

Realism *bei* Frege: Reply to Burge*
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ABSTRACT: Frege is celebrated as an arch-Platonist and an arch-realist. He is renowned for claiming that truths of arithmetic are eternally true and independent of us, our judgments and our thought; that there is a 'third realm' containing nonphysical objects that are not ideas. Until recently, there were few attempts to explicate these renowned claims, for most philosophers thought the clarity of Frege's prose rendered explication unnecessary. But the last ten years have seen the publication of several revisionist interpretations of Frege's writings—interpretations on which these claims receive a very different reading. In 'Frege on Knowing the Third Realm', Tyler Burge attempts to undermine this trend. Burge argues that Frege is the very Platonist most have thought him—that revisionist interpretations of Frege's Platonism, mine among them, run afoul of the words on Frege's pages. This paper is a response to Burge's criticisms. I argue that my interpretation is more faithful than Burge's to Frege's texts.

Gottlob Frege has long been regarded as one of the least compromising realists in the recent history of philosophy. This assessment of Frege is supported by his renowned claims that the truths of arithmetic are eternally true; that the truths of arithmetic are independent of us and our judgments and thoughts; that not every object has a place; that there is a 'third realm' containing objects which are neither physical objects nor ideas. There have been relatively few attempts to explicate these renowned claims, largely because most philosophers have agreed that the clarity of Frege's prose renders explication unnecessary. But the last ten years have seen the publication of several revisionist interpretations, including interpretations on which even Frege's renowned claims express unfamiliar views. In a recent article, 'Frege on Knowing the Third Realm', Tyler Burge has responded to this revisionist trend. Burge argues that Frege is indeed the Platonist and realist that most have thought him and he argues that several revisionist interpretations, mine among them, go afoul of the words on Frege's pages.¹

On Burge's view, the meaning of Frege's renowned claims is obvious and does not require interpretation. Consequently, Burge devotes a good portion of his paper to what he regards as simple reports of Frege's views along with observations that revisionist interpreters get them wrong. Thus most of Burge's descriptions of Frege's Platonism are supported neither with explanations of Frege's views nor with textual arguments for the accuracy of Burge's interpretation but, rather, with long lists of citations. Burge's point, which he thinks should be obvious to any reader of Frege's writings, is that Frege believes in a 'third realm' consisting of objective, but non-spatio-temporal entities, which are not in any way dependent on human conceptualization or human language. This realm includes, according to Burge, "some objects, and all functions" (1992, p. 637) or, to be more specific, it includes "extensions -- including numbers -- functions -- including concepts --and

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¹ The interpretations to which Burge responds explicitly are those in Hans Sluga (1980) and Thomas Ricketts (1986) as well as my own (1990).

thought contents" (1992, p. 636). While Burge thinks that this much is evident, however, he does not think that these claims alone constitute a Platonist view. He writes,

Many of these things might be maintained by someone who was not a Platonist. One might make the remarks about imperceptibility, non-spatiality, atemporality, and causal inertness, if one glossed them as part of a practical recommendation or stipulation for a theoretical framework, having no cognitive import -- or as otherwise not being theoretical claims or claims of reason. ... Or one might have some other basis for qualifying these remarks, reading them as "non-metaphysical" or as lacking their apparent ontological import. ...Platonism has no monopoly on claims to lawlike or inter-subjective objectivity about non-spatial, atemporal entities. (1992, p. 637)

Frege's renowned statements about non-spatio-temporal objects constitute an expression of Platonism only if they are meant to play some theoretical role in the explanation of some phenomenon. Burge's burden -- and here he admits he is engaging in a substantial interpretive effort -- is to argue that Frege's renowned claims *are* meant to play such a role and that the phenomenon they are meant to explain is the objectivity of science.

One of the interpretations to which Burge objects is the one I set out in my (1990). And, given the above, it is not difficult to see why. I have argued that, while what is objective is, on Frege's view, independent of what actually has been (or will be) expressed in language, it is not independent of what *can* be expressed in language. Although concepts, for Frege, are not created, but discovered, the discovery of a concept is not anything like the discovery of a law of nature -- since the Fregean notion of concept bears no interesting relation to anything like that of a natural kind. Concepts are discovered by the formulation of precise distinctions. Moreover, these formulations of precise distinctions also suffice to give us (at least some) thoughts. Finally, and perhaps most important, none of Frege's views about concepts and functions can be part of a theory. Frege himself states that such predicates as 'concept' and 'function' are defective and he says, of his sentences in which such terms appear, that they are not literally true.² The purpose of these sentences in Frege's writings is meant to be elucidatory.³

For Frege, on my interpretation, no theory can include a statement that functions or concepts are non-spatio-temporal objective entities. And, consequently, Frege would have denied that it was possible even to formulate the sort of metaphysical theory that, on Burge's view, constitutes Frege's Platonism. Further, such terms as 'objective' and 'subjective' are also precluded from playing a role in a theory. Thus Frege would not have been attempting, as Burge claims, to give a theoretical explanation for the objectivity of scientific practice.

Now, given what I have said so far, the choice between Burge's view and mine may seem easy. Burge takes Frege at his word. I claim that Frege cannot always be read literally. It looks as if it is Burge who takes fidelity to the words on the page more to heart. But it is not that simple. Frege himself says, "By a kind of necessity of language, my expressions, taken literally, sometimes miss my thought" (1892 p. 204; see also 1979, p. 250 (1983 p. 269)). Thus Burge cannot be taking *all* Frege's remarks literally. He must, at least, be disregarding the above statement. Burge might respond that, if he is disregarding some of Frege's statements, he is surely disregarding fewer than I am. But significance cannot be measured by counting statements. I will argue that my

² See, e.g., 1979, pp. 177-178, 239 (1983 pp. 192-193, 257-258) 1980a, p. 141 (1976 p. 224). For a more complete discussion of Frege's view about sentences in which such predicates as "concept" or "function" appear, see my 1990 pp. 246-260.

³ For a discussion of elucidatory statements and the significance of the difference between elucidation and theory, see my 1990, Chapter 6 and 1997b.

interpretation is more faithful to the words on Frege's pages than Burge's apparently flat, unvarnished reports are. I will also argue that Burge's substantive interpretive work is no more convincing than his reportage.

