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How to Be a Fictionalist About Material Constitution (and Just About Anything Else)

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In this chapter, I will do two things. First (in Section 1), I'll develop a general strategy for constructing fictionalist views of controversial objects (e.g., abstract objects, composite objects, temporal objects, and so on). Second (in Section 2), I'll develop and motivate a special case of this general sort of view—namely, a fictionalism about coincident objects.

1 How To Be a Fictionalist About Controversial Objects

1.1 Error-Theoretic Fictionalism

I want to start by saying a few words about a certain argument strategy that philosophers often use to argue for controversial objects. The strategy I have in mind can be summed up as follows: (1) locate a category of ordinary sentences that seem obviously true and (2) argue that the sentences in question can be true only if objects of some controversial kind exist. For example, Platonists argue that mathematical sentences like "3 is prime" can be true only if there are abstract objects; modal realists argue that sentences like "There are two ways the election could turn out" can be true only if there are non-actual possible worlds; eternalists argue that ordinary sentences about the past

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(and future)—e.g., "Elizabeth is a direct descendant of William the Conqueror"—can be true only if there exist past (and future) objects; and mereological universalists argue that sentences about medium-sized objects—e.g., "There's a table in my dining room"—can be true only if there are composite objects (i.e., objects with proper parts).

One way to respond to arguments like this is to admit that the truth of the relevant ordinary sentences does depend on the existence of objects of the relevant controversial kind and then to claim that, since the relevant objects don't really exist, the relevant sentences aren't true. We can call views of this kind *error theories*.

Now, sometimes when we endorse an error theory, we can just say that the sentences in question are false and leave it at that; e.g., this seems like the right thing to do in connection with the claims of astrology. But the sentences I'm concerned with here—sentences like "3 is prime" and "There's a table in my dining room"—are obviously very useful to us, and, what's more, there's clearly something right about them. So, in order to defend an error theory about sentences like these, we need to provide an account of the sense in which these sentences are "right," or "correct," despite the fact that they're not literally true, and we need to explain why these sentences are so useful to us, why they seem so obvious to us, and so on.

I think there's a general strategy for explaining these things that works in connection with error theories about many different kinds of controversial objects. The strategy involves the adoption of a certain sort of fictionalism—or, as I'll call it, error-theoretic fictionalism (ETF). In the remainder of this section, I'll develop this general strategy, mostly by articulating some specific instances of ETF.

1.2 Mathematical ETF

I begin by developing *mathematical ETF*. The first component of this view is the following:

Mathematical Error Theory: (a) The Platonist semantics for mathematics is correct—that is, our mathematical sentences and theories

are about (or at least purport to be about) abstract objects; but (b) there are no such things as abstract objects; and so (c) our mathematical sentences and theories are not true.1

In order to defend this view, one thing we would need to do is account for the objectivity and factualness of mathematics. Consider the sentences "3 is prime" and "4 is prime." According to error theory, both of these sentences are untrue. But there's obviously some sense in which the former is right and the latter is wrong. Error theorists can't just throw all of mathematics into the garbage; they need to tell some story about how our mathematical theories are right, or correct, even if they're not literally true.

Field (1989) tried to meet this challenge by claiming that the difference between "3 is prime" and "4 is prime" is analogous to the difference between "Santa Claus is jolly" and "Santa Claus is mean." In particular, the difference is that "3 is prime" is part of a certain well-known mathematical story, whereas "4 is prime" is not. Field expressed this idea by saying that "3 is prime" is true in the story of mathematics. This is a good start, but error theorists need to say what this means. Field's view (1998) is that (a) the story of mathematics consists in the axiom systems that are currently accepted in the various branches of mathematics, and (b) truth in this story essentially amounts to following from these axioms. I've argued against this view elsewhere (2009). Mathematical ETF-ists of the kind I have in mind employ the following definitions instead: (a) the story of mathematics is just Platonism (or, more specifically, plenitudinous Platonism—i.e., the claim that there's a plenitude of abstract objects); and (b) a sentence is true in the story of mathematics iff it would have been true if (plenitudinous) Platonism had been true (or, perhaps better, if there had actually existed a plenitudinous realm of abstract objects).

So mathematical ETF-ists claim that while "3 is prime" isn't strictly speaking true, it's true in the story of mathematics. Moreover, according to ETF-ists, truth in the story of mathematics is an important kind of correctness—we might call it fictionalistic correctness. To

see how ETF-ists can motivate this claim, notice first that truth in the story of mathematics is, on the ETF-ist view, perfectly objective and factual. For, according to ETF-ists, to say that, e.g., "3 is prime" is true in the story of mathematics is just to say that the following nearby sentence is literally (and objectively) true: "If plenitudinous Platonism had been true, then 3 would have been prime." Moreover, the sentences that come out true in the story of mathematics on the ETF-ist view are exactly the same as the sentences that come out true on the Platonist view; in other words, Platonists and ETF-ists divide the mathematical sentences into "good" ones and "bad" ones in an extensionally equivalent way.

