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Platonism, Nominalism, and Semantic Appearances[1]

It is widely assumed that platonism with respect to a discourse of metaphysical interest, such as fictional or mathematical discourse, affords a better account of the semantic appearances than nominalism, other things being equal. Of course, other things may not be equal. For example, platonism is commonly supposed to come at the cost of a plausible epistemology and ontology. But the hedged claim is often treated as a background assumption. It is motivated by the intuitively stronger one that the platonist can take the semantic appearances at 'face-value' while the nominalist must resort to ad hoc and technically problematic machinery in order to explain those appearances away [Benacerraf 1973, 661]. With respect to mathematics, Cole writes,

> Mathematical platonism enjoys widespread support and is frequently considered the default…position…This is unsurprising given [that] mathematical platonism takes at face-value such well known truths as that 'there exist' an infinite number of prime numbers [2010].

Linnebo claims,

> [Platonism] enjoys strong prima facie plausibility. For the language of mathematics strongly appears to have the same semantic structure as ordinary non-mathematical language….This appearance is also borne out by the standard semantic analyses proposed by linguists and semanticists [Linnebo 2018].

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And Balaguer says,

> [Platonists] take mathematical theory at face value, that is, adopt a realistic semantics for mathematese. Therefore, they…think that our mathematical theories are straightforwardly *about* abstract mathematical objects…[1995, 153, italics in original].

In this article, I argue that, on any natural construal of 'face-value', the platonist, like the nominalist, is not able to take the semantic appearances at face-value. And insofar as the nominalist is forced to resort to ad hoc and technically awkward devices in order to explain those appearances away, the platonist must resort to such devices too. One moral of the story is that the thesis that platonism affords a better account of the semantic appearances than nominalism – even other things being equal – is not trivial. Another is that we should rethink a widespread methodology in metaphysics.

1. Platonism and Nominalism

Consider the following areas of discourse:

(1) Fiction

(2) Mathematics[2]

(1) and (2) have at least two features in common. First, (1) and (2) contain numerous sentences that prima facie seem to be true.[3] For example, the following two sentences, corresponding to (1) and (2), respectively, prima facie seem to be true. (A student would correctly circle 'true' next to (1a) or (2a) on a true/false exam about the Holmes fiction or numbers, for example.)

(1a) Sherlock Holmes lives in London.

[2] I begin with (1) and (2) for expository reasons only. As will become clear in Section 5, the argument to follow does not depend on one's views about any single area, such as fiction.

[3] This is commonly granted by metaphysicians and philosophers of mathematics (see, e.g., Wolterstorff [1979] or Field [1980, Introduction]), but less often by more linguistically-oriented philosophers (Currie [1990], Lewis [1978], Walton [1990]). With respect to fiction Howell writes, 'Taken at face value, 'Anna Karenina is a woman' seems true.' [1998, 659], and with respect to mathematical discourse, Swoyer writes 'Many sentences of arithmetic, e.g., '7 + 5 = 12' certainly seem to be true…' [2000, 4.1].

(2a) 2 is prime.

The second thing that (1) and (2) have in common is that the truth of many sentences from those areas seems to presuppose that there are objects which are commonly thought by metaphysicians to be abstract. For example, (1a) seems to be such that it could only be true if there were a fictional object, Holmes, and fictional objects are commonly thought by metaphysicians to be abstract. Similarly, (2a) seems to be such that it could only be true if there were a mathematical object, the number 2, and mathematical objects are commonly thought by metaphysicians to be abstract.

Let us call an area of discourse that shares these features an *abstract* area. And let us call the following view about an area, *D*, *platonism* about *D*.

> There are the objects that seem to be referred to or quantified over in apparently true sentences from *D*.[4]

Then platonism about fiction is the view that there are fictional characters, fictional houses, fictional countries, and so on.[5] And platonism about mathematics is the view that there are numbers, (pure) sets, tensors, and so forth.[6]

In contrast to platonism, let us define *nominalism* about an abstract area, *D*, as the view that there are no objects that platonism about *D* entails that there are. That is, nominalism about *D* is the following view.