1.

Let us begin with the simple issue of the words on Frege's pages. I have said that, on Frege's view, "the physical world is not articulated -- that we impose structure on it" (1990, p. 184). Burge objects, "The language of imposition is not present or implied in Frege" (1992, p. 640). Who is right?

It is true, as far as I know, that no words that can reasonably be translated by 'impose' or its cognates appear Frege's writings. But whether the language of imposition is implied in Frege's writings is another matter. I use the term 'impose' to draw attention to a fundamental difference between Frege and contemporary realists on how we can be wrong about the world. This difference, obscured by Burge, is present in one of the very passages he cites in support of his assertion that the language of imposition is not implied in Frege's writings.⁴ Frege writes,

The metaphors that underlie the expressions we use when we speak of grasping a thought, of conceiving, laying hold of, seizing, understanding, of *capere*, *percipere*, *comprehendere*, *intelligere*, put the matter in essentially the right perspective. What is grasped, taken hold of, is already there and does not come into existence as a result of these activities. Likewise what we see into or single out from amongst other things [*was man aus einem Gemenge herausliest*] is already there and does not come into existence as a result of these activities. (1979, p. 137 (1983, p. 149))⁵

One of the striking features of this passage is the emphasis on conceptualization. This is even more apparent if we look at Frege's actual words, rather than above translation (from Frege's *Posthumous Writings*⁶). The English phrase, 'single out from amongst other things', suggests that there is no question which are the things from which the choice is made. Suppose, for instance, I say I am going to single out something from amongst the things in a room. The listener will not be surprised if I single out a chair or a table. But if I single out, say, the northernmost half of an ornamental carving on a chair, my original claim may seem somewhat dishonest.⁷ There is an assumption of an order here -- that the room is already divided up into objects (most likely one will assume the objects are those things which appear undivided and isolated). But, in fact, Frege talks of reading something out of a *Gemenge* -- a mixture or jumble. No assumption of order is implied. A fragment of a carving is no less appropriate to choose than a table or chair.

Now let us consider the ways in which, on Frege's view, we can go wrong in our attempts to talk about the world. First, our concept-expressions can be meaningless. This is not to say that the

⁴ Burge cites this passage at least five times, once each on pages 636, 641 and 643 and twice on page 639.

⁵ The entire text of the last two sentences is: Das Gefasste, Begriffene ist schon da, und man bemächtigt sich nur seiner. Ebenso ist das, wohinein man schaut, oder das, was man aus einem Gemenge herausliest, schon da und entsteht nicht erst durch diese Tätigkeiten.

⁶ This is the standard English translation of Frege's unpublished writings.

⁷ To see the force of this, suppose you and I have decided to pass some time by playing a guessing game and suppose that, in order to make our game more exciting, we decided to play it for money. I begin by selecting an object in the room and your task is to guess what I have selected. You use up your allotted questions but fail to guess the object I have chosen -- the northern-most half of an ornamental carving. It does not seem unreasonable for you to accuse me of cheating.

Of course, there also might be circumstances in which selecting this fragment of an ornamental carving seems entirely reasonable. Suppose the room has been uncovered in an archaeological dig and suppose that the carving on the table is believed to be an inscription, the northernmost half of which may be a grammatical prefix. But consideration of this sort of context is prohibited if we assume that what is there is there independent of our interests.

concept-expression does not stand for a universal, a natural property, or an instantiated property. It is, rather, to say that the concept-expression is not defined or understood in such a way that it marks off sharp bounds: that is, our use of language is not sufficiently precise. Second, one of the descriptions used as an object-name can be true, either of no object or of more than one. That is, one of our object-names can be meaningless. Finally, a sentence that we take to express a truth can, in fact, express a falsehood.

It is important to note what is missing from this list of ways in which we can go wrong. Nothing in Frege's writings suggests that we can go wrong by failing to carve the world (or, reality) at the joints. Frege does not recognize universals or natural properties, but only concepts. And he makes no metaphysical distinctions between concepts. A typical statement is,

But if we ask, under what conditions a concept is admissible in science The only requirement to be made of a concept is that it should have sharp boundaries; (1979, p. 179 (1983 pp. 193-194))⁸

Thus, presuming *grueness* can be property defined, the concept of *grueness* is perfectly admissible for scientific use.⁹

To see the significance of this, let us return to the metaphor of carving the world at the joints. The image suggests that discovering a concept is much like finding a joint of an animal. The location of a turkey's joint, for instance, depends not at all on the person carving the turkey or what kind of knife she uses. A carver with a sharp knife may be able to cut through the bone, but

⁸ See also 1891b pp. 159-160; 1884, Sections 74, 94. Moreover, he argues, in *Foundations* that it is a mistake to think that concepts need be acquired by abstraction (1884, section 49), in part because such a requirement would make it impossible to acquire concepts under which no objects fall.

Burge might object that the issue is not whether or not a concept is admissible in science but, rather, whether or not a concept *exists*. But it is difficult to find such language in Frege's writings. This is especially interesting in light of the emphasis Burge places on the naturalness of his reading of Frege. Burge would have us believe that his reading comes directly from Frege's texts. Yet Frege virtually never explicitly discusses the existence (as opposed to the admissibility for purposes of logic or science) of concepts or functions. The one exception of which I am aware, is the following remark from an 1882 letter to Marty, where Frege appears to contradict Burge. Frege writes,

Now I do not believe that concept formation can precede judgement because this would presuppose the independent existence of concepts, but I think of a concept as having arisen by decomposition from a judgeable content. [*weil das ein selbständiges Bestehen des Begriffes voraussetze, sondern ich denke den Begriff entstanden durch Zerfallen eines beurteilbaren Inhaltes.*] (1980a, p. 101 (1976, p. 164).

Given Burge's emphasis on existence, this passage requires explanation. But precisely because Frege so rarely writes about existence, it seems wrong to make too much of this passage. The available evidence for Frege's views about concepts consists of the many passages concerning the admissibility either of concepts or of concept-words for science or logic.

