adding) and yet I *don't*. My understanding is both fully conscious and *not* conscious, in that it cannot be 'pointed to' in my mind. I just—*act*, seemingly without justification, yet with absolute certainty that I'm justified.

Where I disagree with Kripke is in his argument about "quaddition". This is his main argument in support of the skeptical paradox, but it seems to me neither necessary nor convincing. The *quus* function is an artificial mathematical function that Kripke invents for the sake of argument. This is how he defines it:

$$x \textit{ quus } y = x + y, \text{ if } x, y < 57$$
$$= 5, \text{ otherwise}$$

In other words, if x and y are both less than 57, the '+' sign is to be interpreted as we normally interpret it, namely as denoting the additive function. But if x or y is greater than 57, then the '+' sign changes its meaning: it now means that the outcome of the operation is 5.

Kripke argues that there is no way for me to know whether I mean plus or quus when confronted with a mathematical equation in which the '+' sign occurs. This applies to both the past and the present: I cannot know what I meant in the past nor what I mean right now. Perhaps I have meant quaddition all along. The point here is not that memory is unreliable; this has nothing to do with the paradox. Even if I have perfect memory of my past intentions and actions,

[44] Ibid., pp. 21, 22.

I cannot be certain that I have always understood plus by '+'. Kripke asks, "What is the fact about my past usage that refutes the possibility that I meant quus rather than plus?"[45] Moreover, what is the fact about my *present* usage that refutes the possibility that I mean quus? There is none, he says. I may mean quus even without knowing it!

Now, I may just be obtuse (this is indeed a possibility), but I don't see what all the fuss is about. The 'quus' possibility is refuted by the fact that at no time when writing out the equation, for example, '13 + 25 = 38' do I think to myself "Because 13 and 25 are both less than 57, I have to interpret '+' as meaning plus". I'd have to *think* this in order for quus to be a possibility. Because I have never thought about quus, as I have thought about plus (many times), I have never meant quus. Kripke doesn't even consider this answer to his skeptical question, despite its unbelievable obviousness. This leads me to think I may be misinterpreting him. But I can't see how: nothing I've read in the text justifies a more charitable interpretation. So I suppose this was just a bizarre lapse in his thinking.

I also disagree with the argument that we cannot be said to be following a rule when doing, say, an addition problem privately, or when judging that a given patch of color is blue, because I think there *is* a criterion in these cases. Kripke writes that "the basic point [is] that I follow rules 'blindly', without any justification for the choice I make".[46] Also: "The entire point of the skeptical argument is that ultimately we reach a level where we act without any reason in terms of which we can justify our action. We act unhesitatingly but *blindly*."[47] This blindness is supposed to imply that private rule-following is impossible. And, in a sense, Kripke is right: we *do* act blindly, or 'automatically'. But this by no means entails that we lack justification for our action. The reason it seems to is that Wittgenstein and Kripke formulate the issue in terms of

[45] Ibid., p. 9.
[46] Ibid., p. 81, footnote 70.
[47] Ibid., p. 87.

choice: we are said to *choose* blindly. And a blind choice, of course, is an arbitrary and unjustifiable one. But the fact of the matter is that when using language (be it mathematical or any other kind) we do not choose how we act. Our action is *forced* on us. It just 'comes' to us that 2 + 2 = 4 and that a given spot of color is red and that a given sensation is called 'pain' and that the right grammatical form of a given sentence is so-and-so. The criterion for our rule-following is simply that we *cannot act any other way*—i.e., that we are *unable to choose* what seems right to us. Because we can't even conceive of an alternative, we're certain that we're right in our rule-following.

In other words, while Wittgenstein is right that a rule necessarily guides us, he is wrong to think that when we act 'privately' we are not being guided. We *are*, though not in the 'choice' we make; rather, in the range of possible choices that is laid out for us. And there *is* no range: when we see a plus sign, we have no choice in the matter of how to interpret it (unless, of course, we self-consciously stipulate that it will not mean addition—but in this case we know we are flouting the rule). This is why we can speak of 'right' here, why there is, in a sense, a fact of the matter. We know we are following a rule because we sense that whatever seems right to us will *not* necessarily be right. It has to be *forced* on us first. The feeling of rightness has to be involuntary.

Thought-experiments have been proposed to show the untenability of any kind of 'inner feeling' as a criterion. A common strategy is to say that, for all we know, we are "under the influence of some insane frenzy, or a bout of LSD",[48] and thus misinterpret our own consciousness. But there is something odd about this argument. I'll pass over the fact that we should be suspicious of any argument in support of a Wittgensteinian idea which Wittgenstein

[48] Ibid., p. 9.

himself would have considered ridiculous.[49] Instead, I'll point out that anyone who has actually been insane or been under the influence of LSD or marijuana or any other mind-altering drug will know that his consciousness during these episodes is radically different from his ordinary consciousness. It's so different that, practically speaking, it is *not* a possibility that when we experience the 'lucid', 'objective', 'rational', 'clear-headed' state of mind that is called ordinary we are actually experiencing some sort of insane frenzy. Hence this argument is not persuasive. It does remind me, though, that I should be careful in how I formulate my ideas. Instead of invoking only the feeling of 'involuntarily being guided', which, after all, can exist in some strange way even when one is under the influence of a drug, I should invoke also the 'lucidity' with which this feeling coexists in the ordinary, non-drug-stuporous consciousness.