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[4] 'Platonism', as I have defined it, does not build in that the alleged objects really are abstract, much less non-contingent (see Abell [2020]), 'outside' of spacetime, and so on. (I will return to these issues in Sectio 6.) I use the label for lack of alternatives. Of course, few platonists in this sense take the disputed objects to be Ideas, in the sense of Plato.

[5] I do not say 'there exist' for reasons that will become clear in Section 8. For discussions of platonism about fiction, and the thesis that (at least some) sentences from that discourse have the logical forms and truth-values that they seem to, see Kripke [1973], van Inwagen [1977], Wolterstorff [1980], Salmon [1998], and Thomasson [1999].

[6] For discussions of platonism about mathematics (besides those referenced in the Introduction), and the thesis that sentences from that discourse have the logical forms and truth-values that they seem to, see Quine [1948], Gödel [1964], Putnam [1972], Maddy [1990], or Shapiro [1997].

> It is not the case that there are the objects that seem to be referred to or quantified over in apparently true sentences from *D*.

So, nominalism about fiction is the view that there are no fictional characters, fictional houses, fictional countries, and so forth. And nominalism about mathematics is the view that there are no numbers, sets, tensors, and so on.[7]

2. A Weakness of Nominalism

It is widely believed to be a major weakness of nominalism about an abstract area is that the nominalist cannot take the semantic appearances at 'face value'. Thus, while it seems that, say, (2a) is both of the logical form *a is F* (or, alternatively, of the form *there is a unique G that is F*), and also true, nominalism about (2) entails that this is not so. Nominalism entails that, contrary to appearances, (2a) is either false, or not actually of the logical form *a is F*.

Nominalists have various strategies for explaining these appearances away. For example, *error-theoretic* nominalists with respect to mathematics, or those who deny the appearance that mathematical sentences are literally true, contend that it is nevertheless *as though* they were true in some important respect. They might claim that mathematical sentences conservatively extend the 'nominalistic' implications of our best scientific theories,[8] or that they pragmatically convey non-mathematical propositions which are literally true, for example.[9]

Similarly, *paraphrase nominalists* about mathematics, or those who deny the appearance that mathematical sentences have the logical forms that they seem to, propose that mathematical sentences are like 'The average American lives to be 77.28' – which, while appearing to presuppose the existence of a suspect object, The Average American, does not in fact. They might maintain that (2a) is shorthand for the claim that, according to a contextually determined theory, 2 is prime,[10] or the claim that it is in some sense possible that 2 is prime, for example.[11]

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[7] 'Nominalism' has been used in innumerable ways. The present use is stipulative.
[8] See Field [1980] and [1989]. For skepticism about a useful concrete/abstract distinction as it appears in the work of nominalists like Field, see Clarke-Doane [2022, 2.2].
[9] See Edidin [1994].
[10] See Szabo [2003]. This view is also suggested by Field [1980].
[11] See, for example, Hellman [1989] or Chihara [1990].

There are two familiar criticisms of nominalist explanations of the apparent truth and logical form of sentences from abstract areas. First, they are ad hoc.[12] What reason, it is rhetorically asked, do we have for thinking that it is merely as though (2a) were true that is independent of error-theoretic nominalism with respect to (2)? Or, again, what reason do we have for holding that (2a) is like the sentence 'The average American lives to be 77.28' besides paraphrase nominalism with respect to (2)? A common refrain is that we have no such reason.

The second criticism of nominalist explanations is that they face technical obstacles.[13] For example, the paraphrase nominalist who holds that a mathematical sentence, *S*, is shorthand for the claim that, according to some relevant mathematical theory, *T*, *S*, will presumably want to allow that there are true mathematical sentences which are undecidable with respect to *T*. In particular, when *T* is a (recursively axiomatized) mathematical theory interpreting Peano Arithmetic (*PA*), such as *ZF* or *PA* itself, the paraphrase nominalist will presumably concede that a canonical consistency sentence for *T*, Con(*T*), is true. But this would seem to conflict with her paraphrase strategy insofar as Con(*T*) is not a (first-order) consequence of *T* (if *T* is consistent).