Frege writes, "a concept that is not sharply defined is *wrongly termed a concept*". (1962 vol. ii section 56) and "In other words, what we have just called a concept would not be a genuine concept at all, since it would lack sharp boundaries" (1962 vol. section 64). He says "It must be determinate for every object whether it falls under a concept or not; a concept-word which does not meet this requirement on its meaning is meaningless." (1979 p. 122 (1983 p. 133)) And he says that piecemeal definition is inadmissible because it is possible to form signs that look like concept-signs "although they cannot be admitted as such because the concept designated would not have sharp boundaries and so could not be recognized as a concept." (1979 p. 241 (1983 p. 260)).

⁹ In contrast David Lewis (1983) distinguishes properties from universals (which pick out natural properties). He says, Any class of things, be it ever so gerrymandered and miscellaneous and indescribable in thought and language and be it ever so superfluous in characterising the world, is nevertheless a property. ... Properties carve reality at the joints -- and everywhere else as well. (1983, p. 346).

He holds, moreover, that among the nonnatural properties are properties that can be expressed in language but do not carve reality at the joints. For example he says that a universal of *grueness* would be anathema (1983, p. 149). Thus *grueness* can only be a nonnatural property, a property that does not carve reality at the joints.

this does not show that there was a joint in that location. That cut would create something that wasn't there before. Universals or natural kinds are supposed to be independent of us and our interests in much the way joints are. Someone's interests may lead her to delimit a set of objects through a disjunctive description. This description may not mark off either a universal or a natural property. Description can carve the world at a non-joint. It can cut right across the bone.

In contrast, Frege says in our original passage about grasping a thought that *whatever* we read out of a mixture is *really there*. The turkey analogy is not apt because there is no distinction between joints and non-joints. Think, instead, of cutting a cake. The line dividing the piece that is cut off from the rest of the cake was always there (along with other lines along which the cake was not cut). Of course, facts about the cake limit the lines along which it can be cut -- it cannot be cut along lines that do not pass through it. But nothing about the cake determines the particular line along which it was cut. This is why I chose to use of the term 'impose' in describing Frege's view. If every precise concept-expression delimits a joint, then, in a sense, the world no more has joints than a cake does. Moreover, insofar as there is a notion of existence for concepts, it is constituted by nothing more nor less than a precise distinction between what does and what does not fall under the concept. For the discovery of a concept, precise expression (and, in some cases, demonstration of this precision) suffices.

Furthermore, the concept-expressions we use play a role in determining which objects we discover. We cannot, for instance, discover that there are infinitely many primes without formulating the concept 'prime number'. In my discussion of this I wrote, "discovering what is 'there' in the realm of the abstract amounts to discovering what meets the descriptions that interest us" (1990, p. 203). This statement, Burge claims, is misleading.¹⁰ He says "When our interests and descriptions happen to accord with mathematical truth, we do, of course, discover things that 'meet' those interests and descriptions" (1992, p. 641). It seems that, on Burge's view, according with truth is a criterion of legitimacy for our interests and descriptions (at least for purposes of mathematical discovery).

But it is not entirely clear what it is for our interests and descriptions to accord with mathematical truth.¹¹ What is it to say that 'prime number' is a description that accords with mathematical truth? If it means that the description 'prime number' picks out a real concept or a universal (as opposed to an 'unnatural' property) then, as I have argued above, Frege would disagree with this criterion of legitimacy. Frege recognizes no such distinction. If it means that the description 'prime number' is true of at least one object then, again, Frege would disagree with the criterion of legitimacy. Frege says that his demand that it be determined, for each object, whether

¹⁰ Burge also accuses me of having cited no texts to support it. But I did not mean to be reporting statements Frege made. I meant, rather, to be offering an interpretation, in non-Fregean language, of some of Frege's statements that I did not regard as absolutely clear. Frege says, for instance,

The mathematician cannot create things at will, any more than the geographer can; he too can only discover what is there and give it a name. (1884, section 96)

The view that the mathematician cannot create things at will does not have, as a consequence, that the mathematician's (or geographer's) discoveries are independent of conceptualization. Indeed, the geographer is a good example of someone who cannot make discoveries independent of a map. The geographer discovers, not that there is a mountain, but that there is a mountain in a particular location. While the mathematician's discovery does not require a literal map, her discovery requires conceptualization. The mathematician cannot discover 'some entity', but she can, for instance, discover that a particular sequence occurs in the decimal expansion of pi.

¹¹ I am also puzzled by Burge's saying that, in some circumstances we discover things that 'meet' interests *and* descriptions. I wrote that we can discover objects that "meet the descriptions that interest us", not that we can discover objects that meet our descriptions and interests. Moreover, I think it was fairly clear that, by 'meet', I meant 'satisfy'. We are interested, for instance, in which numbers satisfy the description 'prime number'.

or not it falls under the concept "is completely satisfied by concepts which, like 'not identical with itself' contain a contradiction" (1884, section 74). Indeed, Frege's logical proofs of the truths of arithmetic (which certainly involve discoveries) are based on the use of this empty concept.¹²

Burge's worry seems to concern the apparent license of arbitrariness. If we can discover something that is really there merely by precisely formulating an arbitrary description, it may seem as if what is really there depends on us. But the fact is that this license comes directly from Frege. Recall that he says that whatever we read out of a jumble *is* really there. This may seem to be a mistake on Frege's part. After all, it does not seem to fit with some of his other remarks. Frege himself makes fun of the suggestion that a precise definition of the number one is sufficient to show that there is such a thing (1979, pp. 69-70 (1983 pp. 77-78)). And he seems to believe that, even if the expression 'that lime-tree' isn't vague, there may be no lime tree. He writes,

if I only think I see without really seeing, if on that account the designation 'that lime-tree' is empty, then I have wandered into the realm of fiction without knowing it or meaning to. (1918a p. 68)

But the objection, formulated in this way, runs afoul of the distinction between objects and concepts. For Frege, the discovery of a mathematical object does indeed require more than a precise description -- it requires existence and uniqueness proofs. Presumably, the discovery of a physical object requires perceptual evidence of its existence. In either case some sort of demonstration of existence is involved. But the discovery of a concept, as I've argued above, requires no such thing. Expression of precise boundaries *does* suffice for the discovery of concepts.