It's important to distinguish ETF from if-thenist views of the kind put forward by, e.g., Horgan (1984). On Horgan's view, "3 is prime" is best read as saying that if there had been numbers, then 3 would have been prime, and so this sentence is true (and so Horgan isn't a fictionalist at all). ETF, on the other hand, doesn't say that the counterfactual provides the real content of "3 is prime"; rather, it says that the fictionalistic correctness of "3 is prime" is grounded in the literal truth of the counterfactual.²

You might complain that it's not very helpful to appeal to counterfactuals in an attempt to avoid committing to abstract objects because counterfactuals commit to the existence of possible worlds. But I think this is wrong; I can't argue for this here, but I think counterfactuals of the above kind can be true even if there are no such things as possible worlds. (You might also worry that if ETF-ists say that mathematical objects couldn't exist, then these counterfactuals will be counterpossibles. But while I can't argue for these two points here, I think that [a] counterpossibles can be [nonvacuously] true, and [b] anti-Platonists should endorse contingentism about abstract objects.)

In addition to accounting for the objectivity and correctness of mathematics, ETF- ists also need to account for (a) the usefulness of mathematics in scientific and ordinary discourse and (b) the harmlessness of

¹ Views of this kind are developed in Field (1989), Balaguer (1998, 2009), and Leng (2010).

² I think we have good reasons to doubt this sort of if-thenism because we have good reasons to endorse the Platonistic semantics of mathematical discourse. I argue for this in Balaguer (1998), but I can't get into it here.

the fact that mathematics isn't literally true (i.e., they need to explain why we don't get into trouble by relying, in science and everyday life, on theories that aren't true). These two issues are deeply related to the Quine- Putnam indispensability argument. The idea behind this argument is that we have to say that our mathematical theories are true because they're inextricably woven into our best empirical theories, which we think are true.³ I can't give a full response to this argument here, but the following is a quick summary of what I think mathematical ETF-ists should say (for more, see Balaguer, 1998).

If there are any such things as abstract objects, then they're causally inert. But, given this, it follows that the truth of empirical science depends on two sets of facts that hold or don't hold independently of one another. One of these sets of facts is purely Platonistic and mathematical, and the other is purely physical (or more precisely, purely anti-Platonistic). Since these two sets of facts hold or don't hold independently of one another, we can maintain that (a) there does obtain a set of purely physical facts of the sort required here, i.e., the sort needed to make empirical science true, but (b) there doesn't obtain a set of purely Platonistic facts of the sort required for the truth of empirical science (because there are no such things as abstract objects). Therefore, mathematical ETF is consistent with an essentially realistic view of empirical science because we can say that, even if there are no mathematical objects and, hence, our empirical theories aren't strictly true, these theories still paint an essentially accurate picture of the physical world because the physical world is just the way it needs to be for empirical science to be true. In other words, mathematical ETF-ists can maintain that the physical world "holds up its end of the empirical-science bargain." So ETF-ists can say that while our empirical theories aren't strictly true, there's still an important sense in which they're correct because they're true in the story of mathematics—i.e., they're such that they would have been true if plenitudinous Platonism had been true.4

³ See, e.g., Quine (1948) and Putnam (1971).

These remarks suggest a way for ETF-ists to explain the usefulness of mathematics and the harmlessness of the fact that mathematics isn't strictly true. They can explain the usefulness of mathematics by saying that it provides us with a descriptive or representational aid i.e., that it gives us an easy way of making claims about the physical world. For instance, by referring to real numbers—or, rather, by using terms that purport to refer to real numbers—we give ourselves an easy way of describing the temperature states of physical systems. The reason this is convenient is that (to put the point Platonistically) there's a structural similarity between the space of possible temperature states and the real number line. Because of this, it's convenient to use numerals as names of temperature states. It would be much harder if we had to use names like "Floyd" and "Jane"; it would be harder to remember whether the corresponding temperature states were hot or cold.

ETF-ists can explain harmlessness in a similar way. Given that we use mathematics in science and in our everyday lives, you might have thought that if this talk was just a fiction, we would get into trouble. But ETF-ists can respond to this worry by (a) reiterating that we use talk of mathematical objects (in scientific and ordinary discourse) as a mere descriptive aid and (b) pointing out that descriptive aids don't need to be true in order to be useful. To appreciate this, consider the following dialogue:

Jane: My father is a lot like Homer Simpson.

Bill: That can't be true because there's no such thing as Homer Simpson. Jane: That's true, but my father is like that anyway. I'm just using the term "Homer Simpson" to communicate something to you about my father. My claim is that my father is like that even if there's no such thing as Homer Simpson; i.e., he's such that if Homer had existed, then he would have been a lot like Homer.

Mathematical ETF-ists can say the same thing about our talk of numbers in scientific and ordinary discourse. If I say, "It's 20 degrees

⁴ You might claim that if there are no abstract objects, then we don't know what the physical world would have been like if abstract objects had existed. Yablo (forthcoming) expresses a worry like this. But since the right way to read counterfactuals is as saying what would be true if the antecedent were true and everything else remained as unchanged as possible, and since abstract objects are (or would be) causally inert,

I think we have good reason to say that if there are no abstract objects, and if abstract objects suddenly came into being, then this wouldn't change anything in the physical world.

outside," and if you say that what I said can't be true because there are no such things as numbers, then according to mathematical ETF-ists, I can respond as follows: "It's true that it's not really 20 degrees outside because there's no such thing as the number 20; but you don't need to worry about that because the air outside is exactly the way it needs to be for it to be the case that it's 20 degrees outside. It's precisely that temperature; i.e., it's such that if numbers had existed, then it would have been 20 degrees."

