Why are (some) Platonists so insouciant?

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SUMMARY

Some platonists truly agonize over the ontological commitments which their platonism demands of them. But many others are remarkably insouciant about positing the existence of abstract objects, despite their unfamiliar nature. Why is that? An examination of various statements on the existence of abstract objects by the prominent platonists Bob Hale, Michael Dummett, and Burgess and Rosen suggest that some platonists may not believe that abstract objects really do exist. Hence, their insouciance.

WHY ARE (SOME) PLATONISTS SO INSOUCIANT?

Introduction

Some platonists truly agonize over the ontological commitments which their platonism demands of them. Peter van Inwagen, for example, confesses candidly,

I am happy to admit that I am uneasy about believing in the existence of 'causally irrelevant' objects. The fact that abstract objects, if they exist, can be neither causes or [*sic*] effects is one of the many features of abstract objects that make nominalism so attractive. I should very much like to be a nominalist, but I don't see how to be one ... [1]

In contrast with certain more sanguine platonists, van Inwagen thinks that we should reject platonism if we can: 'It would be better not to believe in abstract objects if we could get away with it.' [2] For it is very puzzling that objects should fall into two so radically different and exclusive categories as abstract and concrete:

The platonist must think of objects, of what there is, as falling into two exclusive and exhaustive categories, the abstract and the concrete. If x falls into one of these categories and y into the other, then no two things could be more different than *x* and *y*. According to orthodox Christian theology, no two concrete things could differ more than God and an inanimate object. But (assuming for the sake of the illustration that all three things exist) the differences between God and this pen pale into insignificance when they are compared with the differences between this pen and the number 4; indeed, the number seems no more like the pen than like God. The difference between *any* abstract object and *any* concrete object would seem to be the maximum difference any two objects could display. [3]

It would be much more appealing, says van Inwagen, to suppose that one of the categories is empty.

But concrete objects are indisputably real and well-understood, in contrast to abstract objects. So we should presume that abstract objects do not exist. Nominalism of some sort is thus the default position. Indeed, van Inwagen believes, 'one should not believe in abstract objects unless one feels rationally compelled by some weighty consideration or argument... my conclusion is that a philosopher should wish not to be a platonist if it's rationally possible for the informed philosopher not to be a platonist.' [4]

Moreover, van Inwagen, as a classical theist, has theological misgivings about the existence of uncreated objects other than God. Van Inwagen tells us that when he recites the Nicene Creed,

I must regard the phrase 'creator of all things visible and invisible' as containing a tacitly restricted quantifier... I commit myself only to the proposition that God is the creator of all things (besides himself) that can in some sense be either causes or effects. [5]

Van Inwagen's platonism is thus a sort of agonistic platonism embraced only with great reluctance and struggle.

Other platonists are much more cavalier about postulating the existence of such radically unfamiliar objects. Theirs is an insouciant platonism. They do not seem at all troubled by adding such objects to one's ontology. Why is that? Whence their insouciance about abstract objects? This question has received scant attention in the philosophical literature. But I want to raise the suspicion that there may be, ontologically speaking, less than meets the eye to some platonists' affirmation of the existence of abstract objects. [6] Consider three examples.

Bob Hale and Crispin Wright

It is not always clear just what sort of ontological status is being ascribed to abstract objects, even by their most ardent defenders. Consider the neo-Fregean view called 'Abstractionism' by its proponents Bob Hale and Crispin Wright. The view is so-named because of the crucial role played by so-called abstraction principles of the form $(\forall a)\ (\forall b)\ (\Sigma(a) = \Sigma(b) \Leftrightarrow E(a, b))$, where a and b are variables of a given kind, 'Σ' is a term-forming operator denoting a function from items of the given kind to objects in the range of the first-order variables, and E is an equivalence relation over items of the given kind. The principles explain the truth conditions of certain Σ-identities as coinciding with the truth conditions of an equivalence statement which we already understand. For example, the direction of a = the direction of b if and only if a is parallel to b. The left-hand side of this biconditional involves reference to abstract objects, namely, directions, even though the right-hand side makes no mention of such entities. The appearance of such abstract objects, as if by magic, has led some ontologists to suggest that Wright and Hale subscribe, or should subscribe, to either quantifier variance, according to which the first-order existential quantifier has more than one meaning (one ontologically committing and another not), or to maximalism, according to which everything possible actually exists. [7] Hale and Wright, however,