In any case, we have to distinguish between following a rule and *correctly* following the rule we *think* we're following. I may have made a mistake in a calculation even though I feel sure I haven't, but I am nonetheless justified in believing that I was following a rule while doing the calculation, because I did not say to myself something like, "Okay, 93 ÷ 75? Ehh, what the hell, let's say 6." In that case I would not have been following a rule. But because the calculation 'guided' me, albeit incorrectly—and my consciousness was not of the drug-stuporous kind—I was following some sort of rule. (If I remember rightly from reading the *Philosophical Investigations*, Wittgenstein admits that being guided, in contexts of language and mathematics, is the necessary and sufficient condition for rule-following.) Still, it may be objected that we need a criterion for *correct* rule-following; Kripke argues that communal approval (of an individual's linguistic practice) can be the only such criterion. The individual himself cannot privately check whether he has followed a rule correctly (even though, as we have seen, he *can*

[49] He did not have much sympathy for these kinds of skeptical thought-experiments, involving 'possibilities' that we're insane or drugged-up or dreaming or aliens on another planet or what have you.

'check' whether his actions were rule-governed). –But why not? Indeed, that statement has very odd implications. Consider:

> [The following are] rough assertability conditions for such a sentence as "Jones means addition by 'plus'." *Jones* is entitled, subject to correction by others, provisionally to say, "I mean addition by 'plus'," whenever he has the feeling of confidence—"now I can go on!"—that he can give 'correct' responses in new cases; and *he* is entitled, again provisionally and subject to correction by others, to judge a new response to be 'correct' simply because it is the response he is inclined to give.[50]

In other words, if I say that 2 + 3 = 5, I have to patiently wait for you to decide whether that's right. My certainty is only provisional. Suppose you're busy doing something else; the longer you keep me waiting, the more unbearable will be my doubt that I've carried out the operation the right way. Finally you come over and look at the equation and say, "Yes, that's right", and I heave a sigh of relief—because, according to Kripke, I was not entitled to judge that I had given the right answer until you agreed with me. –And that's just weird.[51]

On the other hand, there *is* something compelling in the objection that one's own private certainty is not enough to establish that one has followed a rule correctly. The reason, of course, is that people have been known to be wrong from time to time. So we find ourselves torn between two intuitions: the intuition that certainty *is* a sufficient criterion for correctness in cases

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[50] Ibid., p. 90.

[51] It is also, ironically, not very Wittgensteinian. Wittgenstein would ask "*What would it be like* to doubt that 2 + 3 = 5?" Since a substantive doubt is inconceivable here, he would disagree with Kripke that one's feeling of confidence is provisional. Therefore, Kripke's whole interpretation of Wittgenstein must be flawed in some way.

like 2 + 3 = 5, and the intuition that certainty is *not* sufficient in other cases. Said differently: in some cases it is acceptable to say, "I just *know*!" in answer to the question "How do I know I'm right?", while in others it is not. The question naturally arises, then, "Where is the boundary between these two categories?" There does not seem to be a clear boundary, though, which should lead us to think that this whole formulation of the problem is wrong.

I'll try approaching it from a different angle. I have already noted my disagreement with the quus argument. This means that I *can* know that I don't mean the quus function. I mean the plus function. But what *is* this? The skeptic is right that there are no instructions in my head with which the plus function can be equated; there is, rather, simply an awareness that 2 + 3 = 5, and 7 + 8 = 15, etc. But this absence of instructions that can justify my belief that 2 + 3 = 5 does not mean there is no such thing as addition, nor that I have no understanding of it. If we reformulate the mathematical proposition we can get a clearer understanding of it: '2 + 3 = 5' is a restatement of ||+|||=|||||. It is, in a way, a tautology, in that it equates ||||| with |||||. The reason there are no instructions in my head is that the plus function is too 'primitive' to admit of being analysed into a list of instructions. The same is true of multiplication, division and subtraction. It may indeed take a while to find the solution of, e.g., 210 ÷ 39, but this does not mean that the division function *itself* is some kind of complicated 'composite', some list of instructions. My understanding of it is unanalysable because the function cannot really be reduced to anything.

So, strictly speaking, the criterion for the correctness of one's claim that 2 + 3 = 5 is not one's certainty; it is that '2 + 3 = 5' can be analysed into '||+|||=|||||', which is self-evident. It would not make sense to seek a criterion for the correctness of *that* proposition (i.e., a

criterion for the truth of the judgment that one is correctly following the rule of addition).[52] Therefore, private rule-following is possible.

To clarify all this: because I have rejected the quus argument, I can reject Kripke's rejection (on page 13) of the suggestion that the main skeptical question (the question that leads to the repudiation of private rule-following) can be reformulated as "How do I know that 68 + 57 is 125?" Since I have reformulated it this way, I can re-reformulate it as the question of what justifies my certainty. And the justification is that the proposition can be restated in a form that is even more self-evident than the form that relies on Arabic numerals (namely, the '||+|||' form). At this point we have to stop inquiring further—by asking, for example, why the new proposition is self-evident. It just is. (As Wittgenstein said (*PI*, §1), explanations must come to an end somewhere.)