It's not just that the lack of literal truth here isn't harmful. Since abstract objects are causally inert (or would be causally inert if they existed), it wouldn't matter at all (for our purposes) if they existed. It's not as if we think the number 20 is somehow making the air outside be the temperature it is. That number could pop in and out of existence, and nothing about the air would change. The sentence "It's 20 degrees outside" would flip back and forth between being true and being false, but we wouldn't notice this, and indeed, it wouldn't matter to us at all. In short, the sentence "It's 20 degrees outside" would have the exact same amount of usefulness to us regardless of whether numbers existed.

Finally, ETF-ists can also account for why sentences like "3 is prime" seem so obvious to us; it's because we don't usually think about the possibility of numbers not existing; in other words, we just overlook the possible scenarios in which this sentence isn't true. (Note, however, that once we consider the possibility of numbers not existing, "3 is prime" becomes completely non-obvious. For whether this sentence is true depends on whether abstract objects exist, and it's not obvious whether such things exist.)

Let me make two more points before moving on. First, I don't take anything I've said here to give us a positive argument for mathematical ETF. I've just been explaining how ETF-ists can account for various phenomena and why ETF is an attractive view that should be taken seriously. In order to argue that this view is actually true, ETF-ists would need to supplement what I've said here with arguments for the following two claims: (1) the Platonistic semantics of mathematical discourse is true, and (2) there are no such things as abstract objects. I won't argue for either of these claims here.

Second, I want to articulate a few different kinds of fictionalism and indicate which kind of view I take ETF to be. For starters, we can distinguish the following two views:

Hermeneutic fictionalism (about mathematics): In ordinary cases, when people⁵ utter mathematical sentences, they intend their utterances to be taken as fictional. In other words, when people utter mathematical sentences, they're usually not making genuine assertions; rather, they're merely pretending to make assertions.

Assertional fictionalism (about mathematics): In ordinary cases, when people utter mathematical sentences, they're asserting what these sentences say (and so they're asserting things that aren't true).6

We can make a further distinction, within the assertional-fictionalist camp, between the following two views:

Revolutionary assertional fictionalism (about mathematics): We (i.e., ordinary speakers) should change what we're doing in mathematical discourse; in particular, we should switch to intending our utterances of mathematical sentences to be taken as fictional; i.e., we should stop making assertions with our mathematical utterances, and we should adopt a convention of just pretending to make assertions with these utterances.

Nonrevolutionary assertional fictionalism (about mathematics): We don't need to change what we're doing in mathematical discourse because there's nothing wrong with that discourse. Now, we do make assertions in mathematics that aren't true, but there's nothing wrong with this because the mark of goodness in mathematics isn't truth; rather, it's truth in the story of mathematics. Thus, since our

⁵ By "people," hermeneutic fictionalists might mean ordinary folk or mathematicians or both.

⁶ It might seem that fictionalists have to endorse either hermeneutic fictionalism or assertional fictionalism, but I've argued elsewhere (2009) that there's a way for fictionalists to deny assertional fictionalism without committing to hermeneutic fictionalism. But I won't worry about this here.

mathematical assertions are (usually) true in the story of mathematics, it follows that they're (usually) good, and so we don't need to change what we're doing in mathematics.

I think that nonrevolutionary assertional fictionalism is superior to hermeneutic fictionalism and revolutionary assertional fictionalism, but I don't have the space to argue for this here. I just want to point out that the ETF-ist view that I'm describing is a nonrevolutionary assertional view. Moreover, while I won't keep making this point, I intend all of the other ETF-ist views that I'll articulate in this chapter to be read as versions of nonrevolutionary assertional fictionalism as well.

1.3 Mereological ETF

Mereological ETF-ists begin by endorsing the following: Mereological error theory: (a) ordinary claims about things like tables and cats (and scientific claims about things like planets and atoms) are about (or at least purport to be about) composite objects, i.e., objects with proper parts; but (b) there are no such things as composite objects (i.e., mereological nihilism is true); and so (c) ordinary claims about things like tables and cats and planets are not true.

I'll assume for the sake of simplicity that mereological ETF-ists think that the physical world consists of nothing but tiny simples and that while there are no such things as cats and tables and planets, there are simples arranged catwise and tablewise and planetwise.⁷

While mereological ETF-ists think that ordinary sentences like "There's a table in my dining room" aren't strictly true, they also think that there's an important sense in which these sentences are *right*, or *correct*. In particular, they think they're *true in the story of composite objects*, where (a) *the story of composite objects* is just mereological universalism (or unrestricted composition), and (b) a sentence is *true in*

the story of composite objects—or fictionalistically correct—iff it would have been true if mereological universalism had been true.⁸

So mereological ETF-ists think there's an important kind of correctness and incorrectness that attaches to our sentences about things like tables and planets and cats. ETF-ists divide these sentences into the "good" ones and the "bad" ones, just like the rest of us do, and indeed, they put the very same sentences into the two piles that the rest of us do—i.e., the sentences that come out true (and false) in the story of composite objects, according to mereological ETF, are the same sentences that come out true (and false) according to mereological universalism. So, e.g., "There's a table in my dining room" is true in the story of composite objects, and "There's a nuclear warhead in my dining room" is false in the story of composite objects—i.e., it's such that it would have been false even if mereological universalism had been true.