repudiate such interpretations of their view. [8] They concede, 'If it *looks* as if the truth of abstraction principles may turn on substantial metaphysical hostages, or as if there are special problems about knowing that they are true, or can be stipulated to be true, this appearance needs to be disarmed before the abstractionist can expect much sympathy for his proposals.' [9] Wright and Hale, however, insist that no metaphysical assistance is needed in defense of their principles. 'There is no metaphysical hostage to redeem. A (good) abstraction *itself* has the resources to close off the alleged (epistemic metaphysical) possibility [that the denoted abstracts do not exist]... the truth of the right-hand side of an instance of a good abstraction is conceptually sufficient for the truth of the left. There is no gap for metaphysics to plug, and in that sense no 'metaontology' to supply.' [10] This view of the matter, they muse, is essential not only to abstractionism but also to the quantifier variantist 'rescue' of abstractionism. Quantifier variance ensures the conservation of truth conditions right to left across the biconditional by taking the right-hand side to be sufficient for existential generalizations of the left-hand side 'at a purely conceptual level, without collateral metaphysical assumption'. [11] This 'is a thesis about what meanings-concepts-there are, not about the World of the metaphysician.' [12] If the metaphysician spurns this 'minimalist conception of objects and singular reference', they warn, then he will have to deny that abstractions can ever be said to be stipulatively true. [13]

It remains quite unclear just to what sort of ontology Wright and Hale think themselves committed by singular reference to abstract objects. Elsewhere Hale differentiates sharply between objects in the ordinary sense and objects in the peculiarly Fregean sense relevant to their view. For Frege, Hale explains, objects constitute one category of entities alongside others, like concepts (properties), relations, and functions. Objects are complete entities, while concepts, relations, and functions are incomplete entities. Hale says that this categorization of non-linguistic entities presupposes a prior, logical categorization of types of linguistic expressions into singular terms and various incomplete expressions, like predicates. In Hale's view we have little insight into the nature of these nonlinguistic entities apart from the linguistic expressions which distinguish them: 'there is no fully general explanation of what it is to be an entity of one of those types save by reference to the type of expressions of which entities of that type are the non-linguistic correlates.' [14] An object, then, just seems to be the potential referent of a singular term: 'To be an object, in the sense intended, is just to be the sort of thing that can be referred to by means of a singular term...' [15] Indeed, in Hale's view once one understands that some expression is functioning as a singular term and one understands what is being referred to, it makes no sense to ask whether the referent is an object: 'It is, in consequence, simply unintelligible to suppose that someone fully equipped with the relevant notions of object, property, etc., might understand a certain expression, and know which entity it stood for, and yet be in serious doubt about whether that entity is, say, an object or not.' [16] On this view it would seem fair to say that the weather, for example, is an object, since it may be referred to in true sentences like 'Today the weather in Atlanta will be stormy.'

Now lest we have reservations about including the weather in our ontological inventory as an existent object, Hale hastens to add that it is crucial that it is the Fregean notion of object that is at issue here. Even if something is an object in the peculiarly Fregean sense, we might still wonder, he says, whether it is an object in the common use of that word. Hale gives the example of a perforated sheet of postage stamps. One might wonder whether the singular term 'the third from the left in the fourth row' refers to an object in the ordinary sense of that word. But anyone who understands this expression cannot doubt that it refers to an object in the Fregean sense if it refers to anything at all. It seems to be a conceptual truth that the referent of a singular term is an object in the Fregean sense. Even though Frege uses 'object' (*Gegenstand*) to distinguish certain entities from other entities like concepts, relations, and functions, Hale emphasizes that the Fregean use of the word is, in contrast to the common use of 'object,' not a sortal term at all (not even a very general one).

Now if abstract objects are just the referents of certain abstract singular terms but not objects in the ordinary sense of the word, it is far from clear, I think, what the affirmation that abstract objects exist really amounts to ontologically. Hale avers,

If it is taken as invoking the everyday notion of object, the question whether there are abstract objects is devoid of philosophical interest; its answer is quite certainly that there are not, but that is trivial-a great many kinds of thing beside those whose title to be recognized as abstract objects has been taken seriously by philosophers fail to count as objects in that sense. Vague though the common notion is, it is evidently outrageous to suggest that numbers, classes, directions and shapes, say, are objects in that sense. But the same goes for hurricanes, speeches (i.e., the actual historical events) and holes in the ground. [17]

I find Hale's disclaimers to be very puzzling, in large part because it is difficult to understand the distinction he insists on between objects in the ordinary sense and objects in his Fregean sense. Hale does not explain what the ordinary sense of 'object' is, other than to say that the word is a sortal term, in contrast to Frege's usage. This is not very helpful, since 'object', 'concept', 'relation', and 'function' do, in fact, seem to be functioning for Frege as sortal terms used to classify various entities. [18]