But what about statements in which a sensation or a spot of color is named? What criterion do we have for their correctness? In the case of the private individual, there is none. To justify them, he can invoke only their self-evidence. Ultimately he'll have to stand trial before the tribunal of communal judgment. But surely it speaks in favor of the possibility of private rule-following that 99.9% of the time, the community will agree with him. (There may be some slight doubt with regard to borderline cases, in which, say, one person considers a spot to be red while another considers it pink, but in these cases the correctness of the rule-following is not in question. Indeed, it is not obvious that there *is* a 'correct answer' here. This fact may be of

[52] Admittedly, one could explain the proposition's truth by lining up both sides of the equation in a one-to-one correspondence (which, of course, is what we have already implicitly done by equating the two sides). But then there is no 'criterion' for the truth of the statement that they have a one-to-one correspondence. It's just self-evidently true. So at some point we have to stop looking for a criterion other than 'self-evidence'.

significance, but I don't think its significance bears on the question of whether rules can be followed privately.)[53]

These issues and related ones could be dissected for many pages, but I have already strayed too far from the subject of this paper. I think that, in the end, Kripke's book is incoherent, but I'll pass over its other problems[54] and get to the main point: the rejection of the truth conditional analysis of meaning is wrong. For one thing, we have seen it to be unnecessary: there *is* a fact about what I mean by a given utterance such as 2 + 3 = 5. For another, it defies common sense. If I say, "The house is on fire", I mean that the house is on fire. I.e., my meaning is the relevant truth conditions. Nevertheless, as I said above, I agree with a *version* of Kripke's skeptical paradox, a watered-down version. While I think that sentences have meanings (viz., the truth conditions of the propositions they express[55]), our understanding of them is an obscure phenomenon, conscious yet unconscious. Understanding can be neither a sensation in

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[53] For an alternative and, I think, more plausible interpretation of Wittgenstein's private language argument, see Norman Malcom's paper "Wittgenstein's *Philosophical Investigations*", in Harold Morick ed., *Wittgenstein and the Problem of Other Minds* (New York: McGraw Hill Book Company, 1967), pp. 45 – 81.

[54] There are many. For instance, Kripke cannot account for communal agreement in rule-following. If there is no fact about what addition is, why do we do addition problems in the same way? Consider (p. 97): "We cannot say that we all respond as we do to '68+57' *because* we all grasp the concept of addition in the same way, that we share common responses to particular addition problems *because* we share a common concept of addition. ....There is no objective fact—that we all mean addition by '+', or even that a given individual does—that explains our agreement in particular cases." Aside from being fairly preposterous, this position leaves it a mystery as to why we would agree.

[55] Maybe the reader will adopt the Austinian view and argue that performative utterances must be distinguished from constative ones. The 'truth conditions'-analysis of meaning, he'll say, is not appropriate for performative statements, only (perhaps) for constative ones. He'll say that the meaning of the former is the *role* they play in social interactions. The meaning of "I love you!", uttered in a moment of passion, is not the sentence's truth conditions, but its role, or its function (viz., to express an emotion). This view hearkens to Wittgenstein's theory that meaning is *use* (or "assertability conditions", or the statement's role in a language-game, or whatever). But I've always found these ideas confused. While Austin's distinction is useful, to say that a sentence's *meaning* is something like a "role" in a "language-game" makes no sense. The meaning of "I love you!" cannot be stated as "Expression of emotion!" Rather, the meaning is the truth conditions—namely that *I love you*. Thus, a statement's role is different from its meaning. –Still, one might object that the speaker's purpose is not to state the proposition which is expressed by the sentence 'in itself' (together with the context in which it is spoken—because context is relevant to a proposition's meaning. See the footnote in which I mention the "problem of egocentricity".), but rather to perform an act. "I now pronounce you man and wife", said at a wedding, can indeed be understood as stating a proposition with a given truth-value, but that is not its role in the language-game. –But I don't deny this. I am concerned not with the *speaker's purpose* but with the meanings of declarative sentences in abstraction from the language-game in which they are spoken; that is, the meanings of the sentences 'in themselves'. Since declarative sentences posit truth conditions by virtue of their form, their meanings must be directly related to these truth conditions.

consciousness—nor a *fact* in consciousness, because *where is* the fact?[56]—nor merely behavioral. To make the point in a catchy aphoristic style reminiscent of Wittgenstein: while we understand sentences, we don't understand our understanding. It is *sui generis*, a half-nonexistent—half-behavioral and half-conscious—state. Any person with an iota of introspective skill should see this. Moreover, I can appeal directly to "the master" himself: in a number of sections in the *Philosophical Investigations* he grapples with the question of what understanding could possibly be. His not finding an answer corroborates my idea.