To appreciate how mereological ETF-ists can adopt this stance, it's important to realize that they endorse the following thesis:

The causal irrelevance of the existence of composite objects: The existence of composite objects is causally irrelevant—or it would be causally irrelevant if these objects did in fact exist. Moreover, the world would look exactly the same to us regardless of whether composite objects existed.

The reason this is true is that all the causal work that composite objects do (if they exist) is already done by the simples that compose them. If I throw a baseball through a window, then we can say that the baseball caused the window to break; but we can also say that the simples that compose the baseball caused the window to break, and the baseball isn't doing any *extra* causal work. Once the simples have done their causal work, there's nothing left for the baseball to do—it isn't needed. So whether the baseball really exists is causally irrelevant; the window will break either way. And more generally, everything that happens in

⁷ Rosen and Dorr (2002) endorse a view like this. Sider (2013) endorses this sort of nihilism, but I don't think he commits to an error theory. There are other kinds of nihilism—e.g., Horgan and Potrč (2000) endorse the view that there's only one object, namely, the entire universe.

⁸ ETF-ists could say instead that the story of composite objects is more aligned with a commonsense view according to which there are, e.g., no such things as trout-turkeys. I think this view is problematic, but I can't get into this here.

the physical world would happen in the exact same way (and the world would look exactly the same to us) regardless of whether composite objects existed.9

Mereological ETF-ists can use the causal irrelevance thesis to explain two important things. First, they can use it to explain why truth in the story of composite objects is an important kind of (objective) correctness; because if it wouldn't make any substantive difference to the world whether composite objects existed, then the would-be truth of our claims about composite objects would be just as good as the literal truth of those claims. Second, ETF-ists can use the causal irrelevance thesis to explain why it wouldn't be a problem for us—why it wouldn't be harmful to our purposes—if our talk of composite objects was a fiction. For it follows from the causal irrelevance thesis that our talk of composite objects would be equally useful regardless of whether composite objects existed. (And it should be obvious that talk of composites is useful—it's just easier to speak of tables than of simples arranged tablewise.)

Finally, mereological ETF-ists can also explain why our talk of things like tables seems obviously true to us: it's because we don't usually consider the possibility that there aren't any composite objects. (Notice, though, that as soon as we consider this possibility, the thesis that there are composite objects becomes completely nonobvious; indeed, we seem to have no epistemic access to whether there are such objects.)

In short, then, mereological ETF is deeply analogous to mathematical ETF. And, again, what I've said here doesn't give us a positive argument for mereological ETF. In order to argue that that view is true, we would need to supplement what I've said here with arguments for the claims that (a) there really aren't any composite objects, and (b) we really do refer (or purport to refer) to such objects in our ordinary speech.

1.4 Generalizing

There are very similar ETF-ist views associated with many different philosophical questions. For instance, temporal ETF involves the following claims:

- 1. Temporal error theory: (a) Ordinary claims about the past and future-e.g., "Elizabeth is a direct descendant of William the Conqueror"—are about (or at least purport to be about) past and future objects, i.e., objects that exist but not at the present time; but (b) there are no such things as past or future objects—i.e., presentism is true; and so (c) ordinary claims about the past and future are not true. 10
- 2. While sentences about the past and future aren't strictly true, they're still correct in an important sense because they're true in the story of temporal objects, where the story of temporal objects is just eternalism—i.e., it's the claim that past and future objects are just as real as present objects—and a sentence is true in the story of temporal objects iff it would have been true if eternalism had been true.
- 3. The causal irrelevance of eternalism: The truth of eternalism is causally irrelevant (or more precisely, it would be causally irrelevant if it were true), and so the world would look exactly the same to us regardless of whether presentism or eternalism were true.
- 4. We can use the causal irrelevance thesis to argue that truth in the story of temporal objects is a genuine kind of (objective) correctness; and we can use this to explain why our talk of past and future objects is useful to us, why this talk seems obviously true to us, and why it wouldn't matter if this talk weren't literally true—i.e.,

⁹ One might object here as follows: "We can imagine a case where part of what caused you to throw the baseball is that you believed that you were throwing a baseball. In other words, part of the cause of the broken window is a mental state whose content concerns a baseball, not some simples." But mereological ETF-ists can admit that this is true and just claim that the belief in question isn't strictly true (but that it is true in the story of possible worlds). There's no problem with this because false beliefs can cause things as easily as true ones can.

¹⁰ Views of this kind are developed by Sider (1999) and endorsed by Markosian

why it wouldn't be harmful to our purposes if this talk were a fiction.

Likewise, we can develop *modal ETF* by endorsing analogous claims about modality and modal discourse. And so on for various other philosophical problems. In fact, I think there's a sort of formula for generating ETF-ist views about controversial objects. If philosophers are debating the existence of type-T objects, then ETF-ists about Ts endorse the following claims: (1) There's a category of ordinary sentences that are best read as being about (or purporting to be about) Ts; but there are no such things as Ts, and so ordinary T-talk isn't true. (2) It doesn't matter in some sense whether Ts exist because even if they existed, they would be causally irrelevant and the world would look exactly the same to us regardless of whether Ts existed. (3) While ordinary T-talk isn't strictly true, there's still an important (and objective) sort of correctness that attaches to this talk; in particular, much of this talk is true in the story of Ts, where a sentence is true in the story of Ts iff it would have been true if (all of the 11) Ts had really existed. (4) We can use the facts mentioned in (2) and (3) to explain why our T-talk seems so obvious, and why it's so useful, and why it's not harmful to our purposes that this talk isn't true.