So what is the contrast between Fregean objects and objects in the ordinary sense? The most help we get from Hale is the contrast of ordinary objects with hurricanes, speech events, and holes. This contrast suggests that objects in the ordinary sense are what are classically called substances, things which exist in and of themselves. [19] If this is right, then I am puzzled by two things. First, if for the platonist abstract objects are not substances, then what are they? On platonism it seems that some *abstracta*, at least, should be classed as objects in the sense of substances. Numbers seem clearly to be stand-alone objects, if they exist, and the shape of a ball is supposed to be an entity that exists independently of the ball. Even directions could seem to stand alone, as when someone says, 'He fled

in that direction.' If these are not objects in the ordinary sense, then what are they?

Second, if abstract objects are taken to be merely the sort of things that can be referred to via an abstract singular term, do they exist at all, even for the platonist? The answer to that question will depend on one's theory of reference. [20] A *Gegenstand* can be merely the subject of conversation, what one is talking about. *Prima facie* we talk all the time about things that do not exist. Are abstract objects among these? Hale's examples of things besides abstract objects which are not objects in the ordinary sense does not inspire confidence that abstract objects, even on platonism, truly exist, for hurricanes, speech events, and holes are precisely the sorts of thing that many metaphysicians plausibly deny exist. [21] These things are real in the sense that they are not illusory, but they are not, properly speaking, existents. If abstract objects have no more reality than holes, then perhaps Hale is right in thinking that the question of their existence is of no philosophical interest, for then the affirmation that they exist may be trivial, having no ontological significance.

Hale goes on to say,

When, as I intend, the question is understood in terms of the Fregean notion of object, it is inseparable from questions belonging to the philosophy of language-asking whether there are objects of a certain general kind is tantamount to asking whether there are, or at least could be, expressions functioning as non-vacuous singular terms of a certain kind. When the domain of objects is understood as including at least the referents of all genuine singular terms, it is anything but obvious that it is does not include abstract objects of various sorts; rather there is a quite strong *prima facie* case for believing that it does. For there can be no serious doubt that we frequently find ourselves employing what at least appear to be singular terms for entities of many kinds-numbers, classes, shapes, to mention some of the more obvious examples-which, in advance of any deep account of the abstract/concrete distinction, we would have little hesitation in classifying as abstract. [22]

Writing in the aftermath of 'the linguistic turn' introduced into philosophy by Frege, [23] Hale and Wright speak of abstract objects in terms of semantic categories rather than classical metaphysical categories. [24] Hence, it is hard to know what is the ontological import of non-vacuous singular terms. We may agree without hesitation that we employ singular terms to talk about entities which, if they exist, are abstract; but the problem is that we similarly employ singular terms to talk about things like Wednesdays, shortages, holes, and events, which plausibly do not exist. It might be said that in such cases the relevant singular terms are vacuous and the sentences containing them false. But as mentioned, whether non-vacuous singular terms have real world ontological correlates is going to depend upon one's theory of reference, which at this point remains yet to be enunciated. [25]

Michael Dummett

Michael Dummett, whose earlier work inspired Hale and Wright, is another philosopher whose remarks on the existence of abstract objects are far from perspicuous. For example, noting that informal discourse is permeated by abstract terms, Dummett cities as an illustration the following paragraph from a London daily:

Margaret Thatcher yesterday gave her starkest warning yet about the dangers of global warming caused by air pollution. But she did not announce any new policy to combat climate change and sea level rises, apart from a qualified commitment that Britain would stabilize its emissions of carbon dioxide-the most important 'greenhouse' gas altering the climate-by the year 2005. Britain would only fulfill that commitment if other, unspecified nations promised similar restraint.

Dummett then observes,

Save for 'Margaret Thatcher', 'air' and 'sea', there is not a noun or noun phrase in this paragraph incontrovertibly standing for or applying to a concrete object (is a nation a concrete object, or a gas?). Ordinary literate people readily understand such paragraphs; few would be easily able to render them in words involving reference only to concrete objects, if indeed they can be so rendered, or even to understand such a rendering if presented with it. An ordinary reader's comprehension of the abstract terms does not consist in the grasp of any such procedure of translation, but in a knowledge of how those terms function in sentences: no reason whatsoever exists for supposing him to attach a reference to 'Margaret Thatcher', but not to 'the climate' or 'air pollution'.