Of course, these remarks about concepts may not seem to be of central importance. Frege's celebrated realism has more to do with his remarks about numbers and thoughts than his remarks about concepts and concept-expressions. But notice that the existence of at least some thoughts is also demonstrated by precise expression. Consider the sentence 'All whales are mammals'. Supposing that the concepts 'whale' and 'mammal' have been precisely defined, 'All whales are mammals' expresses a thought. And the formulation of these definitions is *all* that is required for grasping that thought. Thus, precise expression suffices for the grasping of (or discovery of) at least some thoughts -- those that can be expressed by sentences with no proper names. Furthermore, if one accepts Basic Law V -- the law that, on Frege's view is required if numbers are to be logical objects -- the formulation of a precise concept-expression also suffices for the discovery of its extension.¹³

The above argument, of course, is not Frege's. It is rather the product of an attempt on my part to draw consequences from Frege's views about concepts and concept-expressions. Does Frege say anything like this? According to Burge, he does not. Burge writes that, had Frege maintained that extensions, functions, or thought contents were dependent on human conceptualization or human language, judgment, or inference (*actual or possible*), he would

¹² Nor do I see how Frege could view discovery as requiring that our interests accord with the truth. It is probably true that we can only make mathematical discoveries if we are interested in mathematical truth (as opposed, for example, to manipulating attractive mathematical symbols). But it is odd to regard an interest in truth, in this sense, as a requirement on discovery. For such a requirement is both entirely trivial and insufficient. It isn't enough to be interested in mathematical truth; one has to be interested in some more specific issue.

¹³ Of course, Basic Law V is responsible for the inconsistency of Frege's logic. But most of Frege's renowned remarks about the non-spatio-temporal objectivity of numbers date from writings that anteceded the discovery of the inconsistency. When these remarks were written, it was consistent with Frege's views that numbers could be discovered via precise expression alone.

have said so, and thereby qualified the numerous remarks that have traditionally invited the Platonic interpretation of his work. (1992, p. 638) (emphasis added)

And Burge continues, "He never does say so". But this is not exactly true. In 'Negation', one of the companion papers to 'Thoughts', Frege writes,

The being of a thought may also be taken to lie in the possibility of different thinkers' grasping the thought as one and the same thought. [*Man kann unter dem Sein eines Gedankens auch verstehen, dass der Gedanke als derselbe von verschiedenen Denkenden gefasst werden können.*] In that case the fact that a thought had no being would consist in several thinkers' each associating with the sentence a sense of his own; this sense would in that case be a content of his particular consciousness so that there would be no *common* sense that could be grasped by several people. (1918b, p. 146).

In this passage Frege certainly seems to be saying that the existence (being) of a thought is dependent on something linguistic or communal.

It isn't that the thought's existence depends on any person's grasping it or expressing it but, rather, that it depends on the *possibility* of the thought's being expressed in language or communicated. Similarly, on Frege's view, the nature of thoughts is connected both to something linguistic and to something communal.

To see this, consider an example. Supposing the 'whale' and 'mammal' have been precisely defined, what is the nature of the thought expressed by 'All whales are mammals'? Surely the features that distinguish this thought from other thoughts -- its subject matter and exactly what is stated when it is asserted -- are part of the nature of the thought. And, just as surely, these have very little to do with language or conceivability: one cannot infer anything about language from the fact that all whales are mammals. But this does not, as Burge appears to believe, exhaust the nature of the thought. Surely, it is also part of the nature of each thought that it *is* a thought.

And what is a thought? It is the kind of thing that can be true or false, that can be conceived and judged, that can be grasped via assertoric sentences. Inferences can be made from it, but it cannot be predicated of something. Now Burge would not likely deny that Frege held that a thought is the kind of thing that can be true or false. But he gives every sign of resisting any suggestion that the other features mentioned are to be found in Frege's conception of a thought. Indeed, Burge cites a passage in which, he claims, Frege says our relations to a thought are 'inessential' parts of its nature. (1992, p. 641)

But that isn't actually what Frege says in the passage Burge cites. What Frege actually says is that a property of a thought is inessential "if it consists in, or follows from, the fact that this thought is grasped by a thinker". (1918a p. 76) This has to do with actual, not possible, mental activities. Frege never suggests that the fact that it *can be* conceived or judged is inessential to the nature of the thought. Further, when Frege introduces the notion of thought in 'Thoughts' (1918a p. 61), he explicitly characterizes them as imperceptible.¹⁴ Perhaps he means thereby to be telling us about their nature, perhaps not. But this much is clear. Frege's writings give us no conclusive reasons to deny that he thought that the sort of access humans *can have* to an object can be part of its nature. Nor do they give us reason to deny that he thought it is part of the nature of a thought that it can be expressed by an assertoric sentence.

But Burge thinks they do. He says that, had Frege believed that functions or thought contents were dependent on human conceptualization or language, he would have qualified the remarks that are read as Platonic. But the 'unqualified' statements to which Burge alludes do not

¹⁴ Note also, that Burge talks about imperceptibility at least twice in his characterizations of things belonging to the third realm (1992 pp. 636, 643).

say that they are independent of what *can* be grasped, conceived, judged, or expressed in words. They say that thoughts are independent of what *is* grasped, conceived, judged, or expressed in words. Does the passage from 'Negation' qualify the mind-independence of non-spatio-temporal objects? Not if we understand, by 'mind-independence', independence from mental activities or practices. But if, by 'mind-independence', we understand independence from what can be conceived, judged, communicated or expressed in words, the passage does more than qualify the claim that non-spatio-temporal objects are mind-independent -- it denies that claim. If there is an alternative interpretation of the passage, Burge does not offer it.