As it happens, I think that this 'paradox' is merely a manifestation of a much broader paradox grounded in the nature of consciousness. I won't delve into it deeply, but I will say that its essence is the fact—articulated first by Fichte[57] (or maybe Kant), then Hegel,[58] then Kierkegaard,[59] then Marx,[60] then Sartre[61] and the existentialists—that human consciousness is a self-negation, a self-difference, a relation to itself. Human consciousness is self-consciousness, i.e., consciousness of consciousness, and is, moreover, always focused on an object (whether the object be itself or something else), which means it is always transcending itself, which means it is never just *itself*. It is never simply identical to itself; it is, rather, in continuous contradiction with itself. Thus, it is both a frenzied activity, a 'fullness', and an emptiness, a nothingness.[62] This paradoxical nature is the origin of the fact that consciousness *itself* (and not merely

[56] And yet, of course, it *is* a fact in consciousness. It must be, because by definition it is a conscious state.
[57] See his *Wissenschaftslehre*.
[58] See, for example, *The Phenomenology of Spirit*.
[59] See Section A in the first chapter of *The Sickness unto Death*.
[60] See *The Economic and Philosophical Manuscripts*, specifically "A Critique of the Hegelian Dialectic and Philosophy as a Whole".
[61] See *Being and Nothingness*.
[62] Its nature is at once infinite and yet 'self-limiting'. The Ancient Greeks, who defined being as a kind of self-limiting, would therefore have considered self-consciousness to be the being *par excellence*. Their term "*parousia*", which is usually misleadingly translated as "substance" but signifies rather a "self-enclosedness", a "standing presence", and which they understood as the essence of being, would apply to self-consciousness. And yet self-consciousness is also an emptiness. Hence the paradox. Cf. Martin Heidegger, *An Introduction to Metaphysics* (New Haven: Yale University Press, 1959), p. 61.

understanding, as I argued above) is not 'locatable', not denotable or 'able-to-be-pointed-to', but rather a mysterious non-present presence. A substanceless substance.

Now, abstract objects share this quality. Intuition involuntarily interprets them as 'substantive' in some way, though at the same time it denies them substance. Any concept is an example. The concept of '2': when contemplating it, one cannot help feeling as if there's *something there*, some 'abstract content' that does not quite let itself be grasped. Say the word to yourself several times and examine your consciousness as you do so. If you have a knack for introspection, you'll notice that you feel as if you can almost 'reach out and touch' the concept, as if you can point to it. "It's *right there*!" 'Dog', or 'dogness', has the same unsettling, elusive, half-concrete half-illusive feel. So does the proposition "The dog is running". If you contemplate that sentence, reflect on the 'eternal', 'objective' yet strangely ungraspable nature of its propositional content—you'll be nonplussed.

Since the platonic "third realm" is necessarily the home of these abstract objects, it is closely related to the paradox I am discussing. But before I elaborate on that, I should dispose of traditional arguments in support of the claim that there are no abstract objects.[63]

Carnap considered such questions as "Are there numbers?", "Are there relations?", and "Are there properties?" to be pseudo-questions.[64] I agree, though not with his reasons. He divided ontological questions into two categories: internal and external. By "internal" he meant *internal to a given linguistic framework*. An example of this kind of question would be "Is there a number x such that $x + 13 = 13$?" This is substantive and answerable, because it presupposes the linguistic framework of numbers and asks whether there is something within this framework that satisfies certain criteria. On the other hand, there are questions which effectively call into

[63] I say "traditional" because, as will be seen, I think the conclusion is true *in a sense*.
[64] See his article "Empiricism, Semantics and Ontology", in Putnam and Benacerraf, op. cit., pp. 233 – 248.

question entire linguistic frameworks, though they seem to be about the existence of entities. The three questions asked above are examples. They are not substantive, because while they are supposed to be questions of fact—"Are there *really* numbers?"—they in fact merely call for a decision, namely, the decision whether to adopt a given linguistic framework. So they are trivial: "Yes, there are numbers if you adopt that framework, because—you've adopted the framework of numbers! If you choose not to, then there are *not* numbers." In other words, all questions are necessarily internal to certain linguistic frameworks; but ontologists think they are asking *external* questions, and so their questions do not have the meanings they are thought to have. [65]

My disagreement with this account stems from my skepticism about the idea of linguistic frameworks. First of all, I don't think they're explanatorily necessary. We need not posit a specific "framework" for speaking about, say, properties, because in even the most primitive language—even the 'click' language of the !Kung Bushmen in Africa—talk about properties is unavoidable. Surely no separate "framework" need be introduced in order to speak about properties, because in nearly every sentence, some kind of property is spoken of. Moreover, what would count as 'inside' and 'outside' a given framework? How would one know when one had stepped outside the 'properties' framework, or stepped back inside it? What *is* a framework? Thirdly, the implication is odd that a decision can be made about whether to adopt a certain framework. One cannot just choose to reject numbers, in the sense of *not even recognizing that people talk about them*. If one understands what someone means by '2', then one has already 'decided' to adopt the numbers framework. But of course no decision is involved here; acceptance of numbers (in this not-necessarily-abstract-object sense) is natural and necessary. Fourthly, I think that certain ontological questions *are* substantive—or, at any rate, there is at least one such question: "Do physical objects exist?" That is, "Do the objects we perceive exist

[65] Cf. Thomas Hofweber, "A Puzzle about Ontology", pp. 24, 25.

independently of us, or are they merely 'in our minds'?" Carnap's theory is not nuanced enough to allow that some ontological questions are substantive while others are not. Lastly, the association of Carnap's theory with his conventionalism makes me suspicious of it, since I find conventionalism a very implausible doctrine. It may be that the two theories are logically separable, but—anyway, I'm suspicious.