The notion of reference to an object is employed to mark the difference in linguistic function between a singular term and a predicate or relational expression; and that difference is as salient in the sentence 'Carbon dioxide is a compound' as in 'Margaret Thatcher is a woman'. One can know a great deal about Margaret Thatcher without ever having had to identify her; but, to understand a personal name, one has to know that there is a such a thing as identifying its bearer. There being such a thing is what constitutes it as referring to its bearer, and explains our understanding of its use in predicating something of its bearer. Identification of a county, say as that in which one is, of a gas, say as being emitted from an exhaust pipe, of a political group, say as holding a meeting, all differ greatly from identifying a person, because counties, gases and political groups are things of very different kinds from people: but such identifications occur, and play the same fundamental role in our discourse about such things as the identification of people plays in our discourse about them. To deny those things the status of objects, and to the corresponding expressions the function of referring to them, is to fall into nominalist superstition, based ultimately on the myth of the unmediated presentation of genuine concrete objects to the mind. [26]

This is an extraordinarily puzzling passage. Dummett holds that almost all the noun phrases in the cited

paragraph do not refer to concrete objects but do refer to objects. Do they refer, then, to abstract objects? Clearly not, for not only are things like air pollution and sea level rises and gas not abstract, but Dummett accepts the characterization of abstract objects as objects having no causal powers, [27] yet here it is explicitly stated that global warming is caused by air pollution, that carbon dioxide gas alters the climate, and that nations must promise restraint. On pain of contradiction Dummett must be using the word 'object' in two different senses. The things mentioned are not objects in what Hale calls the ordinary sense of the term, but they are objects in the semantic sense of being the referents of singular terms. As Dummett says, the notion of reference to an object in the latter sense is just a way of marking the difference between a singular term and a predicate or relational expression. The metaphysician can happily grant the things in question the status of objects in this sense without thinking that his ontology will have to include in it things like dangers, sea level rises, commitments, and restraints. [28]

If this interpretation is correct, it explains Dummett's otherwise strange insouciance about embracing an object so bizarre as the Equator. In response to a sort of dispensability argument for nominalism-what Dummett calls 'the nominalist challenge'-to the effect that abstract objects, lacking as they do all causal powers, explain nothing and so may be dispensed with, Dummett writes,

In *Grundlagen*, Frege's examples of objective but non-actual objects are the Equator and the centre of mass of the solar system. The existence of the Equator is certainly an a posteriori truth. It depends on the fact that the Earth has poles, which in turn depends on the unquestionably contingent fact that it spins about an axis. Yet, if someone argued that to assume the existence of the Equator explains nothing, that, moreover, since it has no causal powers, everything would be exactly the same if it did not exist, and that therefore we have no reason to accept the hypothesis of its existence, we should gape at the crudity of his misunderstanding.

What should we say to correct the objector's misunderstanding? He is trying to conceive of the Equator as an actual object that has been *stripped* of its causal powers; naturally, then, he cannot see what grounds we can have for believing in such an object. We have to teach him that it is an altogether different *kind* of object. We can do that only by patiently explaining to him the use, or the truth-conditions, of sentences containing the term 'the Equator'; such an object as the Equator is given to us only by means of our grasp of what can be meaningfully said about it and when it is true to say it. When we have given these explanations, he will grasp that there is nothing problematic about the existence of the Equator; that its existence is not a hypothesis, but stands or falls with the proposition that the Earth rotates about an axis. Or, if he does not, we may abandon him to self-congratulation on his resistance to platonistic superstition. [29]

According to Dummett, Frege's distinction between objects which are or are not actual (*wirklich*) does

not contrast real objects with fictitious objects, but 'serves, rather, as his manner of distinguishing between what present-day philosophers usually call 'concrete' and 'abstract' objects'. [30] The Equator is not *wirklich* because it has no *Wirkungen* (effects) upon anything. Now I understand that the platonist does not postulate the Equator as an explanatory hypothesis. But I do not understand the platonist's insouciance about permitting so strange an object into his ontology. The reason Dummett thinks that there is nothing problematic about so weird an abstract object as the Equator is that, I suspect, he himself accepts the Equator's existence merely in the sense of being what 'the Equator' refers to in true sentences like 'The Equator bisects the Congo' rather than in the sense of the platonistic superstition that one's ontological inventory includes this circular, spatio-temporal, contingent, 25,000 mile long, abstract object currently girdling the earth. It is an object only in the semantic sense of being a referent of a singular term. If this understanding is correct, rejecting the 'platonistic superstition' does not entail falling into the 'nominalist superstition' of denying that the function of singular terms is to refer to objects.