3. A Virtue of Platonism?

Unlike nominalism, it is widely agreed that a major *virtue* of platonism about an abstract area, *D*, is that the platonist can take the semantic appearances at 'face value' – whatever platonism's epistemological or ontological liabilities.[14] After all, platonism about *D* allows that sentences of *D* have the logical forms and truth-values that they seem to. So, given that there are no *additional* semantic appearances that are inconsistent with platonism, it affords a better account of the semantic appearances than nominalism – other things being equal.

However, on any natural construal of 'semantic appearances', there are additional semantic appearances with respect to any abstract area, *D*, besides the apparent truth-values and logical

[12] See, for instance, Loux [2006, Ch. 2].
[13] See, for instance, Hoffman and Rosenkrantz [2003]. (They focus on different problems than the one that I raise presently.)
[14] See, for example, Benacerraf [1973], Jubien [1997], Rosen and Burgess [1997], Thomasson [1999], Shapiro [2000], Loux [2006], and the sources quoted in the Introduction.

forms of sentences from *D*. There are the apparent *properties predicated* in sentences from *D*. For example, besides appearing to be true and of the logical form *a is F*, 'Biden is president' appears to predicate Biden the property had by Obama, Bush, and so forth rather than the property of being made of wood, having spin, or being non-spatio-temporal. It is possible, by the Completeness Theorem, to *merely* honor the apparent truth-values and logical forms of *every (first-order) consistent sentence whatever* by interpreting the sentence in a domain of pure sets. But there is no useful sense in which a Pythagorean (who holds that everything is a mathematical object) takes the semantic appearances at 'face value'! This point is sufficiently banal that it appears to have gone generally unexamined.[15] While platonists have long emphasized that they can take the first two semantic appearances at face value, they have rarely gone on to argue that they can take this last one that way too. Can they do this?

4. A Problem for Platonism

There is a simple argument that seems to show that platonists cannot take sentences from an abstract area to predicate the properties that they seem to, given that they also take them to have the truth-values and logical forms that they seem to have. To see this, let us begin by revisiting:

(1a) Sherlock Holmes lives in London.

Suppose, as before, that two of the semantic appearances with respect to (1a) are, like (2a), that it is true and of the logical form *a is F*. What about the appearance that the predicate 'lives in London', as it occurs in (1a), expresses the property of living in London -- rather than the property of being red, being finite, or living in Los Angeles? Prima facie, (1a) predicates the same property of Sherlock Holmes as 'Conan Doyle lives in London' does of Conan Doyle (Parsons [1980, 115], Reicher [2019], Zemach [1993]). But if 'lives in London', as it occurs in (1a), expresses the property of living in London, then absurdity seems to follow. If (1a) is true, and of the logical form *a is F*, then it seems to follow that there exists an object, referred to by 'Sherlock Holmes', which satisfies the predicate 'lives in London'. And if 'lives in London', as

[15] Something like the problem that I will raise has been recognized in the case of fiction by Zemach [1993], Howell [1998], Maier [2017], Thomasson [1999], Reicher [2019], and Semeijn & Zalta [2012]. But it has not, as far as I know, been raised in the form and generality that I will raise it here. See also the references in Section 8.

it occurs in (1a), expresses the property of living in London, then, apparently, Sherlock Holmes exists and instantiates the property of living in London! But, then, something must have gone wrong. Anyone who sincerely went looking for Holmes in London would be out of their mind.[16]

The simple argument makes two assumptions besides that (1a) has the truth-value and logical form, and predicates the property, that it seems to. First, it assumes that if a sentence of the form *a is F* is true, then the thing referred to by '*a*' must *exist* (there are no nonexistent things). Second, it assumes that if an object has a property, then it *instantiates* that property (there is no other way to have a property). I return to these assumptions in Section 8. But each of them is widely granted by platonists themselves. So, let us first discuss the generality of the problem.

5. The Generality of the Problem

It is tempting to think that the problem is peculiar to platonism about fiction. Platonism about fiction is, after all, a contentious view. It would be unremarkable if the semantic appearances in fiction alone were somehow incoherent. In fact, however, the problem is very general. *When interpreted at face-value, apparently true sentences from all manner of abstract areas involve the predication of properties to objects that cannot seriously be thought to instantiate them*.