My own argument is simply that it makes no sense to reject abstract objects on the basis of traditional nominalistic arguments. Such a rejection reminds me of Richard Rorty's asinine denial of sensations, and his argument that we think they exist only because "elimination [in language] of the referring use of 'sensation' would be in the highest degree *impractical*."[66] Behaviorism and nominalism: two extremely confused and tellingly similar doctrines. Penelope Maddy quotes with approval this "stunningly simple counter-argument" to the belief in universals, taken from Quine: "We want to say that Ted and Ed are white dogs. This is supposed to commit us to the universal 'whiteness'. But for 'Ted and Ed are white dogs' to be true, all that is required is that there be a white dog named 'Ted' and a white dog named 'Ed'; no 'whiteness' or even 'dogness' is necessary. [Therefore we need not invoke universals.]"[67] Maybe I'm confused, but it seems to me that Quine and Maddy have overlooked the fact that they just used the concepts 'whiteness' and 'dogness', namely by saying that Ted and Ed are white dogs. 'White' and 'dog' are concepts; one does not suddenly change their essence by adding '-ness' at the end. With or without the suffix, we're dealing with concepts, which means we're dealing with things that are neither physical nor mental. I have already explained why concepts cannot be mental entities; if the reader would ask why they cannot be physical, I would—not know how to respond. I might note that Frege considered the view that they are physical to be so obviously

[66] Richard Rorty, "Mind-Body Identity, Privacy, and Categories", in *Modern Materialism: Readings on Mind-Body Identity*, John O' Connor ed. (New York: Harcourt, Brace & World, Inc., 1969), p. 153.
[67] Maddy, op. cit., p. 13.

wrong that he didn't even mention it. Or I might note that the dog I see in front of me is not the same thing as the concept (or, if the reader is allergic to that term, the 'word') I apply to him, viz., 'dog'. This word can apply to many objects, many particular dogs; therefore it is a "universal", and an abstract object. A universal is nothing but a word, or a concept, that ranges over many entities;[68] and surely it will not be denied that there are such words. 'Red', 'dog', 'number', 'large', etc. To be horrified by the "prodigiously teeming Platonic Heaven"[69] to which this acceptance of universals apparently leads is a rather strange reaction, because it is effectively a horror at the existence of words. And where would philosophers be without words?! (Maybe in Diogenes's barrel, since they certainly couldn't earn a living.)

I'll consider shortly the problems that nominalism is supposed to resolve. For now, I just want to point out how senseless it is to deny abstract objects on the basis of arguments like the foregoing: in doing so, one is really denying words, because words are concepts[70] and concepts are abstract objects (because they can be neither mental nor physical).

So: to say there are words and to say there is a third realm are essentially the same thing. But what does this mean? It means that concepts and propositions—or, in general, the "senses" of sentences (to quote Frege)—are objective but not physical. (They cannot be subjective, as Frege argued.) Their objectivity is what makes communication possible. But what is this objectivity? This question has two answers: the platonic and the phenomenological. The platonic, however, is not really an answer, but a restating of the question. The platonist is content to define abstract objects negatively, as *not* physical and *not* mental. He cannot say what they are *positively*, because humans can have no conception of something that exists outside space and

[68] I'll address the question of uninstantiated universals later.
[69] Goodman, op. cit., in Putnam and Benacerraf, op. cit., p. 200.
[70] To be precise: words 'incorporate' concepts. In Saussurean terminology, a word is a union of the signified and the signifier, or the concept and the "sound-image". See Saussure's *Cours de linguistique générale.*

time. Therefore the platonist says that concepts exist in a third realm and leaves it at that, without telling us what that means. The phenomenological answer, on the other hand, is the truly explanatory one: the objectivity of propositions (and concepts) is in a position analogous to that of understanding. As understanding is phenomenologically both present and absent, so is the objective meaning of propositions. In order for them to *have* a meaning, of course, it must be accessible, in some way, in consciousness, because otherwise people could not communicate (they would not know the meanings of utterances), and language would have no purpose.[71] Nor does it make much sense to say that words have a meaning outside consciousness—outside of how they are interpreted by consciousness. Whatever meaning they have must somehow be in consciousness. Moreover, it must be in the consciousness of every person who competently uses the language, because, since objective meanings (rather than subjective ideas associated with them) are what make communication possible, anyone who communicates must have access to these meanings. Now, we have seen that a proposition's meaning is its truth conditions.[72] Hence, an awareness of the truth conditions is what is half-present when someone understands a proposition.[73] This awareness is *all that exists* of the ("abstract") truth conditions, i.e., the objective meaning, i.e., the abstract object. The meaning "in itself"—whatever that phrase means—does not exist, because whatever exists exists in spacetime. Therefore, the "third realm", and abstract objects, and concepts, and propositions, and words, are all myths, albeit necessary ones.

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[71] Kripke and Chomsky and others have demolished the behaviorist analysis of meaning in terms of "dispositions" and whatnot. Meaning must be accessible *in consciousness* for it to be meaning.

[72] The 'truth conditions' analysis in itself does not provide a satisfactory account of interrogative statements or imperatives. But I think it could be extended to do so. For truth conditions give a kind of 'picture' (in a sense similar to that in which the early Wittgenstein used it in his theory of meaning); and I think that a 'picture'-oriented theory of meaning could potentially do justice to imperatives and interrogatives. I also think it could elucidate the problems of synonymy ('How is synonymy possible? What does it mean?').