This probably goes without saying, but just to be clear, the various versions of ETF don't stand or fall together. It may be that some of them are true and others are false. Indeed, my own view is that some of them are much more plausible than others. For example, I think that mathematical and mereological ETF are more plausible than temporal and modal ETF. I think that modal ETF is less plausible because the relevant semantic theory (namely, that ordinary modal claims are best read as being about possible worlds) is less plausible than the relevant semantic theories in the mathematical and mereological cases. 12 And

I think that temporal ETF is less plausible because the relevant metaphysical theory (namely, that there are no past or future objects) is less plausible than the relevant metaphysical theories in the mathematical and mereological cases (namely, that there are no abstract objects and no composite objects). 13

2 Fictionalism About Coincident Objects

I now want to use the general strategy described in the last section to develop a version of ETF that, to the best of my knowledge, is entirely novel-namely, an ETF-ist view of coincident objects and material constitution. Moreover, at the end of the chapter, I'll provide a (partial) positive argument for this view.

2.1 Bazillion-Thingism and One-Thingism

Let's say that two (numerically distinct) objects are coincident at a time t iff they're located in the same place and made of the same stuff (or composed of the same parts) at t. For instance, if Ralph is a clay statue and Lumpy is the lump of clay that Ralph is made of, then many people would say that Lumpy and Ralph are distinct coincident objects.

There are two different mainstream views that commit to the existence of coincident objects. The one I'll be concerned with here is multi-thingism. This is the view that there are 3-dimensional coincident objects-and note that when I speak of 3-dimensional objects, I'm talking about objects that have three spatial dimensions, so that on my lingo, if an object is 3-dimensional, then it's not temporally extended, and it's wholly present right now.14 (The other view that commits to

14 Multi-thingist views are developed by Wiggins (1967), Thomson (1983), Lowe (1983), Simons (1987), Yablo (1987), Baker (1997), Fine (2003), Shoemaker (2003),

Bennett (2004), Thomasson (2007), and Koslicki (2008).

¹¹ What "all of the Ts" means varies from case to case, but it usually involves some sort of plenitude thesis (like plenitudinous Platonism) or maximalist thesis (like mereological universalism).

¹² There's also a second worry you might have about modal ETF. Like other ETF-ists, modal ETF-ists are committed to endorsing certain kinds of counterfactuals; but you might think that this is incompatible with the modal ETF-ist idea that ordinary modal claims aren't true because you might think that counterfactuals are modal claims. I argue in my (MSa) that this problem can be solved, but I can't get into this here.

¹³ My reservation here has to do with the argument from special relativity to eternalism. I think this argument is stronger than any argument for abstract objects or composite objects. In the end, I don't think this argument works, but this is extremely controversial.

coincident objects—namely, 4-dimensionalism—commits only to temporally extended coincident objects; I won't be concerned with this view here.)

There are many different versions of multi-thingism, but I'll assume that the best versions of this view entail that for every (3-dimensional) physical object, there is a plenitude of other (3-dimensional) objects that are coincident with it—i.e., there are as many objects coincident with it as there could be, given all the relevant facts about the actual world. Following Bennett (2004), I'll use the term "bazillion-thingism" to denote this plenitudinous version of multi-thingism. 15 I'll also assume that the best versions of multi-thingism involve the idea that coincident objects can be distinguished by means of their essential properties. If we put this together with the plenitude thesis, then we can formulate bazillion-thingism as follows (I should note, however, that this is not exactly how Bennett formulates the view):

Bazillion-Thingism: For any (3-dimensional) object O and any set S of properties, if it's possible that there's a distinct (3-dimensional) object O* such that O* is coincident with O and O* has all and only the properties in S essentially, then there is such an object.

In contrast, we can define one-thingism as follows:

One-thingism: For any set M of physical objects, there's exactly one object that's composed of the members of M.

Notice that on this definition, one-thingism entails mereological universalism. This is pretty arbitrary; if we wanted to, we could change the word "exactly" in the preceding definition to "at most"; if we did this, then one-thingism wouldn't entail universalism (indeed, it would be compatible with mereological nihilism) and so it would more aptly

be called "zero-or-one-thingism" than "one-thingism." But for my purposes here, the preceding definition is convenient because I'm going to assume that ETF-ists about coincident objects endorse this universalist version of one-thingism.

The most obvious difference between bazillion-thingism and onethingism is that they give opposite answers to the question of whether there are coincident 3-dimensional objects. But another important difference concerns essential properties. According to bazillionthingism, Ralph has its shape essentially, and Lumpy has being a lump of clay essentially (but doesn't have its shape essentially). But onethingers (or at any rate, one-thingers of the kind I'm concerned with here) reject this whole picture. To bring this out, let me use the term "object O" to denote the (one and only) 3-dimensional composite object that, according to one-thingism, is composed of all and only the objects in the Lumpy/Ralph region. (For simplicity, I'll assume that there's no unclarity about which objects are in the Lumpy/Ralph region, so that there's no unclarity about which composite object is the one that's composed of all and only the objects in that region; this is obviously false, but no harm will arise from making this simplifying assumption.) In any event, the point I want to make here is that, according to the kind of one-thingism that I'll be working with, object O does not have properties like being a statue and being a lump of clay essentially. If I rolled O into a ball, then according to this view, it wouldn't be a statue anymore, but it would still exist. Likewise, there are various things I could do to O that would make it stop being a lump of clay without making it disappear.