Nor is this the only passage that causes problems for Burge on this score. In a more famous passage from section 26 of *Foundations* (a passage Burge does not mention), Frege writes that what is objective in the appearance of space (and, by implication, in any appearance) is "what is subject to laws, what can be conceived and judged, what is expressible in words" (1884, section 26). This is a passage with broad implications. I have argued that Burge has not shown that, on Frege's view, either existence for concepts or existence for thoughts is independent of the possibility of linguistic expression. But thoughts and concepts may seem to have a special relationship to linguistic expression. It is not unreasonable to wonder if Burge's interpretation correctly describes Frege's view about other physical and non-physical objects. What makes the passage from *Foundations* especially interesting is that Frege is discussing, not the objectivity of non-spatio-temporal objects, but *objectivity generally*. Frege's very notion of objectivity -- whether applied to things belonging to the third realm or to the physical world -- seems connected, in some way, with language and communication.

Although Burge does not mention this particular passage, he does criticize my interpretation of Section 26 of *Foundations*. For Burge takes great exception to the claim that Frege connects objectivity, generally, to linguistic expressibility. In Section 26, Frege uses the North Sea as an example of an objective object in an attempt to give a general characterization of objectivity that will apply to numbers as well. Frege writes there that, if it is true that the North Sea is 10,000 miles in extent, then this is not dependent on any of our arbitrary choices or ideas. As I interpret Frege's remark (and Burge agrees with this much), Frege is saying that, had those boundaries of the North Sea never been drawn, the North Sea would still be there (although unrecognized) and still be 10,000 miles in extent.¹⁵

How does this accord with Frege's claim, in the same section, that what is objective is what can be conceived and judged, what is expressible in words? The simplest interpretation is that the objectivity of the North Sea is dependent on the possibility of marking off its boundaries in language. To say that unrecognized objects exist,¹⁶ then, is simply to say that it is possible to mark off, in language, boundaries that have never actually been marked off by anyone¹⁷. Burge

¹⁵ I have said here (and in my 1990) that the North Sea would still be there, rather than saying that it would still exist. Strictly speaking, existence cannot be predicated of objects. Frege identifies the problem of the ontological argument, for instance, as resulting from the mistake of predicating existence of God (1906 p. 383). Frege does not talk about the existence of the North Sea in section 26 of *Foundations* but, rather, about its objectivity. For these reasons, I think it preferable to avoid talking about the existence of the North Sea. But the situation is complicated. One problem is that there are a number of German words that can be translated by "exist" and its cognates. Thus there are a few occasions on which Frege himself does predicate existence of an object, most notably in 1962 vol. i p. xxiv, which Burge quotes.

¹⁶ Notice that the claim that unrecognized objects exist, unlike the claim that the North Sea exists, is completely unproblematic. In it, existence is predicated of the concept *unrecognized objects*.

¹⁷ I am somewhat puzzled by Burge's claim that in my (1990) I cite no texts in support of this interpretation of the North Sea discussion. There, as in this paper, I offer this interpretation of the North Sea discussion as an explanation of Frege's claim, in section 26, that what is objective is what can be conceived and judged, what is expressible in words.

dismisses this interpretation with the remark that Frege gives every indication that existence claims "are not about possibility, language, or activity at all" (1992, p. 640).¹⁸ But this remark exhibits two confusions. First, it is consistent to hold both that existence claims are not, by nature, about possibility, language or activity and that some existence claims *are* about possibility or language. It may well be that some existence claims are about possibility or language and some are not. Second, and more significant, for Frege 'aboutness' is a feature, not of the thought but of the sentence used to express the thought.¹⁹ Frege writes, in 'On Concept and Object',

In the sentence 'there is at least one square root of 4', we are saying something, not about (say) the definite number 2, nor about -2, but about a concept, *square root of 4*; viz. that it is not empty. But if I express the same thought thus: 'The concept *square root of 4* is realized', then the first six words form the proper name of an object, and it is about this object that something is being said. (1892 p. 199)

In this passage, Frege gives two sentences that, he claims, express the same thought but are about different things. It is entirely consistent with Frege's view that 'unrecognized objects exist' and 'it is possible to mark off, in language, boundaries that have not actually been marked off by anyone' express the same thought, although the former is not about language, while the latter is about language. These two points, however, do not address the Burge's central objection.

His central objection is that there is no evidence that Frege's notion of objectivity depends on expressibility in language or conceivability. So far, we have seen two passages, the remark from Section 26 of *Foundations* and the discussion of the being of a thought from 'Negation', which belie Burge's claim. It is important to appreciate that these do not stand alone. In addition to characterizing what is objective as what can be conceived and judged, what is expressible in words (1884, section 26), Frege says that the range of applicability of arithmetic (which is also the range of applicability of logic, the most general science) is "the widest domain of all; for to it belongs not only the actual, not only the intuitable, but everything thinkable"(1884, section 14).

Burge might respond that the widest domain of all is should not be dependent on what is thinkable. But there is no evidence that Frege agrees. Frege writes, "the area of the enumerable is as wide as that of conceptual thought" (1980a, p. 100 (1976 p. 163)), he does not say or suggest that it is *wider* than the domain of conceptual thought. Even in 'Thoughts', the article that Burge takes as containing Frege's clearest statements about the status of non-spatio-temporal objects, Frege suggests a distinction between what is or has been thought by people and what is thinkable when he says,

Neither logic nor mathematics has the task of investigating minds and contents of consciousness owned by individual men. Their task could perhaps be represented rather as the investigation of *the* mind; of *themind*, not of minds. (1918a p. 74)

¹⁸ I believe, however, that if Frege is interpreted correctly the following discussion is all beside the point. The claims in question are about objectivity, not existence. And, as I argue in Chapter 6 of my (1990), claims about objectivity are ultimately ineffable.

¹⁹ This seems to accord with Burge's use of the term 'about'. He writes

Since logic is about (denotes) concepts and other functions, relations, and logical objects, all knowledge is at least partly about non-spatio-temporal entities. (1992, p. 640)

Of course *logic* doesn't denote anything. Presumably, Burge means that the sentences in Frege's logical notation contain expressions that denote functions, etc. Thus it does not seem unreasonable to infer that, on Burge's view, 'aboutness' is determined by what the expressions in sentences denote. This is not to say that aboutness is unrelated to thoughts. If, e.g., any sentence that expresses a particular thought *must* have an expression denoting a particular object, then one could say that the thought is *about* that object.