To see this, let us consider the following sentences, corresponding to (2) mathematical, (3) natural kind, (4) 'nonexistent' object, (5) aesthetic, and (6) type discourses, in turn:

(2b) Every regular decagon has 10 sides of equal length.[17]

(3b) The Polar Bear lives in the Arctic.[18]

[16] Note that it is irrelevant to this argument whether Holmes would be non-contingent.
[17] This is a simple example. Virtually any claim of synthetic geometry, including typical theorems of Euclid's *Elements*, even as rigorized in Hilbert [1899/1980], would serve. There are other examples too. One of them – the theory of finite strings - is especially important from an epistemic point of view. I will return to this shortly.
[18] See Liebesman [2011] for this point about generics, and Leslie and Lerner [2016] for complications. For a defense of platonism about natural kinds, and the view that sentences from that area have the truth-values and logical forms that they seem to, see Wolterstorff [1970] and Lowe [1989].

(4b) Vulcan is a planet between the Sun and Mercury.[19]

(5b) Mozart's *Requiem* is in the key of D minor.[20]

(6b) The letter 'O' is oval in shape.[21]

(2) – (6) each constitutes an abstract area. And each of (2b) – (6b) seems to afford an example from (2) – (6), respectively, of a sentence that is both true, and such that it could only be true if there existed an object that is commonly thought by metaphysicians to be abstract. However, each of (2b) – (6b) *also* seems to involve the predication of a property that the target object could not seriously be thought to instantiate.

The problem, at first pass, is that abstract objects could not have sides or shape, live on a certain continent, orbit the Sun, or have tonal qualities. Such features entail spatial ones, like length, (relative) position, and wavelength. I say 'at first pass', because this makes it sound like the platonist could avoid the problem by offering a new account of abstract objects, or by denying that the relevant objects would be abstract in the first place. On the contrary, *no matter what* The Polar Bear is, it cannot be seriously thought to live in the Arctic along with its instances.[22] Similarly, no matter what Vulcan is, it cannot be located between the Sun and Mercury. (We have checked!) Even (2b) and (6b) are unbelievable when interpreted at 'face-value'. To maintain that, for example, letter types (whatever they are) literally have shapes would be to revert to a historically Platonic metaphysic, according to which, corresponding to any particular letter 'O' is the *archetype* 'O' which literally resembles its instances with respect to shape.[23]

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[19] For a defense of platonism about 'nonexistent' objects, and the view that (at least some) sentences from that area have the logical forms and truth-values that they seem to, see Caplan [2004]. See Salmon [1998] or [2002] for a related view.

[20] For a defense of platonism about all or part of aesthetics, and the view that sentences from that area have the truth-values and logical forms that they seem to, see Wolheim [1968], Wolterstorff [1975] and [1980], Levinson [1980], Kivy [1983], or Dodd [2007].

[21] For a defense of platonism about types, and the view that sentences from that area have the truth-values and logical forms that they seem to, see Cameron [2000], Broomberger [1992], and especially Wetzel [2002] and [2009].

[22] Clearly similar points apply to (1b). No matter what Sherlock Holmes is, he could not literally live in London (assuming that this means that he exists, and instantiates the property of living there). More on this in Section 8.

[23] Such a view would raise many awkward questions. If something has shape, then it would seem to need to occupy space(time). Where are the archetypes? Do they interact with the strong, electro-weak and gravitational forces? Or do they constitute an 'extra-dark' kind of dark matter that fails to even interact with gravity?