[73] Lest I be misunderstood: it isn't that a person only half-understands any given proposition; rather, his *complete* understanding is unanalyzable. It is neither perceptible (in the manner of sensations) nor spatially qualified. It is just mysteriously '*there*'. Thus, I say in this paper, somewhat misleadingly, that it "half-exists".

I am inclined to think that the phenomenological impetus behind platonism is the obscure nature of understanding (i.e., of linguistic and propositional meaning[74]). This obscurity is especially noticeable with regard to isolated concepts. As I noted above, when I say 'tree' slowly while concentrating on the mental state that accompanies the act, I am tempted to believe that the word has more abstract content than I can phenomenologically grasp. It has an objective conceptual content, of which my understanding (of the word) is but a shadow. Its *full* content lies somewhere else, somewhere outside of me, in some eternal Paradise of logical forms. It isn't hard to believe that Plato and Frege and other realists were led to posit a third realm partly by virtue of some unconscious mechanism relating to the peculiar phenomenology involved in understanding concepts and sentences.

Be that as it may, their hypothesis was not only psychologically natural but epistemologically necessary, in that it is a presupposition of the belief in words, which are themselves a necessary condition for highly evolved communication. Without the belief that 'tree', no matter how often it is used, is always the same word, language would have no consistency; it would be so variable as to be useless. It could not even be learned in the first place. Any given sound-image, such as 'tree', must develop a fixed significance in consciousness for it to be of use; this significance is what leads people to posit a thing called 'the word's meaning', which is nothing but the abstract object, or the concept, which the sound-image is supposed to designate. In other words, *everyone*, even the dullest person on the street, as well as nominalists, implicitly believes in a reification called 'abstract objects', because everyone

[74] Many philosophers think that linguistic meaning should be differentiated from propositional meaning. This is because of what Russell called "the problem of egocentricity". (See his paper "Mr. Strawson on Referring".) The sentence "It is raining now" has the same linguistic meaning no matter where it is uttered, but if I say it in St. Louis and then say it in New York, its propositional content seems to change (for it may be true in St. Louis and false in New York). While this argument seems powerful, there are others that undercut it. I cannot discuss them now, though; suffice it to say that a declarative sentence's linguistic meaning is not unrelated to truth conditions.

believes in words and words incorporate such objects. Strictly speaking, however, words do not exist, because (1) all existents are in spacetime, as words are not (though the sound-images are), and (2) no single 'significant sound-image' (such as this particular meaningful mark: 'tree') is ever used twice. Each meaningful sound-image is unique; no two are ever the same, even 'tree' and 'tree'. They look and sound the same, and we interpret them as having the same significance, but they cannot be called instantiations of a single word because the notion of an abstract object is impenetrably obscure.

What I have said about words applies also to propositions. Whenever we utter a proposition we are positing its objectivity, its truth, its abstractness. This is because language necessarily *refers* [or represents]: a proposition posits a reference (viz., its truth conditions), and since the reference is always 'fixed' (unchanging), it must be abstract. (After all, nothing concretely existing is ever *fixed*. Things change in every instant, whether through movement, through destruction, through birth, or whatnot.) This referential [or representational] character is also why we are psychologically incapable of interpreting concepts as mere 'names', or empty 'classes' devoid of conceptual content: in referring, language is saturated with an objective character.

So, the way we (necessarily) use language entails that there are abstract objects, but there are not, so our use of language is deluded. In other words, to believe that communication is possible we must 'half-consciously' believe in abstract objects—because otherwise, so it seems, all we have are ideas "private to me only. Another man's idea is, *ex vi termini*, another idea. We should then have, it might be, many millions of twos on our hands." If humans are to understand each other, a *universal sense* must inhere in a given word or sentence. When using words we automatically interpret this sense as being an abstract object, but in reality it is merely the fixed

significance attached to a given type of sound-image in the minds of people who speak the same language. Evidently the human mind is such that this sort of universal consistency in understanding is not only possible but necessary. Thus, there is only *one* concept '2' because every person's immediate intuition of that sound-image is qualitatively the same (both between people and between times in one person's life)—and, moreover, the 'meaningful sound-image'[75] has a referential character, as do all words (though not in as intuitively obvious a way as propositions do)—and therefore the sound-image is inevitably taken to denote a given abstract entity. Epistemologically speaking, though, we need not invoke abstract entities in order to account for communication[76]; it is enough that humans have consistently similar understandings of each 'type' of sound-image (such as the type 'tree').

In short, both nominalism and realism have elements of truth. Nominalists point out that if concepts do not exist in spacetime they do not really exist. Realists, on the other hand, realize that to deny the existence of concepts is a flagrant violation of common sense, since people use concepts all the time. So, they are right to emphasize (unknowingly) the elusive phenomenological abstractness/objectiveness of words and sentences—but they are wrong to turn it into a mind-independent thing. And yet their doing so is perfectly natural, since in everyday life we half-consciously believe[77] in abstract objects, due to the referential character (and ultimately the 'truth conditions' analysis) of language. Indeed, the reader will notice that, given my ideas, I cannot help contradicting myself at every turn: in using 'meaningful sound-images' (like the ones on this page) I cannot help 'assuming' that each is an instantiation of a

[75] I'll keep calling such sound-images 'words', since my intention is not to reform language. But the reader should keep in mind the ways in which I have qualified the use of 'word', as well as 'concept' and so on.
[76] As I said above, however, we do have to invoke a half-conscious belief in abstract entities in order to account for people's unreflective *understanding* of language.
[77] This 'half-conscious belief', while paradoxical-sounding, is analogous to our half-conscious understanding of any word or sentence.

word, which I have argued is an illusion. But insofar as one uses language, one falls victim to this illusion.