Does O have any properties essentially, according to one-thingers of the kind I've got in mind? That depends on what's required for a property to count as an essential property of an object. One thing that's required here is that the object in question couldn't exist without having the property in question. It's pretty unpopular nowadays to suppose that this is all that's needed. But let's say that a property F is a minimalessential property of an object x iff x couldn't exist without having F. Given this, I want to make three points about the sort of one-thingism I'll be working with in the rest of this chapter. First, according to this view, properties like being a lump of clay and being a statue aren't essential properties of O because they aren't even minimal-essential

¹⁵ There are lots of advantages to going for a plenitudinous view. In particular, this gives multi-thingers a way of responding to problems relating to vagueness, arbitrariness, anthropocentrism, and epistemology. I can't argue for this here, but see Balaguer (1998) for a discussion of how mathematical Platonists can solve the epistemological problem with their view (as well as problems relating to vagueness and arbitrariness) by endorsing a plenitudinous ontology. There are a lot of parallels between these two cases.

properties of O (this was the point of the preceding paragraph). Second, one-thingers of the kind I've got in mind will admit that O has some minimal-essential properties; e.g., they'll say that properties like being a bunch of physical stuff are minimal-essential properties of O. Third and finally, according to the one-thingist view I've got in mind, whether properties like being a bunch of physical stuff count as essential properties of O, and not just minimal-essential properties of O, depends on what's needed for a minimal-essential property to be an essential property. And one-thingers of the sort I have in mind don't take any stand on this question.

So while the sort of one-thingism I've got in mind isn't entirely antiessentialist, it's pretty anti-essentialist, and so I will sometimes call it "anti-essentialist one-thingism."

2.2 Constitutional ETF

In this section, I'll characterize an ETF-ist view of coincident objects that I'll call constitutional ETF. To get at this view, we first need to appreciate the way that multi-thingism goes hand-in-hand with a certain sort of semantic theory of ordinary names like "Lumpy" and "Ralph." There are various semantic theories that multi-thingers might endorse, but here's an obvious candidate:

Bazillion-thingist semantic theory: We use ordinary names like "Lumpy" and "Ralph" to pick out objects that have certain of their properties essentially. E.g., "Ralph" denotes an object (or at least purports to denote an object) that has its shape essentially, whereas "Lumpy" denotes an object (or purports to denote an object) that has being a lump of clay essentially but doesn't have its shape essentially.

I don't want to pretend that multi-thingers have to endorse this very theory; they could obviously endorse a somewhat different theory, but this won't matter in what follows. I want to explain how to be an ETFist about coincident objects, and, to do that, I need a multi-thingist semantic theory to work with. I'll assume that the semantic theory just articulated is true, but if some other multi-thingist semantic theory were the true theory of English, then I could adjust constitutional ETF accordingly. As long as multi-thingers endorsed a semantic theory that said that "Lumpy" and "Ralph" denote distinct (3-dimensional) coincident objects—and they're obviously committed to the idea that some such theory is true—I would be able to develop ETF as a response to whatever semantic theory they accepted.

In any event, the first thesis that constitutional ETF-ists endorse is the following:

Constitutional Error Theory: (a) The bazillion-thingist semantic theory is right, and so ordinary names like "Lumpy" and "Ralph" denote (or at least purport to denote) 3-dimensional objects that have certain of their properties essentially; but (b) objects of this kind almost never exist—e.g., there is no object in the Lumpy/Ralph region that has being a lump of clay or being a statue essentially; and so (c) ordinary names like "Lumpy" and "Ralph" almost always fail to refer, and ordinary claims about things like statues and lumps of clay are almost all untrue.

I say that almost all ordinary names fail to refer on this view. To see why, suppose I introduce the name "Stuffy" to denote object O, and suppose I use this name to pick out an object that has the property being a bunch of physical stuff essentially. Then, depending on what's needed for this property to count as an essential property of O, constitutional ETF-ists might want to say that "Stuffy" refers to O. For instance, if all minimal-essential properties are essential properties, then constitutional ETF-ists will say that "Stuffy" refers to O. But this is the exception. ETF-ists think that most ordinary names—e.g., names like "Lumpy," "Ralph," "Obama," and "Mars"—fail to refer. And so they also think that most ordinary sentences about things like statues and lumps of clay-e.g., "Lumpy could survive being rolled into a ball, but Ralph couldn't"-aren't literally true.

The second thesis that constitutional ETF-ists endorse is the following:

The causal irrelevance of the existence of coincident objects: If bazillion-thingism were true, then the existence of (3-dimensional)

coincident objects would be causally irrelevant. Moreover, the world would look exactly the same to us regardless of whether objects of this kind existed.

This follows more or less directly from the corresponding claim about composite objects. If it wouldn't make a causal difference to the world whether any composite objects existed, then it presumably wouldn't make any causal difference whether many such objects existed. Suppose, e.g., that an art dealer wanted to pay a million dollars for Ralph, and suppose also that anti-essentialist one-thingism was true, so that Ralph didn't exist; this wouldn't stop the dealer from paying her million dollars and walking off with object O (and not with Ralph) because the dealer wouldn't have any clue that Ralph didn't exist. The transaction would look exactly the same to us regardless of whether bazillion-thingism or anti-essentialist one-thingism were true—i.e., regardless of whether Ralph existed. And analogous points can be made about all other events that we take to involve ordinary objects; e.g., it wouldn't stop my window from breaking if the baseball-like object that I threw at it wasn't an object of the kind I took it to be because it didn't have the relevant properties essentially. The window would break in the exact same way regardless of whether the baseball-like object that I had in mind existed.