Before discussing how the problem complicates any 'platonic semantics', let me emphasize that it is not limited to sporadic and awkward examples (though these would be enough to undercut platonism's claim to a uniform face-value semantics a la Benacerraf [1973]). Finitistic work in the foundations of mathematics is commonly premised on exactly the view of types that I am criticizing.[24] It assumes that, unlike numbers, a proof is 'surveyable', a 'concrete object...a finite configuration...of recognizable symbols' [Huber-Dyson 1991, 16]. Proofs are made of symbol *types*, like The Letter 'O'. When one says that there is no proof of '0 = 1' in *PA*, for example, one does not mean that none happens to have been instantiated. Hilbert [1983/1936] obscures this when he writes 'In number theory we have the numerical symbols *1*, *11*, *111*, *1111* where each numerical symbol is intuitively recognizable by the fact it contains only *1*'s.…*3* > *2*… communicate[s] the fact that...the...symbol [*2*] is a proper part of the [symbol *3*] [1983/1926, 193].' Hilbert must have in mind symbol types because otherwise it would be a doubtful empirical hypothesis that every number has a successor (there may be a longest concrete string). However, it is far from clear that *2* is a proper part of *3*, for it is unclear whether types have parts. It is even misleading to suggest that 'The relations of dependence between...the axioms and the theorems' are 'fully 'visible': their properties and features...read off from the purely syntactic and structural connections between (the shapes of) the strings [Berto 2009, 41].'[25] As objects which lack shape, and fail to deflect photons, proofs are no more surveyable or visible than numbers.

The upshot is that a wide range of apparently true sentences from abstract areas seem to involve the predication of properties to objects that cannot seriously be thought to instantiate them. The problem cannot be dismissed as a technical one that only applies to claims of fiction, for example. It is likely to infect epistemological and ontological discussions across philosophy.

[24] See Wetzel [2002] for cognate discussion.

[25] Among other leading mathematical and logical theorists, Bourbaki [1970, Chapter 1] seems not to appreciate the epistemological distinction between types and tokens. Later, however, Chavelley, a leading figure of the Bourbaki group, does appear to have recognized the problem. In an interview, he laments, 'the idea of a symbol which is 'the same,' although written in different places and at different times, is not at all an idea that stands by itself. But it must stand by itself if one has this conception…of mathematics. Not only can this idea not possibly be realized, but its content is absurd. A symbol cannot possibly be 'the same' if it does not have an aura of signification. There…is an appeal to something human that contradicts the idea of a perfect 'horizon' [i.e., complete rigor] [Guedj, 1985].'

6. A Weakness of Platonism

There is, then, a tangible sense in which the platonist, like the nominalist, cannot take the semantic appearances at 'face-value' either. She cannot understand arbitrary sentences from abstract areas to predicate the properties that they seem to – at least insofar as she understands those sentences to have the truth-values and logical forms that they seem to have as well.

Again, the argument for this assumes, provisionally, that there are no nonexistent things, and that the only one way to have a property is to instantiate it. (I return to these assumptions in Section 8.) But since these assumptions are widely granted by platonists themselves, how might platonists explain the semantic appearances away without contravening these assumptions? The most straightforward way is to hypothesize that predicates are systematically ambiguous. They express certain properties when predicated of the likes of mountains, people, and atoms, and distinct, but related, properties when predicated of the likes of numbers, fictional characters, and natural kinds. For example, at first approximation, the platonist about fiction might propose that a predicate, '*F*', when predicated to a fictional object, expresses the property of being such that, according to the pertinent fiction, it has the property that is commonly expressed by '*F*' (where there is presumably no difficulty arising from a fictional character's having this property).[26]

There are two problems with this proposal. The first is that it is ad hoc, like corresponding nominalist ones. If there is no reason to deny that the sentence 'Sherlock Holmes lives in London' has the truth-value or logical form that is independent of nominalism, then it is hard to think of a reason to deny that the sentence *predicates the property* that it seems to which is independent of platonism. The nominalist and platonist proposals are both unnatural in some respect. Indeed, the platonist interpretation is a near mirror image of a simple paraphrase nominalist interpretation. Where the envisioned platonist tells us, roughly, that 'Sherlock Holmes lives in London' is true just in case Holmes is such that, according to the Holmes fiction, he lives in London, the paraphrase nominalist tells us, roughly, that the sentence is true just in case, according to the Holmes fiction, Holmes lives in London! Of course, there are differences between these readings. The platonist's preserves the apparent logical form of the sentence,

[26] For discussions of proposals in the vicinity of this one, see Kripke [1973], van Inwagen [1977], Salmon [1998], Thomasson [1999], or Caplan [2004].

while the paraphrase nominalist's does not. But, then, the paraphrase nominalist's reading preserves the apparent property predicated by the sentence, while the platonist's does not.