John Burgess and Gideon Rosen

My final example of insouciant platonists is John Burgess and Gideon Rosen. In criticizing imagined 'content-hermeneutic nominalism', they entertain the suggestion that mathematical existence theorems are not ontologically committing to mathematical objects because 'there is simply an ambiguity in the word 'exists', between a strong and a weak sense, which we may write as '**exists**' and '*exists*.' (A) ['There exist prime numbers greater than a thousand'] is supposed to be quite true if by 'exists' one means '*exists*', and to become false only if one takes 'exists' to mean '**exists**''. [31] Burgess and Rosen rejoin that the nominalist will need to explain these two senses of existence and show that philosophical claims involve one sense while internal mathematical and scientific claims involve the other. Then they add,

Suppose it is said ... that for a thing to **exist** is for it to [*sic*; *supply* 'be'] part of the ultimate furniture of the universe. However this last phrase is interpreted, it seems quite plausible that large, composite objects like the Eiffel Tower do not **exist** in this sense. But an anti-nominalist may be perfectly willing to grant that the Euler function may not **exist** in this sense either. The most the anti-nominalist wishes to claim [*sic*; *supply* 'is'] that the Euler function exists in the same sense that the Eiffel Tower does. [32]

They conclude, 'the genuinely controversial question is whether or not numbers, functions, and the like exist in the sense in which the planet Venus does and the planet Vulcan doesn't.' [33]

It is difficult to know what to make of this. Burgess and Rosen seem to agree with metaphysicians like van Inwagen that chairs, tables, and other alleged composite objects do not exist and therefore are not to be included with, for example, fundamental particles in one's ontological inventory. If mathematical

functions are like those things, then they do not exist, which is the nominalistic position. Van Inwagen insists that on his view chairs-and, by extension, the Eiffel Tower and Venus-are real in the sense that they are not illusory. [34] But they do not exist as unified objects. There literally are no such things. Burgess and Rosen seem to think likewise.

Burgess elsewhere confirms this impression by looking at the dispute in a theological light:

One very traditional sort of way to try to make sense of the question of the ultimate metaphysical existence of numbers would be to turn the ontological question into a theological question: Did it or did it not happen, on one of the days of creation, that God said, 'Let there be numbers!' and there were numbers, and God saw the numbers, that they were good? According to Dummett, and according to Nietzsche-or my perspective on Nietzsche-this is the *only* way to make sense of questions of ontological metaphysics... I myself believe, like Russell, that analytic atheism [the thesis that theological language is meaningless] is false, and suspect, contrary to the Australians, that the Nietzsche–Dummett thesis is true. If as I believe the theological question does make sense, and if as I suspect it is the only sensible question about the italics-added *real* or capital-R Real existence of numbers, then I would answer that question in the negative; but then I would equally answer in the negative the question of the *Real* existence of just about anything. [35]

It is clear that Burgess rejects what he calls 'capital-R Realism' in favor of a much weaker 'realism' which amounts to just 'a willingness to repeat in one's philosophical moments what one says in one's scientific moments, not taking it back, explaining it away, or otherwise apologizing for it.' [36] This weak realism does not presume to tell us 'just what God was saying to Himself when He was creating the universe'. [37]

Conclusion

I earlier suggested that the platonist could be understood as affirming that abstract objects are just as real as hurricanes, holidays, and events-and, we may add, the Eiffel Tower-and yet be no more committed to the existence of abstract objects than we are to the existence of objects serving as the referents of the relevant terms. Now obviously, abstract objects cannot be said to be real in virtue of the fact that they are not visual or auditory illusions. But it seems to me that a distinction can be drawn with respect to *abstracta* which is analogous to the distinction between real and illusory for concrete objects.

We are all familiar with the paradoxes of naïve set theory, such as Russell's Paradox, which destroyed Frege's edifice and eventually catapulted him into nominalism in late life. To Frege there was every appearance that impredicative sets were real sets; but if set theory was to be salvaged, then, as W. V. Quine put it, 'such illusory combinations of entities' had to be ruled out, and the reality of such pseudo-sets denied. [38] Other would-be mathematical objects-like a proof of the consistency of arithmetic or a

derivation of the Continuum Hypothesis from the axioms of Zermelo–Fraenkel set theory-have proven to be just mathematical pipedreams. With respect to properties, van Inwagen similarly notes that, despite every appearance, there is no real property *unable to be said truly of itself*, for this leads inevitably to the analogue for properties of Russell's Paradox for sets. [39] D. M. Armstrong goes further. He distinguishes between 'real properties' and mere linguistic predicates truly said of a thing. [40] Certain terms may appear to ascribe properties, but in fact they do not. For example, *being self-identical* and *exists* are not, in his view, real properties. Now if properties and sets are, for the platonist, real only in the sense that they are not like these pseudo-entities, but they, like holes, hurricanes, and the Eiffel Tower, do not exist, then the platonist has not ventured beyond nominalism, since the nominalist can similarly distinguish real from pseudo-properties, sets, and other mathematical objects.