If Frege's view is that objective objects are independent of what *can* be thought (as opposed to what *is*, *will be*, or *has been* thought), Burge has neither cited passages in which this view is expressed nor explained why Frege should not be taken at his word in the passages cited here.

It should be clear at this point that, whatever Burge has done, he has not given us the straightforward, unambiguous reports of Frege's views that we were promised. Although, as I indicated earlier in this paper, I do not think Frege wants all his statements to be taken literally, my argument that Burge has misreported Frege's views has not depended on a dismissal of any of Frege's explicit statements. It is by the lights of a literal reading of Frege's texts that, I have been arguing, Burge's apparently unvarnished reportage fails to get Frege's views right.

2.

What, then, of the part of Burge's project that he sees as going beyond mere reportage -- the part in which he seeks to show that Frege's famous avowals concerning non-spatio-temporal entities are meant to play a theoretical role in explaining the objectivity of science?

According to Burge, Frege argues that "scientific objectivity is explicable only on the view that thought contents belong to a 'third realm' that is neither mental nor physical" (1992, p. 643). He "attempts to explicate the success of science, the fact of intersubjectively objective cognitive practices and indeed the authority of logic" (1992, p. 643). This is not to say that Frege thought that he needed claims about the third realm to *justify* our claims to scientific objectivity. Burge writes,

I do not think that he thought that such objectivity would somehow be in jeopardy in the absence of such an explanation ... It is rather that such an explanation accounts for what is involved in judgment, logical inference, and logical truth. (1992, p. 644)

Rather, Frege holds that the explanation is needed for our 'understanding' scientific communication and the objectivity of the communal scientific enterprise (1992, p. 643); Frege's Platonism "provides the best understanding of scientific inter-subjective objectivity" (1992, p. 645).

Burge is saying two distinct things here. He is saying that Frege understood his explicit remarks about non-spatio-temporal objective entities to be literal truths belonging to a theory. And he is saying that Frege meant his theory to serve two purposes: to explain the objectivity of scientific practice and to explain the authority and universality of logic. It is not entirely clear whether Burge's view is that these are distinct purposes or that Frege held the explanation of scientific practice to be simply derivative from the explanation of logic. Burge writes,

I think that Frege held, in the main body of his career, that not only thought contents, but numbers and functions were members of this 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. (1992, p. 634)

Here Burge seems to be saying that Frege's renowned claims count as part of an explanation of the objectivity of scientific practice because scientific practice is dependent on logic and the claims play a role in explaining logic. Burge cites six passages in support of his claim that one of Frege's aims is to explain the objectivity of scientific practice.²⁰ Each passage appears as part of an explicit discussion of logic. In what follows, I will assume that on Burge's view these are not distinct purposes; that Frege held the explanation of scientific practice to be simply derivative from the explanation of logic.

²⁰ 1962 vol. i p. xvi; 1979 pp. 133, 137-138 (1983 pp. 144-145, 149); 1918a pp. 69, 74. Frege's concern in the two passages from *Basic Laws* is solely with the status of logic; there is no explicit mention of scientific practice.

Frege certainly does want to explain (and defend) his view of logic. Among the aspects of Frege's logic that set it apart from, for example, the enterprises of the 'psychological logicians' are its authority and universality. And Frege's renowned claims *are* involved in explanations of this. But Burge attributes a stronger position to Frege. According to Burge, Frege's renowned claims are not simply part of an explanation of the nature of logic, they are part of a *theory* that provides the explanation. It is the additional conviction that these claims are part of a *theory* that, on Burge's view, makes Frege a Platonist. And it is in attributing this conviction to Frege that Burge goes afoul of the words on Frege's pages.

Burge writes,

Frege's line is made clearer in "The Thought" where he characterizes laws of truth as general laws which concern not "what happens" but "what is". Speaking of these laws about "what is" in the third realm, Frege says that "from the laws of truth there *follow* prescriptions about asserting, thinking, judging, inferring" (1918a, p. 58). Frege then calls these prescriptive epistemic laws "Laws of thought" (1918a p. 58). This is a paradigmatic Platonic direction of explanation: from what *is* in an abstract realm to what is reasonable.

What could be the nature of this derivation from general laws of truth -- which concern logical objects and functions--to prescriptive laws about judgment? (1992, pp. 646-647)

But this is misleading. It is true that, in the passage from 'Thoughts' that Burge cites, Frege says that the laws of logic are general laws about what is. However, Frege does not say, as Burge goes on to say, that laws of truth are laws about what is in the third realm. As Burge acknowledges elsewhere (1992, p. 644n), logic is the most general science. The laws of truth are laws about *everything*, including everyday spatio-temporal objects. They are not, as Burge suggests here, laws about denizens of the third realm.

To see this, consider law IIa from *Basic Laws*. This law, in contemporary notation, is: $(x)Fx \rightarrow Fa$. Although this is arguably a law about concepts (which, according to Burge, are third-realm entities), it does not address the sort of claims about the nature of concepts that Burge describes -- there is no mention of non-spatio-temporality. But this law is not about concepts alone. It is every bit as much a law about objects. Not, as Burge suggests, logical objects, but *all* objects, tables and chairs included. Nor is it difficult to see how, from this law about what is, prescriptive laws about judgment can be drawn. For example, this law licenses us to infer, from the recognition that some object, say *a*, is not an *F*, that not everything is an *F*. In order to see how the general law of truth licenses prescriptive laws about judgment, there is no need for any reference to an abstract realm (or to objects of an abstract rather than spatio-temporal realm).²¹

Now, Frege never expresses his renowned claims in actual logical notation. They appear only in his discursive discussions of his logic. What role, then, do these comments about functions, concepts and extensions play? Burge seems to have another story to tell. Although Burge denies that ontological notions are prior to logical notions, he says "Logic and ontology are mutually

²¹ Burge might object that some of Frege's other laws seem to be entirely devoted to third realm entities. Consider, for example, Basic Law I: $a \rightarrow (b \rightarrow a)$. This law, Burge might argue, is a law about two particular extensions, the True and the False. But the *law* (as opposed to its explanation) is not about extensions. For the letters 'a' and 'b' in the above expression of Basic Law I are variables. And these variables range over all objects--not just those that are named by sentential expressions (the True and the False), not just extensions, but *all* objects. Moreover, as I have argued in Appendix A of my 1990, the assignment of particular extensions as the meaning of sentential expressions is stipulative. And these stipulations are licensed by our antecedent knowledge of what counts as a good inference. Thus the order of explanation is, in fact, the reverse of the order Burge describes. For another example of how this sort of explanation works, see the discussion of the definition of the conditional-stroke in my 1990, pp. 232-6.

entangled in Frege" (1992, p. 644n). This is not only because logic is the most general science but, also, because "Frege's most fundamental ontological categories (function and object) are logical categories" (1992, p. 644n).