The second problem with the proposal is that it is vulnerable to the charge of being technically awkward, again like corresponding nominalist ones. For example, the paraphrase nominalist notoriously cannot understand *all* sentences on the model just proposed because it is false that, e.g., according to the Holmes fiction, Sherlock Holmes is more famous than any real life detective. But 'Sherlock Holmes is more famous than any real life detective' is apparently true.[27] So, the nominalist must distinguish between sentences apparently about fictional objects that occur 'in' the fiction and those that do not. They will then need to suggest that we only understand sentences that occur in the fiction on the aforementioned model. They might, for instance, have us understand other apparently true sentences counterfactually (*if there had been* fictional characters, Sherlock Holmes *would* have been more famous than any real life detective), or perhaps according to *another* fiction, like the fiction of literary criticism. But this will generate difficulties. For instance, nominalists about fiction might claim that fictional characters, being abstract, exist or not of *necessity*.[28] But, if fictional objects fail to exist of necessity, then on a standard semantics for counterfactuals, 'if there had been fictional characters, Sherlock Holmes would not have been more famous than any real-life detective' is also (vacuously) true.

Just so, the platonist must distinguish between 'internal' and 'external' predications. While the platonist can understand 'internal' predications according to the model above ('Sherlock Holmes lives in London' is true just in case Sherlock Holmes is such that, according to the Homes fiction, he lives in London), they will need to understand 'external' predications, or those that occur outside of the fiction, differently. And while it might be thought that the platonist could just take external predications at 'face-value', this is not at all obvious. For example, outside the fiction we may say 'Conan Doyle created Sherlock Holmes'. But, again, if Holmes is abstract, and abstract objects exist or fail to exist of necessity, then this sentence must be literally false.[29]

[27] See, again, van Inwagen [1977].
[28] Williamson [2017, 199-200] objects in this way to a kind of 'paraphrase nominalism' about mathematics.
[29] See Kivy [1983] for the view that composers discover their artworks, qua abstract objects, as scientists discover their (true) theories. Another problem with the view that Doyle created Holmes is to say *when* he did this. 'When' is not defined in (special or general) relativity. The answer 'simultaneous with Doyle's imaginative act as determined by someone on earth' picks out a very different simultaneity slice than the answer 'simultaneous with Doyle's imaginative act as judged by a person walking on the surface of a planet in the Andromeda galaxy'.

7. The Generality of the Weakness

As before, it might be worried that there is something special about fiction such that platonism about it is vulnerable to the difficulties. In fact, analogous points generalize to (2) – (6).

Platonists about areas that speak of particulars quite generally, such as 'nonexistent' object, and, perhaps, mathematical, discourse, will presumably want to adopt readings of the corresponding sentences that are like the ones just mentioned. (If mathematical objects are repeatables – i.e., types or kinds – then problems discussed in the following paragraphs apply to platonism about mathematics.) For example, the platonist about nonexistent objects may understand (4b), roughly, as ascribing Vulcan the property of being such that, according to a certain false physical theory, it is between Mercury and Venus.[30] And the platonist with respect to mathematics may understand (2b) as ascribing every regular decagon the property of being such that, according to synthetic geometry, it has 10 sides of equal length. However, such readings inherit technical problems, and the ad hoc flavor, of platonist readings of fiction. For example, the problem of undecidables for the paraphrase nominalist about mathematics (Section 2) reappears almost unchanged for the platonist. It is indeterminate whether every number is such that, according to *T*, it fails to code a proof of '0 = 1' from *T* if it is indeterminate whether according to *T*, Con(*T*).

Platonist proposals about areas that speak of 'repeatables', such as natural kinds, types, and musical works, face like difficulties. The platonist about these areas may claim, at first, that a predicate, '*F*', when predicated of a repeatable, expresses the property of being such as to only be instanced by particulars which have the property commonly expressed by '*F*'.[31] For example, the platonist about natural kinds may understand (3b) as ascribing The Polar Bear the property of being such as to only be instanced by particular polar bears which live in the Arctic. And the platonist about musical works may understand (5b) as ascribing Mozart's *Requiem* the property of being such as to only be instanced by particular soundings which are in the key of D minor.