So it is not entirely clear just what ontological commitments are being affirmed by certain platonists, especially by linguistic philosophers. Could that be why they are so insouciant?

Footnotes:

[1]

Peter van Inwagen, 'God and Other Uncreated Things,' in Kevin Timpe (ed.) *Metaphysics and God* (London: Routledge, 2009), 19.

[2]

Peter van Inwagen, 'A Theory of Properties,' in Dean Zimmerman (ed.) *Oxford Studies in Metaphysics*, vol. 1 (Oxford: Clarendon Press, 2004), 107.

[3]

Ibid., 110–11.

[4]

Ibid., 107.

[5]

Van Inwagen, 'God and Other Uncreated Things', 19.

[6]

Øystein Linnebo identifies the insouciant platonism of which I speak as a species of what he calls 'lightweight platonism' (*Stanford Encyclopedia of Philosophy*, s.v. 'Platonism in the Philosophy of Mathematics [§§5.2–3],' by Øystein Linnebo, http://plato.stanford.edu/entries/platonism-mathematics/ July 18, 2009; *cf*. David Chalmers' characterization of such views as 'lightweight realism,' and David Manley's ascription to neoFregeans of the use of 'lightweight quantification' [David J. Chalmers, 'Ontological Anti-Realism,' in *Metametaphysics: New Essays on the Foundations of Ontology* (Oxford: Clarendon Press, 2009), 78, 95–101; David Manley, 'Introduction: A Guided Tour of Metametaphysics,' in *Metametaphysics*, 19, 25]). Linnebo thinks such lightweight semantic platonism falls short of platonism by denying the mind-independence of abstract objects, while I suspect these would-be platonists of failing to affirm the existence of abstract objects. Of them it could be said with Russell, 'In such theories, it seems to me, there is a failure of that feeling for reality which ought to be preserved even in the most abstract studies' (Bertrand Russell, 'Descriptions,' in A.W. Moore (ed.) *Meaning and Reference* (Oxford: Oxford University Press, 1993), 47). *N.B.* that Linnebo admits that lightweight semantic platonism meets the standard criterion for mind-independence with respect of mathematical objects, *viz*., there would still be such objects if no persons existed, but he thinks that we need a different criterion because lightweight platonists reject the analogy between physical objects and mathematical objects. As we shall see, that is not true: they think that such objects are as real as hurricanes, holes, and the Eiffel Tower. Whence, then, their insouciance? It is, I suspect, because they do not think these things truly exist.

[7]

Theodore Sider, 'Neo-Fregeanism and Quantifier Variance', *Aristotelian Society Supplementary Volume* **81** (2007): 201–32; Matti Eklund, 'Neo-Fregean Ontology', *Philosophical Perspectives* **20** (2006): 95–121.

[8]

Bob Hale and Crispin Wright, 'The Metaontology of Abstraction', in *Metametaphysics*, 181–6.

[9]

Ibid., 192.

[10]

Ibid., 193.

[11]

Ibid., 194.

[12]

Ibid.

[13]

Ibid., 209.

[14]

Bob Hale, **Abstract Objects**, Philosophical Theory (Oxford: Basil Blackwell, 1987), 3.

[15]

Ibid., 3–4.

[16]

Ibid., 4; *cf*. Hale and Wright, 'Metaontology of Abstraction', 207.

[17]

Hale, *Abstract Objects*, p. 4; *cf*. the last paragraph on 26.

[18]

Chihara notes that 'The classical Logicists, Frege and Russell, thought that there was some ontologically (or logically) basic totality- 'objects' for Frege and 'individuals' for Russell-that the lowest level variables were supposed to range over,' a view which he finds widely doubted in contemporary Anglo-American philosophy (Charles S. Chihara, *Constructibility and Mathematical Existence* (Oxford: Clarendon Press, 1990), 69). For we should not think of an object or individual as 'a particular kind of thing; it is a particular role that things of any kind may occupy: the role of subject of predication. To accept the semantics for quantification theory is not to accept any particular metaphysics of individuals' (Ibid., 70). Chihara thus questions Quine's criterion of ontological commitment because Chihara is not sure what an entity is on Quine's view. Similarly, Hale seems to have stripped objects of any ontological significance.