It is not difficult to see why Burge might say that logic and ontology are mutually entangled in Frege. Burge says that Frege's logic is committed to extensions and functions (1992, p. 634n), by which he seems to mean that there are expressions, in Frege's notation, that designate particular extensions and functions. And Frege's renowned remarks make it clear that these are not spatio-temporal entities. The most general science is committed to non-spatio-temporal entities. But there are no expressions in Frege's notation for such concepts as, 'is a spatio-temporal object'. Thus the description of the nature of the entities to which logic is committed cannot be a part of logic alone. We need, then, a separate metaphysical theory to explain the commitments of logic. On such a view, it is also not difficult to see where, in Frege's writings, the details of this metaphysical theory can be found.

Frege's discussions of the notions of function and object are crucial parts of his introductions of his logical notation. But these discussions play a very different role from his discussion of, for example, the conditional. The conditional is a particular function that has a name in Frege's notation. But the discussions of functions and objects do not culminate in the introduction of a name in the notation. Rather, they culminate in our recognition of the different uses of different sorts of symbols. Section 1 of *Basic Laws* is titled "The function is unsaturated". Frege there explains how the unsaturatedness of functions requires function-expressions in the notation to carry with them argument places that must be filled in. In section 2, he goes on to introduce the notion of object. He writes,

The domain of what is admitted as argument must also be extended to objects in general. Objects [*Gegenstände*] stand opposed to functions. Accordingly I count as *objects*, everything that is not a function, for example, numbers, truth-values, and the courses of values to be introduced below. The names of objects -- the *proper names* -- therefore carry no argument-places; they are saturated, like the objects themselves. (1962, vol. i section 2)

These are the sorts of discussions that, on Burge's view, set out Frege's ontological theory, for they are used to communicate the difference between function and object; i.e., the difference between what Burge calls "Frege's most fundamental logical categories".

But are descriptions of the difference between functions and objects, and of the non-spatio-temporal nature of functions, concepts and logical objects, meant as part of a *theory*? If so, then Frege is surprisingly loath to set out many of the details in his writings. Although Burge attributes to Frege the view that functions are non-spatio-temporal objective entities, he cites no passage in which Frege says this²² The reason, I suspect, is that Frege never does say this²³ In Frege's many

²² Burge includes three citations in support of his attribution of this view of functions to Frege. Burge says "Concepts or other functions are not temporal", citing 1884 p. viii, section 27 and 1891b p. 158, and he says "Concepts or functions are not products of the mind", citing two of these: 1884, p. viii and 1891b p. 158. But, although Frege does say these things about concepts on the pages cited, the word "function" does not appear on any of these pages.

Presumably, Burge's reason for using these citations to attribute, to Frege, the view that functions are non-spatio-temporal is that Frege says, elsewhere, that concepts are functions (see, e.g., 1891a p. 15, 1962 vol. i section 3). Given that concepts are functions, it should follow directly from the three citations that Burge provides that (at least some) functions are not spatial or temporal. Fair enough. But this is not what Burge says. Burge says, in one of the passages quoted above that, the non-spatio-temporal realm includes, for Frege, "some objects and *all functions*" and, in the other, that it includes *functions--including concepts*. Thus Burge provides no explicit textual support for this global claim about functions.

Moreover, the fact that Frege does not explicitly state this conclusion is significant, given that, on Burge's view, Frege meant his Platonism to be a theory, one of whose central doctrines is that functions are non-spatio-temporal

attempts to explain the notion of function, including his explicit discussions of the "essence of the function,"²⁴ he never characterizes functions as non-spatio-temporal entities.

Burge writes,

Frege's repeated remarks about mind-independence of non-spatio-temporal entities would not have been literally true, if they had been backed by a set of unstated qualifications of the sort that an idealist (or deflationary) interpretation of them would require. (1992, p. 641)

Perhaps so, but, as I have indicated, Frege does not make such remarks about functions. And, while Frege does make some such remarks about concepts, he also explicitly denies that these remarks are literally true. In fact, Frege repeatedly qualifies all claims in which the expression 'concept' appears. There are two sorts of qualifications.

The first is that what can be said about objects cannot be said about concepts or functions. Frege says that this can be expressed metaphorically like this: "There are different logical places; in some only objects can stand and not concepts, in others only concepts and not objects" (1903 p. 372). Moreover, Frege writes,

I do not want to say it is false to say concerning an object what is said here concerning a concept; I want to say it is impossible, senseless (*sinnlos*) to do so. (1892 p. 200; See also 1892 p. 198; 1979, p. 120 (1983 p. 130))

Burge would have us believe that on Frege's view it is literally true that some objects and all concepts are mind-independent non-spatio-temporal entities. But, as the above quotation indicates, Frege denies that there can be anything that is literally true of *some objects and all concepts*.

