

Universals

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In this paper, I argue that there are universals. I begin (section 1) by proposing a sufficient condition for a thing's being a universal. I then argue (section 2) that some truths exist necessarily. Finally, I argue (sections 3 and 4) that these truths are structured entities having constituents that meet the proposed sufficient condition for being universals.

1. A Sufficient Condition

A *predicable* is something that can be predicated of things, which can be true or false of things, which has an extension and an anti-extension. For example, 'cat' is a predicable, true of my cat. Suppose that (unlike 'cat') some predicable is mind-independent in the sense that it does not depend for its existence or its status as a predicable on the activities of any minds.¹ And suppose that this mind-independent predicable is capable of applying to several things. I think that such a predicable would be a universal. So I accept this conditional: *if a thing is a mind-independent predicable, capable of multiple application, then it is a universal.*

This sufficient condition is historically rooted: nominalists have traditionally identified all predicables with mind-dependent entities like words and concepts, while altogether rejecting mind-independent predicables. And the condition is

¹ I offer no account of mind-independence. See Fine (1994) and Thomasson (1999, ch. 2).

consistent with traditional characterizations of universals as objects that are instantiable, multiply instantiable, multiply locatable, or assertible of things. It is also consistent with less common characterizations of universals as objects that are incapable of having qualitative duplicates, and as ungrade objects.² So the proposal is intuitively appealing, historically rooted, and consistent with the extant characterizations of universals.

Moreover, it does not wrongly count words, concepts, sums, sets, or tropes as universals. Words and concepts are not mind-independent predicables, since words and concepts are mind-dependent. And no set or mereological sum is a predicable: sets are not true of their members, and sums are not true of their parts.³ Finally, no tropes are mind-independent predicables having multiple application, since tropes cannot have multiple application.

For these reasons, I believe that the proposed sufficient condition is correct.⁴ In what follows, I will argue that there are multiply applicable mind-independent predicables, and so that there are universals. First, I argue that some truths exist necessarily. Since there might not have been any minds, it follows that these truths might have existed in the absence of any minds, and so they are mind-

² An object is ungrade iff it is not involved in atomic facts having different numbers of constituents. The intuitive idea of this characterization is that, unlike particulars, each universal has a fixed “adicity” that determines the structure of the atomic facts it is involved in. See Russell and Whitehead (1925, p. xix), and Armstrong (1997, p. 85). Here is a sample of the literature discussing the other characterizations I mentioned: Moore (1923), Wisdom (1934), Armstrong (1978a, 1978b, 1989), Lewis (1983, esp. fn. 2), Williams (1986), Chisholm (1996, esp. part 1), Lowe (1998), Ehring (2002, 2004), Gilmore (2003), and van Inwagen (2004). Ramsey (1925) and MacBride (1998a, 1998b, 2005) defend skepticism about the distinction between universal and particular. I cannot discuss their views here.

³ Sets or sums might serve as predicates in one of Lewis’s “Lagadonian” languages, which are languages whose “words” are sets and other objects that don’t normally serve as words (see his 1986, p. 145). But such sets or sums would have extensions by stipulation, and so in a mind-dependent fashion.

⁴ I also accept the stronger thesis that all and only mind-independent predicables are universals. But this is not required for my argument. Compare the similar account of properties in van Inwagen (2004, esp. pp. 131-2). I agree with what van Inwagen says there (pp. 133-4) about the “property” version of Russell’s paradox (the paradox arising from admitting the property of being non-self-exemplifying). He says that there are many workable solutions to this sort of problem, none of them perhaps completely satisfying, all of them adaptable to the case of properties. In any case, my argument does not establish the existence of the property of being non-self-exemplifying.

independent.⁵ Then I will argue, in sections 3 and 4, that these truths have predicable constituents on which they depend for their existence. Since nothing mind-independent depends for its existence on something that is mind-dependent, it follows that these predicables, many of which have multiple application, are mind-independent.

2. Some Truths Exist Necessarily

Normally, when we say that something is necessarily F, we mean that it is necessary that the thing is F *if it exists*. For example, Socrates is necessarily human because it is necessary that *if Socrates exists*, then he is human. But we do not always mean this. For example, when we say that God necessarily exists, we do not mean that it is necessary that God exists if he exists—that would not distinguish God from my cat. Similarly, when we say that something is necessarily true, we do not mean that it is necessary that it is true if it exists. For, if that were what we meant, then the sentence ‘There are sentences’ would be necessarily true (since it would witness its own truth in any world where it existed).⁶

Perhaps, then, what we mean when we say of a thing that it is necessarily true is not just that it must be true if it exists, but rather that it must be true *simpliciter*. But, if we assume (as I do here) that a thing cannot be true unless it exists, it follows that, if something is necessarily true, then it necessarily exists. This is the wrong result. For ordinary linguistic items such as the sentence ‘Everything is self-identical’ do not exist necessarily.⁷ And there is at least a sense in which the

⁵ The assumption that there might not have been any minds is a (substantial) simplifying assumption. Strictly speaking, my argument leaves open the possibility that necessarily existing predicables and truths are ontologically dependent upon the necessarily existing mind of God. See Plantinga (1982) for a discussion of this sort of view. I believe that this view faces serious difficulties, but I cannot discuss the matter here.