Next, let's say that the story of coincident objects is just bazillionthingism and that a sentence is true in the story of coincident objects iff it would have been true if bazillion-thingism had been true. Given this, and given the causal irrelevance of the existence of coincident objects, constitutional ETF-ists can say that while ordinary sentences about things like statues aren't strictly true, they are nonetheless true in the story of coincident objects. Moreover, ETF-ists can maintain that this is an important kind of objective correctness. To see why, notice that all of the sentences about ordinary objects that we ordinarily think of as true will, according to ETF-ists, be true in the story of coincident objects; and all of the sentences about such objects that we ordinarily think of as false will, according to ETF-ists, be false in the story of coincident objects (i.e., they'll be such that they would have been false even if bazillion-thingism had been true). So ETF-ists divide our sentences into the "good" ones and the "bad" ones, just like the rest of us do, and

indeed, they put the very same sentences into the two piles that the rest of us do. Moreover, according to ETF-ists, it's a perfectly objective matter which sentences count as true in the story of coincident objects, and so the sentences that have this trait are getting something right. For example, it's an objective fact that "Rodin made some famous statues" is true in the story of coincident objects, whereas "Obama made some famous statues" is not true in the story of coincident objects. So the only difference here between ETF-ists and the rest of us (or most of the rest of us) is that ETF-ists don't think that the sort of correctness that's at work here is literal truth. Or, to put the point differently, they think that the mark of goodness in ordinary discourse about ordinary objects isn't truth; they think it's truth in the story of coincident objects.

These considerations enable ETF-ists to explain why it wouldn't be a problem for us if our talk of coincident objects wasn't literally true—i.e., why it would be harmless if this talk wasn't true. For, given that the existence of coincident objects is (or would be) causally irrelevant, it just doesn't matter (for scientific or ordinary purposes) whether the kind of correctness that's at work here is literal truth or truth in the story of coincident objects. If coincident objects do exist, then our ordinary talk of such things is true (or most of it is, anyway); and if coincident objects don't exist, then most of this talk isn't literally true, but it's still true in the story of coincident objects. But given the causal irrelevance thesis, it just doesn't matter which scenario we're in. Either way, our talk of coincident objects will be just as useful. Indeed, it seems clear that the usefulness of this talk couldn't be affected by the existence (or nonexistence) of coincident objects because the existence (or nonexistence) of coincident objects wouldn't affect anything about the physical world in any perceptible way.

Also, ETF-ists can explain the usefulness of our talk of coincident objects by pointing out that this talk gives us a way to communicate things about the physical world that would be hard to communicate otherwise. For instance, it gives us an easy way of distinguishing between various ways of thinking of objects. For example, we can think of object O as a statue or as a lump of clay, and it's sometimes useful to think of it in different ways and to distinguish between various ways of thinking of it. ETF-ists don't need to say that we couldn't get along

without this way of thinking and talking; they just claim (what seems obvious) that this is a convenient way to think and talk about things.

Finally, ETF-ists can account for the fact that our ordinary claims about things like statues and lumps of clay seem intuitively obvious to us by pointing out that (a) we don't generally notice that the truth of these claims requires a multi-thingist, heavy-duty-essentialist metaphysics; and (b) we don't usually consider the possibility that this metaphysics might not be true; and (c) we aren't usually aware that it wouldn't matter to our purposes (and would be completely invisible to us) if this metaphysics wasn't true. Notice, however, that as soon as we take note of the points mentioned in (a)-(c), it becomes completely nonobvious that our claims about things like statues are literally true because it becomes clear that we would never know the difference if these claims weren't literally true and were merely true in the story of coincident objects.

2.3 Motivating Constitutional ETF

I haven't so far given a positive argument for constitutional ETF. I've merely been trying to show that it's an attractive view that should be taken seriously. In order to provide a positive argument for this view, I would need to argue for the bazillion-thingist semantic theory (or at any rate, something like that theory—I'd need to argue that some multithingist semantics is true); and I'd need to argue that multi-thingism is false—i.e., that there are no coincident 3-dimensional objects.

I'm not going to try to argue here for a multi-thingist semantic theory, and, in fact, I have no idea whether some such theory is true. This is a controversial empirical question about folk English, and it's not at all obvious to me that we shouldn't endorse some one-thingist semantic theory (indeed, I have elsewhere [MSb] developed and defended such a theory).

Before ending, however, I'd like to say a few words about how we might argue that multi-thingism is false. I don't have the space to develop the argument in full, but my thought is that ETF-ists can argue against multi-thingism by arguing that it's metaphysically "spooky" or "occult." One way to do this is to argue that multi-thingism is

incompatible with a materialistic worldview that we have good independent reasons to believe. The materialistic view of physical objects the view that ordinary things like statues and lumps of clay are purely material objects, or that there's nothing immaterial about these objects—seems to entail that since Lumpy and Ralph are materially equivalent (i.e., since they're made of the same physical stuff), they're identical. But multi-thingism is incompatible with this; it says that while Lumpy and Ralph are materially equivalent, they're not identical. So in order for this view to be true, Lumpy and Ralph need to differ in some nonphysical or immaterial way; so multi-thingism entails (implausibly) that ordinary objects like statues and lumps of clay aren't purely material objects.