Therefore, such questions as "Are there properties?" are misguided. They have two answers: the trivially true and the trivially false. That is, there are properties insofar as we talk about them and can intuitively see that their existence is self-evident. But if we then ask, "Do they *really* exist, though? Are there *abstract objects*?", it is unclear what is meant. Since the only conception we have of real, mind-independent existence is spatiotemporal, yet abstract objects are by definition not in spacetime, the answer to this second question must be that their existence is trivially false. Or else that the question is absurd and empty. Platonists, admittedly, think that abstract objects are explanatorily necessary, but we have seen that this is wrong. It is enough that our linguistic understanding is so similar, or 'fixed', across time and between people as to entail that we half-consciously posit abstract objects.

One of the advantages of my theory is that it avoids the 'causal inertness' problem of abstract objects—by getting rid of them. (At the same time, it explains their philosophical appeal.) So Benacerraf's argument has no relevance anymore.

Incidentally, it is interesting to speculate on the broader significance of my suggestions. While I cannot go into details here, I might point out that humans' self-understanding is afflicted by the same delusions that characterize their understanding of language. To invoke Fichte, Hegel, Kierkegaard, Marx, Sartre and other phenomenologists again: not only is it the case that the human mode of consciousness is self-consciousness; the self *itself* is self-consciousness. It is just immediate consciousness of consciousness; there is no other 'substance' to it, though we intuitively think there is. Wittgenstein thought that an experience of the self is not included in human experience—he thought that the self was the "boundary" of experience (or something

along those lines)—but this is just another example of his sloppy thinking. In truth, the self is *necessarily* included in our experience, because it is what organizes experience into a cohesive whole 'belonging' to one person. Without the illusion of a substantival self, human experience would have a vastly different form than it has. Complex societies would be impossible, complex communication would be impossible, and we would exist at the level of the higher animals. In other words, our mode of experience and knowledge would not be possible without the continuous 'background presence' of a substantival self that organizes and assimilates all the impressions (or rather: whose existence is a *necessary condition* for the organization and assimilation (into a self-centered unity) of impressions). Communities could not take the form they do (as collections of more-or-less distinguishable individuals), which means that *homo sapiens* could not have persevered (because its specifically human communities were what allowed it to triumph over other animals). But this substantival self—this "spiritual substance"—is a myth. There *is* a self, in a way, but it is not what we think it is. It is substanceless; it is consciousness reflected back on itself.

In short, platonism and many other philosophical mistakes are in fact virtually inevitable by the nature of the natural selective tricks through which man triumphed over animals. –Nature *tricked* man into triumphing. That's what it comes down to.

Conclusion

Let's apply our ideas to some of the problems outlined in the first section above. We have seen that the existence of concepts and propositions is both trivially true and trivially false (or, if not false, then the question is empty). This means that the existence of *universals* is true and

false as well, because universals are a certain kind of concept. –Actually, it is not entirely clear which concepts are to be called 'universals'. Bertrand Russell thought that "substantives, adjectives, prepositions and verbs stand for universals".[78] I don't know whether most philosophers (realists, anyway) agree with this statement, but it seems sensible to me. However, we saw above that it isn't clear whether numbers should be called universals or particulars. Arguments can be conceived for and against both sides. Frankly, I think that this debate is rather sterile (like most debates in contemporary philosophy). I have a similarly low opinion of the debate about "uninstantiated universals": "Is a universal necessarily instantiated by at least one particular, or can uninstantiated universals exist?" I suppose, though, that for the sake of thoroughness I should address these subjects.

First, numbers. In his paper "On What There Is", Quine says that the word 'existence' does not have spatiotemporal connotations.[79] The cube root of 27 exists, though it is not in spacetime. I will not deny this. What I'll deny is that it makes sense not to distinguish between this kind of existence and spatiotemporal existence. As we saw above, it is trivially true that numbers exist, since we use them all the time. But the statement that the cube root of 27 *abstractly* exists has no definite meaning. The number 3 is just an 'internalization' of ||| , so to speak. –Of course, stated like that, the proposition is refuted by Frege's argument. This is (one of the reasons) why the myth of abstract objects is necessary. For communication to be possible we have to posit common objects, fixed abstract objects that we can talk about. Still, when someone talks about 3 he does not have an abstract object in mind; he is merely 'half-consciously' aware—or has a 'half-understanding' (see my version of Kripke's paradox[80])—of some

[78] Russell, *The Problems of Philosophy* (New York: Oxford University Press, 1952), p. 93.
[79] Putnam and Benacerraf, op. cit., p. 184.
[80] It entails that *all* understanding is a "half-understanding", a half-existence, like consciousness itself. (This makes sense, because consciousness, while temporally qualified, is not spatially qualified.)

inscrutable, unconceptualizable internalization of │ │ │. This is all that anyone ever 'has in mind' when talking about 3, or any other number. So the myth of the third realm is necessary on one level but unnecessary on another: to talk about numbers we need it, but to *explain* our talk about numbers, we do not.[81]

Thus we see that both mathematical realism and nominalism are false. Nor do I have much sympathy with intuitionism, conventionalism, or Wittgenstein's philosophy of mathematics (such as it is). I don't know much about fictionalism, but I doubt it's right. ("Numbers are useful fictions"? How could that be true? What does it even mean?) I do have other positive ideas, but it would take me too far afield to develop them.