⁶ Fine (2005) criticizes the view that ‘x is necessarily F’ is ambiguous between the conditional and unconditional readings. My discussion could be carried out without assuming such an ambiguity. We could, for example, assume that the distinction between these readings arises only at the level of speaker meaning.

⁷ One might deny this. But doing so puts one in a dilemma. If ordinary linguistic items have their meanings necessarily, then linguistic predicates are universals in my sense—they are multiply applicable, mind-independent predicables. If, on the other hand, linguistic items have their meanings contingently, then ‘Everything is self-identical’ might not have been true (if, for example, it had not meant anything). So it is not the case that it must be true simpliciter, even though there is some sense in which it is necessarily true. That is the point.

sentence ‘Everything is self-identical’ is necessarily true. Hence, there must be a sense of ‘S is necessarily true’ that does *not* imply the necessary existence of S.

But what can it mean to say that ‘Everything is self-identical’ is necessarily true if it means neither that the sentence must be true if it exists, nor that it must be true simpliciter?⁸ A straightforward answer is that the sentence is necessarily true in the sense that it expresses a *proposition*—the proposition *that everything is self-identical*—which itself must be true simpliciter, and so necessarily exists. This answer is committed to the necessary existence of some necessary truths—in this case, propositions. In the rest of this section, I will argue that the alternative answers are also committed to the necessary existence of some truths.

2.1 ‘True at’ and ‘True in’

The standard approach to producing an account which avoids commitment to necessarily existing truths involves embracing an ontology of possible worlds and saying that a sentence (or proposition) can correctly *characterize* a possible world without *existing within* that world. Or, as this is usually put, a distinction is drawn between being *true at* (or *true of*) a world, on the one hand, and being *true in* a world, on the other. Thus the sentence ‘There are no sentences’ is true at worlds that contain no sentences. And it is true in worlds (if there are any) in which it means that all bachelors are unmarried. But it is never true in a world in which it means that there are no sentences, since in such worlds it would witness its own falsity. Similarly, the proposition that there are no propositions is true at worlds (if there are any) in which there are no propositions. But it is never true in any world, since in such worlds it would exist, and thus would witness its own falsity. On this view, for a sentence to be necessarily true is for it to be true at every world. ‘Everything is self-identical’ is necessarily true in this sense.

How should we understand the technical term ‘true at’? Sometimes philosophers appeal to metaphor here: a sentence or proposition is true at a possible world by correctly describing that possible world “from the outside” (Fine 1985, p. 163). Or a sentence (proposition) is true at a world *w* because, if we

⁸ Note that the question is not about the specific or “immanent” notion of necessary-truth-in-L; rather, the question is about the general or “transcendent” notion of necessary truth which applies across languages. One could attempt to argue that the “immanent” notion is all we have any theoretical need for, and that there is no “transcendent” notion, or perhaps that the “transcendent” notion *reduces* to the “immanent” one. I think such a program is doomed for the reasons given in Azzouni (2004).

“generate” the sentence or proposition in the actual world and then “carry” that sentence or proposition to w , we find that it is correctly evaluated there as true (Kaplan 1989, p. 613). But these metaphors are at best a useful heuristic—they are not serious proposals about how to understand ‘true at’.

There is a relatively straightforward way of understanding ‘true at’ if we opt for Lewis’s (1986) account of worlds. Given Lewis’s view, ‘true at’ can be defined like this: S is true at a world w iff S is true when its quantifiers are appropriately restricted (roughly, to things that are parts of w) and proper names occurring in it are understood to refer to parts of w that are counterparts of their actual referents.⁹ For example, consider the sentence ‘All elephants fly’. On Lewis’s view, this sentence is true at possible world w containing non-actual, flying elephants (and no elephants that do not fly). This is because, when the quantifier expression ‘all’ is understood to range over a certain proper subset of the set of all elephants—namely, the set of elephants which are parts of w —the sentence is true. However, on an actualist view, Lewis’s non-actual flying elephants are not a proper subset of the set of all elephants. Rather, on an actualist view, there simply are no such non-actual flying elephants, and so no restriction on the range of the quantifier renders the sentence true at the world in question. Lewis’s understanding of ‘true at’ is therefore not available to an actualist.¹⁰

I assume that there are no non-actual flying elephants. That is, I assume that Lewis is wrong and actualism is true: everything actually exists (including

⁹ ‘Appropriately restricted’ is a placeholder for a more complex analysis. Consider the sentence ‘No elephant is heavier than every possible elephant’. Lewis will say that this is true at our world, but not when interpreted so that the second quantifier is restricted to things that are parts of our world (cf. Lewis 1986, p. 6). That second restriction is not appropriate in the relevant sense. Defining ‘appropriate’ is complex, but I do not object to the claim that, given Lewis’s ontology, it can (at least in principle) be done.