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[30] For proposals in the ballpark, see Salmon [1998] and [2000] or Caplan [2004].
[31] For proposals along these lines, see Wolterstorff [1970], Lowe [1989] and [1993], or Cameron [2000].

However, if corresponding nominalist proposals are ad hoc, then so are these. Just as it is hard to think of a reason to deny that the sentence 'The Polar Bear lives in the Arctic' has the logical form or truth-value that it seems to which is independent of nominalism about natural kinds, it is hard to think of a reason to deny that this sentence predicates the property that it seems to which is independent of platonism. Again, the proposal is a near mirror image of a simple paraphrase nominalist one. Where the platonist tells us that 'The Polar Bear lives in the Arctic' is true just in case The Polar Bear is such as to only be instanced by particular polar bears that live in the Arctic, the paraphrase nominalist tells us that this is true just in case particular polar bears live in the Arctic!

Likewise, such proposals inherit technical problems of nominalist ones. For example, the paraphrase nominalist about natural kinds cannot understand *all* sentences apparently about natural kinds on the model just proposed, because while it is true that The Polar Bear lives in the Arctic, it is also true that some polar bears do not (so, 'The Polar Bear lives in the Arctic' cannot be true just in case all particular polar bears live in the Arctic). The nominalist will thus need to introduce a notion of normality (or proper-formedness) into their analysis, and understand 'The Polar Bear lives in the Arctic' accordingly. To a first approximation, The Polar Bear lives in the Arctic, according to the paraphrase nominalist, just in case *normal* polar bears live in the Arctic. The platonist about natural kinds is in an analogous position. Rather than understanding the sentence as ascribing the property of being such as to only be instanced by particular polar bears which live in the Arctic, she will need to understand it, roughly, as ascribing the property of being such as to only be *normally* instanced that way.[32] If the introduction of this new normative notion causes problems for the paraphrase nominalist, it will cause problems for the platonist.

In fact, the platonist faces problems that the paraphrase nominalist does not. When the metaphysician says that The Polar Bear is abstract and multiply-instantiatable, she does not predicate it the properties of being such as to only be normally instanced by particulars which are abstract and multiply-instantiatable. The platonist about natural kinds, like the platonist about fiction, must thus partition predications. Whether there is a principled such partition deserves additional consideration (see Wolterstorff [1970], [1975], and [1980] for relevant discussion).

[32] See Wolterstorff [1970] and [1980].

8. Existence and Attribute

I have argued that, contrary to the common wisdom, the platonist cannot take the semantic appearances at 'face-value', and have suggested that the platonist requires comparably ad hoc and technically problematic machinery in order to explain those appearances away. But this argument relied on two assumptions which, while widely accepted by platonists themselves, are not incontrovertible. Could the argument be resisted by denying either of these assumptions?[33]

Let us begin with the assumption that there are no nonexistent things. It might be thought that the 'platonist' (the term takes on misleading connotations in this context)[34] could hold that 'Sherlock Holmes lives in London' is true because there (merely) *is* an object (it does not exist), Holmes, who instantiates the property of living in London (Parsons [1980]). But, worries about nonexistent objects aside, this proposal does not address the problem. It remains to explain why we would be insulated from the inhabitants of London who merely *are*. If Holmes literally lives in London, in exactly the sense that Mick Jagger does (as Parsons [1980, 115] suggests) – at, we may add, 221B Baker Street -- then we should find him there. While the behaviorists no doubt overstated the case, this is a large part of what it *means* to say that Holmes (literally) lives there.

Moreover, even if this proposal worked in connection with fictional and nonexistent object discourse, it would not help with (2) mathematical, (3) natural kind, (5) aesthetic, and (6) type discourse. No platonist of which I am aware wishes to deny that The Polar Bear, The Letter 'O', and Mozart's *Requiem*, exist. It is not just that they *are*. But, again, they also satisfy predicates like 'lives in the Arctic'! So, even if the platonist could explain how Holmes instantiates the property of living in London by distinguishing being from existence, there would remain the problem of explaining how *existent* entities like the aforementioned instantiate such properties.