As for the question of whether numbers are particulars or universals, it is, to a certain extent, moot. It presupposes, of course, that numbers are abstract objects, which we have seen is not true (because, in the sense that is meant, there *are* no "numbers"). Nevertheless, insofar as we are generally forced to believe in abstract numbers, the question can be asked, as it can be asked of properties and relations. Unfortunately it cannot be answered. Our intuition vacillates: it is first drawn to "particulars!", then to "universals!", and then back again. Clearly this is because, for example—in support of the "particulars!" hypothesis—│ │ │ is a definite, exact (number of) thing(s) (unlike, say, red, which has many different shades, and is considered a universal); while, in support of the "universals!" hypothesis, the number 3 can be manifested an indefinite number of times in collections of objects. Since there is no decisive argument for either position, and the debate itself seems merely academic (I cannot think of any explanatory purpose it serves), I propose that the question be ignored.

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[81] (I know these thoughts are difficult; I'm trying hard to express them clearly. But it may be that what Wittgenstein said with regard to his *Tractatus* applies also to this paper: "This book will perhaps only be understood by those who have themselves already thought the thoughts which are expressed in it—or similar thoughts.")

This is not, by the way, a cowardly side-stepping of the issue. It is a tacit recognition of the fact that the universal/particular dichotomy is not a fundamental truth grounded in the nature of reality itself—a truth comparable to, say, the law of cause and effect. Rather, it is a philosophical fabrication, an artificial construction devised to facilitate clarity in ontological discussions. There is no *a priori* reason to think that every concept is necessarily *either* a particular *or* a universal, such that in different contexts it cannot be used sometimes as a particular and sometimes as a universal. When the dichotomy is more of a hindrance than a help, it should be ignored.

The question of uninstantiated universals is another pointless one. It strikes me as a terminological dispute. For example, in Armstrong's discussion of it[82] (as in most of his other discussions in the book cited), he does not give the reader a reason to care. There is no broad perspective on its implications, no sense that the question has *meaning*. This is, indeed, the fatal flaw in most contemporary philosophical literature. Philosophers get so bogged down in casuistries that they can't see the broader picture: their assumptions must be false if they result (as they invariably do) in apparently unresolvable deadlock between opposing positions. In this case, the false assumption is realism. Because abstract objects do not exist, the category of 'universals' is merely a heuristic device, an aid to our understanding of how we use language. It is therefore a non-question whether there are uninstantiated universals.

A more interesting question is how to characterize concrete particulars. We looked at the substance-attribute view, the bundle theory, Resemblance Nominalism and trope theory, but all were seen to have flaws. When thinking about them in detail it is easy to get lost in minutiae and lose sight of the larger problem, so we would do well to remember it: "What distinguishes the classes of tokens that mark off a type from the classes that do not?" When the question is

[82] Armstrong, op. cit., pp. 75 – 82.

formulated succinctly like this, the answer is obvious: “properties and relations”. Nominalists contested this answer because of the difficulties that realism encounters. I have argued, however, that properties and relations are not abstract objects, even when formulated in ‘universal’ terms (such as ‘red’, as opposed to *this particular trope* of red). We naturally *interpret* them as abstract objects—e.g., there is a *concept* ‘red’, a *concept* ‘brown’, a *concept* ‘small’—and in order to talk about them we necessarily ‘act’ as if they are abstract objects, but to *explain* our talk about them we need not invoke such objects. Psychology (whether phenomenological or empirical) and neurology and similar disciplines can provide adequate explanations of our behavior in these contexts; we need not bring in ontology. We should *explain away* the controversial ontological presuppositions of the ways we talk, as I have tried to do in this paper. We should not argue about ontology *on its own level*, because, by and large, it is composed of pseudo-questions, which arise from deep confusions in how we interpret the world and use language.

Thus, there are tropes of properties and relations, but there are also general terms that range over a wide variety of tropes. We use these terms as concepts, but to explain our use we need only invoke ‘internalizations’ of rules for applying certain sound-images to concrete particulars—rules learned primarily in childhood. (And, as I argued above, contrary to Kripke’s Wittgenstein, we can follow these rules privately.) Regarding the question of whether we need to invoke substances as bearers of properties, I would suggest that we follow scientific realism (as being the view that best explains all the evidence and does the least damage to common sense): let’s rely on the explanations that science gives us of the nature of matter and of differentiation between natural classes.

In this paper I have not discussed the philosophy of modality, nor the ontology of time, nor various other issues—nor (obviously) have I given a completely satisfactory account of even the problems outlined in the first section—but, as an excuse, I would plead exhaustion. I think that my suggestions could be extended to these other topics as well, but that task will have to be left for another time.