In addition to arguing that multi-thingism entails immaterialism, ETF-ists might argue that there's a second way in which multi-thingism is metaphysically spooky or occult. This second sort of spookiness has to do with the role played in multi-thingism by essential properties. Consider, e.g., Ralph's shape property. Let's call this property F. According to multi-thingers, Lumpy and Ralph both have F, but Ralph has it essentially and Lumpy doesn't. But what is the metaphysics behind this? What's happening in the physical world—in the Lumpy/ Ralph region—that makes it the case that Ralph has F essentially and Lumpy doesn't? In asking this question, I'm not asking for a definition of "essential property." And I'm not raising the grounding problem. What I'm asking for is an intrinsic description of the metaphysics of essential-property possession. In other words, I want essentialists to tell us what it is—intrinsically speaking—for an object to have a property like F essentially. In short, I'm asking for an account of what the physical world is like here.

Here's another way to put the challenge that I'm raising for multithingers: they're committed to saying that there's a difference between the way that Lumpy possesses F and the way that Ralph possesses F, and I'm asking them to tell us what this difference really amounts to. And the reason I'm asking this is that (a) it's totally unclear what the difference could consist in, and (b) it's hard to see how multi-thingers could avoid committing to some sort of immaterialism here because there doesn't seem to be any physical/material difference between the way that Lumpy possesses F and the way that Ralph possesses it.

I have no idea how multi-thingers could answer the question that I'm posing here without committing themselves to a pretty wild metaphysics. Here are two silly answers to the question I'm asking:

Silly Answer 1: The fact that Ralph has F essentially and Lumpy doesn't comes down to the fact that F is somehow "metaphysically lit up" inside of Ralph, whereas it's not lit up inside of Lumpy.

Silly Answer 2: F is stuck to both Ralph's bare particular and to Lumpy's; but it's stuck much more tightly to Ralph's, and indeed, it's stuck so tightly to Ralph's bare particular that if we tried to pry it off (by, say, rolling O into a ball), we would set off a doomsday routine that would annihilate Ralph (but not Lumpy).

These answers are obviously silly and not what multi-thingers have in mind. But I have no idea what they do have in mind; I have no idea how they could construct a non-silly alternative to the preceding views, and in the absence of a non-silly account of what's going on here, all I can say is that I don't get it. I have no idea what essentialproperty possession really involves; I have no idea what Lumpy and Ralph are supposed to be like, according to multi-thingism; and I suspect that there's no way for multi-thingers to clarify this without completely abandoning materialism and endorsing a wild metaphysics that we have no good reason to believe.

Here's another (related) worry: multi-thingers have to say that physics is a woefully incomplete description of physical reality and physical objects. Insofar as our physical theories are compatible with one-thingism, multi-thingers have to say that physics tells us only a tiny fraction of the truth about physical reality. But this seems really hard to believe. And I think it involves a pretty staggering immodesty. Do we really want to claim that we've figured out from our armchairs that physicists have failed to describe the vast majority of physical reality?

You might try to respond to my arguments here by claiming that once we've got a bunch of matter—say, the matter that constitutes Lumpy and Ralph—the corresponding plenitude of coincident objects is an "ontological free lunch." But I think that if you endorse this view, then you're really just a one-thinger with a deflated semantics-i.e.,

a semantics that makes sentences like "Lumpy and Ralph are distinct objects" come out true despite the fact that, at bottom, one-thingism is the true metaphysics. Real, full-blown multi-thingism involves the view that Lumpy and Ralph really exist as distinct objects in the physical world and that there are real metaphysical differences between them. I don't see how you can endorse this view and also claim that it's an ontological free lunch; and any view that entails that the existence of Lumpy and Ralph is an ontological free lunch isn't a multi-thingist view of the kind that I'm discussing here.

You might also try to respond by claiming that Lumpy and Ralph differ modally (or that they have different real definitions) and that this is all there is to say on the topic. But if Lumpy and Ralph have different modal properties, then there has to be something about them that makes this the case. For example, if Lumpy stands in some counterpart relation to some other-worldly object x, and if Ralph doesn't, then there must be some reason for this; there must be some difference between Lumpy and Ralph that makes it the case that Lumpy stands in the relevant counterpart relation to x and Ralph doesn't. And so the exact same problem is going to return. (Likewise, if Lumpy and Ralph have different real definitions, and if this isn't just a linguistic point about "Lumpy" and "Ralph," then there must be some difference between Lumpy and Ralph; but since they don't differ in any physical way, and since we don't have any handle on what the alleged difference could consist in, the same problem is going to return.)

I don't take these brief remarks to constitute a full-blown argument against multi-thingism, but I do think they raise a serious worry about that view. They seem to suggest that multi-thingism has some pretty serious costs because it forces us to believe some rather wild things about the physical world. And what constitutional ETF-ists think is that we have no good reason to pay this cost. For even if multi-thingers are right about the semantics of ordinary language, we can just endorse ETF. We can say that our ordinary talk of things like statues and planets is correct in an important sense of the term but that the sort of correctness that's at work here isn't literal truth—it's truth in the story of coincident objects. If we say this, then we don't have to believe any wild claims about physical reality.

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