¹⁰ Some philosophers claim that Lewis is not a possibilist, but an actualist who believes that “actuality is much bigger and much more fragmented than we ordinarily think” (Lewis 1986, p. 97). The idea is that, whereas actualists just mean ‘exists’ by ‘actual’, Lewis means ‘is spatiotemporally related to me’. This is an error. Lewis accepts a non-standard *theory* about ‘actual’ (he thinks it is an indexical), and, additionally, he accepts a non-standard theory about what is actual. But it doesn’t follow that he means something different by ‘actual’ than those of us who disagree with his philosophical views. It is possible to endorse non-standard theories—even theories at odds with obvious a priori truths involving the relevant concept—without changing the subject. See Burge (1986) for a powerful defense, and van Inwagen (1986, sec. 2) for an application to the case of Lewis on ‘actual’. This seems to be how Lewis saw the matter: he writes (p. 100) that his departure from common sense about what is actual does not require him to “abandon the ordinary meaning” of the term. Thanks to an anonymous referee for raising this issue.

possible worlds, if such there are). How then should we define the term ‘true at’? One natural view is that a sentence *S* is true at a world *w* iff it expresses (or has as its content) a proposition such that, if *w* had been actual, that proposition would have been true. However, according to this view, it is only sentences, and not propositions, that can be true at a possible world. For, unlike sentences, propositions never express propositions. Propositions themselves will only be true at a world *w* in the sense that, if *w* had been actual, *p* would have been true. Thus, on this approach, each necessary proposition *p* will be such that, for every possible world *w*, had *w* been actual, *p* would have been true, and so *p* would have existed. Thus, on this approach, if *p* is necessary, then *p* would have existed regardless of which world had been actual. That is, on this approach, every necessary proposition would exist necessarily.

Alternatively, we might say that *S* is true at *w* iff the proposition *S* expresses is true at *w*. Then we might say that a proposition *p* is true at *w* iff the proposition *that p is true* would have been true if *w* had been actual.¹¹ According to this view, for each necessary proposition *p*, the proposition *that p is true* would have been true, and so would have existed, regardless of which world had been actual. Thus, on this approach, each necessary proposition *p* is such that the proposition *that p is true* exists necessarily.

Is there any account of ‘true at’ that avoids commitment to necessarily existing truths? I will argue that there is not. An account of ‘true at’ depends in large measure on the way in which one conceives of possible worlds. So my strategy in what follows is to consider the accounts which result from the available actualist approaches to possible worlds. In section 2.2 and 2.3, I consider actualist accounts which admit possible worlds but regard them as actually existing objects of one sort or another. In section 2.4, I will consider actualist views that attempt to make sense of talk about possible worlds while dispensing with merely possible worlds altogether.

2.2 Actualist Possible Worlds as Sets

On an actualist account of possible worlds, possible worlds are entities of one sort or another which have two features: *maximality* and *possibility*. Thus we have the thesis that possible worlds are maximal possible ways that the world could be, maximal compossible sets of sentences, maximal compossible sets of

¹¹ Plantinga (1985, esp. pp. 341-4) focuses on this account. He argues that there is no intelligible sense of ‘true at’ in which some proposition is true at a world in which it does not exist.

propositions, or maximal possible states of affairs. The first of these options construes worlds as properties of a certain sort, which are plausibly taken as universals in my sense. This approach is inconsistent with nominalism. But what about the other options?

Consider the “set” accounts.¹² According to these accounts, worlds are certain sets, namely, sets that are maximal and possible. Each world is maximal in the sense that it contains, for every proposition (sentence), either that proposition (sentence) or its negation.¹³ And each world is possible in the sense that the conjunction of its members is possibly true. We can then say that something is true at a world iff it is a member of that world.

According to the “set” views, the conjunction of all the members of a possible world is possibly true, so each member of a possible world is possibly true. But ‘possibly true’ here cannot mean ‘true at some possible world’ on pain of circularity; rather, it must mean that the relevant sentence might have been true simpliciter. However, this is problematic for the view that worlds are sets of sentences, since the sentence ‘There are no sentences’ should be true at some worlds (cf. note 7), and so it should be a member of some worlds, even though it is not possibly true simpliciter. For, if this sentence were true, it would exist, and so would witness its own falsity. (This is just one of many problems which afflict this view—see Lewis’s 1986 discussion for a number of other problems.) Furthermore, *if there are no necessarily existing propositions*, then a similar problem arises for the view that worlds are sets of propositions. For it is plausible that, if there are no necessarily existing propositions, then there might not have been *any* propositions.¹⁴ As a result, the proposition that there are no propositions should be true at some world. But this proposition is not possibly true: if it were true, it would exist, thereby witnessing its own falsity.