One might think, however, that Burge's interpretation can be saved by an obvious, and minor, alteration. Although Frege says that relations that hold between objects cannot hold between concepts, Frege also says that corresponding relations hold between concepts (1894, p. 320). Frege claims that concepts (and some objects) are objective and atemporal. Perhaps Frege does not mean to be making the same claims about concepts and objects but, rather, to be making corresponding claims. But what are the corresponding claims? Presuming we know what it is to say that an object is atemporal, it remains to explain what it is to say that concepts and functions are atemporal. No such explanation appears in Frege's writings. This is not an oversight, nor is it a result of Frege's conviction that the explanation is obvious. For a second sort of qualification appears repeatedly in Frege's comments about the terms 'function' and 'concept'. Frege says

... the word 'concept' itself is, taken strictly, already defective, since the phrase 'is a concept' requires a proper name as grammatical subject; and so, strictly speaking, it requires something contradictory, since no proper name can designate a concept; or perhaps better still, something nonsensical [*einen Unsinn*]. (1979, p. 177 (1983 p. 192))

This is a result of the predicative nature of concepts which, Frege says, "is just a special case of the need of supplementation, the 'unsaturatedness' that I gave as the essential feature of a function in my work *Funktion und Begriff*" (1892 p. 198n). These terms, Frege says, are defective and all sentences in which they occur are either literally false or miss their mark²⁵. So by Frege's own lights, any attempt to say something -- including something corresponding to claims about the non-spatio-

objective entities. Were Burge right about this, one would expect this central doctrine to appear at least somewhere in Frege's writings.

²³ I cannot substantiate this beyond doubt, because I have not inventoried every passage in which the term 'function' appears. However, Frege does not say it in his discussions of the notion of function in 'Function and Concept', 'What is a function?' and *Basic Laws*.

²⁴ See, e.g. 1962 vol. i section 1, 1981a p. 6

²⁵ See, also, 1892 p. 204; 1980a, pp. 136-137, 141 (1976 pp. 219, 224); 1962 vol. i section 4n; 1979, pp. 119, 120, 122, 239, 255 (1983 pp. 130, 133, 258, 275).

temporal objectivity of numbers and thoughts -- about functions or concepts using such defective terms as 'function' or 'concept' will likewise founder.

If Frege's many remarks about functions, concepts and objects are not meant as expressions of literal truths of a theory, what is their purpose?

Burge is exactly right when he says that these discussions are needed for our understanding of logic. But part of what we are supposed to understand when we understand logic is that these distinctions cannot be made explicitly. Frege's discussions of the notions of function and object, both in the early sections of *Basic Laws* and *Begriffsschrift* and in his more discursive writings, are meant to introduce the use of different sorts of symbols for functions and objects. The point of using these different sorts of symbols is to prevent users of a logical notation (a logically perfect language) from making the sort of mistake that can lead the user of a natural language into uttering an apparently meaningful sentence that is either nonsense, misses its mark or is false. The result is that it is impossible to state, in logical notation, the sort of theory that, according to Burge, makes Frege a Platonist.

Might Frege have held such a theory, nonetheless? It is clear that, on Frege's view, a metaphysical theory must be statable in a logically perfect notation. He writes,

I take it as a sure sign of a mistake if logic has need of metaphysics and psychology - sciences that require their own logical first principles. (1967a, p. 18 (1962 vol. 1 p. xix))
There is no room, given Frege's explicit views, for the Platonist theory Burge attributes to him.²⁶

It may seem, at this point, that Burge is only rescuing Frege from absurdity. If Frege's discussions of functions and concepts cannot be part of a theory, then what is their status? How can we come to an understanding of Frege's logic by reading these discussions? On Frege's view, understanding can be facilitated by means of hints (1962 vol. 1 section 5) elucidation or figurative modes of expression (1906 p. 301) or a meeting of minds (1979, p. 259 (1983 p. 179)). The notion of elucidation plays a prominent role in Frege's explanations of how we come to an understanding of basic scientific facts. He says, for instance,

Once the investigators have come to an understanding about the primitive elements and their designations, agreement about what is logically composite is easily reached by means of definition. Since definitions are not possible for primitive elements, something else must enter in. I call it elucidation.²⁷ It is this, therefore, that serves the purpose of mutual understanding among investigators, as well as of the communication of the science to others.(1906 p. 301)

Elucidation, however, is not part of a scientific theory. Frege continues,

We may relegate it to a propaedeutic. It has no place in the system of a science; in the latter, no conclusions are based on it.(1906 p. 301)

This description certainly fits the discussions of the notions of function and object that appear in early sections of *Basic Laws* and *Begriffsschrift*. But Frege's more discursive writings seem less easily viewed as propaedeutics.²⁸

However, there is no easy alternative. It does not help, for instance, to say that in his discursive writings Frege is setting out philosophical rather than scientific theories. For this will help only if Frege recognizes a notion of truth distinct from scientific truth. And there is no

²⁶ I do not have room to give the argument here. In Part II of my 1996, I argue that Frege's logical notation is designed so that such claims as that functions are atemporal cannot be expressed in the notation. The significance of expressibility in the notation is discussed at more length in my (unpublished).

²⁷ I have replaced the word used by the translator, "explication", with "elucidation". The German word is: Erläuterung.

²⁸ For an argument that this is how these writings should be viewed, see Chapter 6 of my (1990).

evidence that Frege recognizes any such thing. On the contrary, he writes, in 'Thoughts', "What I have in mind is that sort of truth which it is the aim of science to discern"(1918a p. 59). Nor does he, elsewhere in his corpus, indicate that there are other notions of truth that interest him. Further, there is no textual evidence that Frege distinguishes philosophy from science. He refers both to philosophy (1884, introduction) and to metaphysics (1967a, p. 18 (1962 vol. 1 p. xix)) as sciences. Insofar as a theory is to be regarded as consisting of truths, there is no evidence in Frege's writings that our understanding of logic requires a *theory* of non-spatio-temporal entities. And there is a great deal of evidence that Frege would have regarded any attempt at providing such a theory as doomed to incoherence.

Thus Burge's substantive argument about the theoretical role Frege's renowned claims are supposed to play is not only far from convincing, it requires us to disregard many of Frege's explicit claims. I do not mean to suggest that these claims are unproblematic. There are many puzzling aspects of the views I have discussed in the last few pages. But there can be no doubt that they were Frege's. Burge may want to argue, as others have, that Frege's puzzling views about concepts and functions should be ignored or that Frege should not have held them. But to provide an interpretation that conflicts with these oft-stated views is not to give the straightforward literal reading of Frege's writings that Burge has promised. The recent revisionist trend in Frege interpretation is motivated, not by a desire for novelty, but by a desire to fit together all Frege's writings. An interpretation that ignores the connection Frege draws between objectivity and expressibility in language or conceivability leaves too much of his view in penumbra.

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