[19]

I note that this is how van Inwagen also understands the word, for he says that if a table were to exist, 'it would be real, a true object, actually a *thing*, a substance, a unified whole' (Peter van Inwagen, *Material Beings* (Ithaca, NY: Cornell University Press, 1990), 100).

[20]

A deflationary theory of reference developed along the lines limned by Paul Horwich, *Meaning* (Oxford: Clarendon Press, 1998) or, better, Arvid Båve, 'A Deflationary Theory of Reference', *Synthèse* **169** (2009): 51–73 allows us to use singular terms non-vacuously even though there are no objects in the world correlated with those terms. Noneists like Richard Routley have vigorously protested what he calls the Ontological Assumption (to wit, the assumption that a statement has the value *true* and is about something only if the subject of the statement refers to an existent object) underlying most contemporary theories of reference (Richard Routley [Sylvan], *Exploring Meinong's Jungle and Beyond: An Investigation of Noneism and the Theory of Items* (Canberra: Australian National University Research School of Social Sciences, 1979), 44; *cf.* 17, 22). Unlike deflationists, Noneists still share the belief that there must be an object to which reference is made, if reference is to be successful-hence, their belief in non-existent objects. Some have accused neo-Meinongians of being closet platonists; but my suspicion is quite the reverse: that insouciant platonists may, in fact, be crypto-Meinongians of some sort. For they hold that some singular terms refer to objects whose existence they deny or whose existence is widely denied.

[21]

For example, van Inwagen considers the postulation of events to be 'ontologically profligate.' 'There are, I would say, no events. That is to say, all statements that appear to involve quantification over events can be paraphrased as statements that involve objects, properties, and times-and the paraphrase leaves nothing out' (Van Inwagen, 'God and Other Uncreated Things', 14). Theodore Sider compares talk of properties in a nominalistic understanding to talk of holes:

'We talk, for instance, as if there are such things as holes... But surely there aren't *really* such things as holes, are there? What kind of object would a hole be? Surely what really exist are the physical objects that the holes are 'in': walls, pieces of cheese, shirts, and so on. When one of these physical objects has an appropriate shape-namely, a perforated shape- we'll sometimes say that 'there is a hole in it.' But we don't really mean by this that there literally exists an extra entity, a hole, which is somehow made up of nothingness' (Theodore Sider, 'Introduction', in *Contemporary Debates in Metaphysics*, Contemporary Debates in Theodore Sider, John Hawthorne, and Dean Zimmerman (ed.) *Philosophy* (Oxford: Blackwell, 2008), 2–3).

N.B. that abstract objects would similarly be entities made up of nothingness and, unlike holes, lacking even liners.

[22]

Hale, *Abstract Objects*, 4.

[23]

On which see Michael Dummett, *Frege: Philosophy of Mathematics* (Cambridge, Mass.: Harvard University Press, 1991), chap. 10. Dummett identifies §62 of Frege's *Die Grundlagen der Arithmetik* (1884) as the first example of the linguistic turn in philosophy. In what Dummett deems 'the most pregnant philosophical paragraph even written', Frege construes the question of how mathematical objects are given to us as a question concerning how the meaning of sentences containing singular terms for mathematical objects is to be fixed. Similarly, Hale is preoccupied with whether singular terms take *abstracta* as their objects, an approach which seems to me to obfuscate rather than elucidate ontology, since the notion of object as a semantic category is said to be so different than that of an object as a category of ontology. E. J. Lowe distinguishes a 'linguistic' and a 'metaphysical' answer to the question, 'What is an object?' The linguistic answer is anything that can be referred to at all, the reference of a singular term or the value of a variable of quantification. The metaphysical answer is any item that enjoys determinate identity conditions and so falls under a sortal concept (E. J. Lowe, 'Objects and Criteria of Identity', in Bob Hale and Crispin Wright (eds.) *A Companion to the Philosophy of Language*, Blackwell Companions to Philosophy 10 (Oxford: Blackwell, 1997), 616). Lowe thinks that properties, facts, and propositions are objects merely in the linguistic sense and that mathematical objects count as objects in the metaphysical sense. What does Hale think? Since he denies that abstract objects are objects in the common sense of that word and focuses on their role as referents of singular terms, it is hard to tell.