[33] See Mally [1912], Castanieda [1974], van Inwagen [1977], Rappaport [1978], and Fine [1982] for additional discussion.
[34] Recall that I defined platonism (Section 1) as the view that there are the disputed objects, not that they exist. So, the theorist under consideration qualifies as a platonist on my taxonomy.

What about the second assumption, that there is only one way to have a property? Zalta [1983] argues that an (abstract) object can 'encode' properties without instantiating them. If so, and if Holmes is abstract, then maybe we run no risk of running into him in London because he merely encodes the property of living there. By contrast, we may spot Jagger, because he has this property in a more potent way – he instantiates it. However, even bracketing doubts about encoding, this view is objectionable for the reason that those discussed in Sections 6 & 7 are. It denies the semantic appearance that Holmes literally lives in London (Reicher [2014, 5.4]). (Even if a *nonexistent* Holmes could literally live there, in principle undetectable, an *existent* Holmes could not!)

This proposal is also ad hoc and technically thorny in much the way that standard platonist views are. Why suppose that Holmes has the property of living in London in a different manner than Jagger which is independent of platonism about fiction [Thomasson 1999, 103, 105]? True, the standard platonist claims that predicates are ambiguous, while the encoding theorist need not. But, then, the encoding theorist maintains that compulas are ambiguous, while the standard platonist need not. At first pass, the encoding theorist claims that Holmes encodes a property, *F*, just when the standard platonist holds that Holmes instantiates the property of being such that, according to the Holmes fiction, he has the property commonly expressed by '*F*'. The problems of Sections 6 & 7, therefore, have analogs in present context. For example, we saw that the standard platonist must demarcate between predicates which, when ascribed to the likes of Holmes, express the properties that they standardly do, and those that do not. The predicate 'is abstract', when ascribed to Holmes, expresses the property of being abstract, while the predicate 'lives in London', when so ascribed, expresses the property of being such that, according to the Holmes fiction, he lives in London. In the present setting, this is just the problem of demarcating between predicates in which copulas are ambiguous and those in which they are not.

To sum up: it does not appear that one can avoid the problem raised here even by taking the radical step of claiming that there are nonexistent things, or different ways to have a property.

9. Platonism, Nominalism, and Methodology

I have raised doubts for the familiar view that the platonist about abstract areas can take the semantic appearances at 'face-value', and have suggested that the platonist requires comparably ad hoc and technically suspect machinery in order to explain those appearances away. These arguments have three consequences for the platonism-nominalism debate and its methodology.

First, the thesis that platonism affords a better account of the semantic appearances than nominalism – even other things being equal – is not trivial. It is substantive and deserves careful scrutiny on a case by-case basis. It certainly does not deserve the place in metaphysics that it seems to enjoy – that of a practically universally-granted background assumption. In particular, we should not assume that while platonism comes at the cost of a plausible epistemology, or ontology, nominalism comes at the cost of a plausible semantics (Benacerraf [1973], Loux [2006]). In light of what has been said, there is no evident sense in which nominalism does come at the cost of a plausible semantics, compared to platonism. Perhaps further investigation will reveal that it does. Maybe the platonist could explain away the relevant appearances in terms of pragmatics, while the nominalist would be unable to similarly dismiss the appearances that they reject. The point is that this needs argument given that neither the nominalist nor the platonist can take the semantic appearances at 'face-value' – contrary to the quotations that begin this article.

Second, we should be wary of semantic appearances (or even more wary than we already are). The arguments offered here suggest that they are inconsistent on a systematic scale, given widely accepted assumptions. In particular, the following three appearances with respect to an abstract area of discourse, *D*, are inconsistent, given widely accepted background assumptions:

(a) The apparent *truth-values* of sentences from *D*.

(b) The apparent *logical forms* of sentences from *D*.

(c) The apparent *properties predicated* in sentences from *D*.

Finally, we should get out of the market for a theory that can save the semantic appearances generally. No theory can do that (even if some theories can save more of them than others). With respect to semantic appearances that I have considered, the situation is as follows:

The *paraphrase nominalist* can save (a) and (c) at the expense of (b).

The *error-theoretic nominalist* can save (b) and (c) at the expense of (a).

The *platonist* can save (a) and (b) at the expense of (c).

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