[24]

Hale later agrees with Dummett that the debate over mathematical platonism must be about the question, 'Are there true statements whose proper analysis discloses expressions purporting reference to numbers?' Although it might seem tendentious to ignore the ontological dispute in favor of the truth-value dispute, Hale finds plausible Dummett's suggestion that a dispute over the existence of certain abstract entities might be represented as a truth-value dispute by taking the disputed class of statements to consist of statements purporting reference to those entities. Indeed, the dispute is best elucidated in terms of the objective truth of statements purporting reference to such entities (Bob Hale, 'Realism and its Oppositions', in *Companion to the Philosophy of Language*, 272–3, 284–5). The general endorsement of this approach to questions of ontology, he says, admits to acceptance of

Frege's Context Principle which warns against asking after the reference of substantial expressions outside the context of complete sentences. For the implications of this approach see Dummett's comments in note 28 below.

[25]

Whether or not semantically determined objects belong in one's ontological inventory will depend on one's theory of reference. Dummett muses that Frege had a 'thin' theory of reference analogous to the redundancy theory of truth which was insufficient to bear the weight of a realistic interpretation of those terms (Ibid., 195–8; *cf*. note 28 below). Which theory of reference one prefers is apt to depend on what one thinks exists. I am therefore inclined to agree with Achille Varzi that linguistic analysis is pretty useless as a tool for drawing up an ontological inventory (Achille C. Varzi, 'Words and Objects', in Bottani, Carrara, Giaretto (eds.) *Individuals, Essence, and Identity*, Topoi Library 4 [Dordrecht: Kluwer Academic Publishers, 2002], 49–75).

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Dummett, Frege: *Philosophy of Mathematics*, 231.

[27]

Ibid., 181.

[28]

C*f*. Dummett's earlier reflections on Frege's platonism:

'When we scrutinize the doctrines of the arch-platonist, Frege, the substance of the existential affirmation finally appears to dissolve altogether. For him mathematical objects are as genuine objects as the Sun and the Moon: but when we ask what these objects are, we are told that they are the references of mathematical terms, and 'only in the context of a sentence does a name have a reference'. In other words, if an expression functions as a term in sentences for which we have provided a clear sense, i.e. for which we have legitimately stipulated determinate truth conditions, then that expression is a term (proper name) and accordingly has a reference: and to know those truth-conditions is to know what its reference is, since 'we must not ask after the reference of a name in isolation'. So, then, to assert that there are, e.g. natural numbers turnsout to be to assert no more than that we have correctly supplied the sentences of number theory with determinate truth-conditions; and now the bold thesis that there are abstract objects as good as concrete ones appears to evaporate to a tame assertion which few would want to dispute' (Michael Dummett, 'Platonism,' in *Truth and Other*

Enigmas (Cambridge, Mass.: Harvard University Press, 1978), 212–13).

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Dummett, Frege: *Philosophy of Mathematics*, 182.

[30]

Ibid., 80.

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Gideon Rosen and John P. Burgess, 'Nominalism Reconsidered', Stewart Shapiro (ed.) in *The Oxford Handbook of Mathematics and Logic*, Oxford Handbooks in Philosophy (Oxford: Oxford University Press, 2005), 525.

[32]

Ibid.

[33]

Ibid.

[34]

Van Inwagen, *Material Beings*, 107.

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John P. Burgess, 'Mathematics and *Bleak House*,' *Philosophia Mathematica* 12 (2004): 30–1.

[36]

Ibid., 19. Some of Burgess' remarks suggest that he is a sort of Carnapian conventionalist or ontological pluralist with respect to abstract objects; others of his remarks suggest at most agnosticism about what really exists. But his theological perspective–'the *only* way to make sense of questions of ontological metaphysics'–yields a clear, negative answer. Unlike van Inwagen, Burgess could recite the Nicene Creed without mental reservation–at least on grounds of platonism.

[37]

Ibid.

[38]

W. V. O. Quine, 'A Logistical Approach to the Ontological Problem', in *The Ways of Paradox*, rev. ed. (Cambridge, Mass.: Harvard University Press, 1978), 202.

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Van Inwagen, 'Theory of Properties', 131.

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D. M. Armstrong, *A Theory of Universals*: Vol. 2: *Universals and Scientific Realism* (Cambridge: Cambridge University Press. 1978), 7–12. *Cf*. Hale and Wright, 'Metaontology of Abstraction', 207–9, where they compare favorably their minimalist conception of objects and reference with the 'abundant' as opposed to sparse view of properties, in contrast to 'the anxious metaphysician' who thinks of the issue analogously to the existence of sparse properties, worrying whether one is referring to 'real properties' in the metaphysical World.