¹² For the “sentence” version of the view, see Lewis’s (1986) discussion of “Linguistic Ersatzism.” For the “proposition” version of the view, see Adams (1981).

¹³ Adams’s (1981) view is slightly different. On his view, there are exceptions to maximality: no world contains any singular proposition directly about particulars which do not exist in that world. This complication does not substantively affect the argument in the text.

¹⁴ If propositions are thoughts (conceived of as mind-dependent), then there might not have been any propositions since there might not have been any minds. But someone might hold that there could have been propositions in a world without minds without admitting any necessarily existing propositions. I find the resulting view implausible for a variety of reasons I will not recount here. But at any rate it would then be true that there are mind-independent propositions, which is all I need for the rest of my argument. We could move directly to section 3.

Robert Stalnaker (unpublished) accepts the proposition version of the “set” view of possible worlds, and gives an account of ‘true at’ that seems to differ from the one I have just criticized. He uses ‘entails’ to define ‘true at’ and ‘true in’:

x is true at $w \leftrightarrow w$ entails x .

x is true in $w \leftrightarrow w$ entails the proposition that x is true.

The idea is that, for a world to entail a proposition, it need not entail that the proposition is true. For example, on this view, a world can entail that Socrates does not exist without entailing the truth of the proposition *that Socrates does not exist*. In this way, a proposition is allowed to be true at a world without being true in that world, and so without existing there.

The problem is to say what ‘entails’ means. If ‘entails’ is defined for sets of propositions as ‘has as a member’, then the account is the same as the above-criticized version of the “set” view according to which to be true at a world is to be a member of that world.

What else might ‘entails’ mean? Entailment is typically explained as follows:

(*) Σ entails $p \leftrightarrow \Box$ (Every member of Σ is true $\rightarrow p$ is true).

But this notion of entailment is not suitable for the purpose of avoiding necessarily existing propositions. In the sense of ‘entail’ defined by (*), if the members of a set can be jointly true, then each proposition entailed by the set can be true. So, by contraposition, *if some of the propositions entailed by a set cannot be true, then the members of the set cannot jointly be true*. As I observed above, if there are no necessarily existing propositions, then there might not have been any propositions at all. As a result, the foe of necessarily existing propositions must say that the proposition that there are no propositions is true at some worlds, and so that some worlds entail it. But, as before, this proposition cannot be true: if it were true, then it would exist, thereby witnessing its own falsity. So the present view requires that some worlds entail propositions which cannot be true. By the above-italicized claim, therefore, this view requires that the members of some possible world cannot jointly be true. Let S be such a possible world. Then ‘Every member of S is true’ expresses something that is impossible. Material conditionals with impossible antecedents are necessary truths. So the material conditional ‘Every member of S is true $\rightarrow p$ is true’ is a necessary truth, even if p is a contradiction. But, given the notion of entailment defined by (*), it follows that S

entails contradictions. Thus, the proponent of the present view would be led to the absurdity that contradictions are true at some possible worlds if he defined ‘entails’ as in (*).

How then can we understand ‘entail’? It is a problematic primitive, since intuitions about entailment often seem to track (*). However, even if we grant this primitive notion of entailment, there is a serious problem concerning iterated modalities. Consider the proposition that it is possible that snow is white. This proposition is necessarily equivalent, on the present view, to the following proposition (where square brackets form the name of the relevant proposition):

(#) Some world entails [Snow is white].

Now consider a claim involving iterated modality: it is necessary that it is possible that snow is white. If this claim is true, then a certain proposition is a necessary truth, namely, the proposition that it is possible that snow is white. But, as we have already noted, this proposition—the proposition that it is possible that snow is white—is on the present analysis necessarily equivalent to proposition (#) listed above. Necessarily equivalent propositions have the same modal status. So (#) is a necessary truth on the present view. That is, it is true at every world. But that means it is true at every world that the proposition that snow is white has a certain feature—the feature of being entailed by a world. To have that feature, a thing has to exist. So it follows that the proposition that snow is white exists necessarily. A proponent of the “entailment” account who denies the necessary existence of at least some propositions is for this reason forced to reject the claim from which we began: that it is necessary that it is possible that snow is white. But this claim follows from the B axiom ($p \rightarrow \Box \Diamond p$) plus the fact that snow is white. So, on the present account, the B axiom must be rejected.¹⁵ In fact, countless claims involving iterated modality face the same problem. That is a significant failing.

Finally, notice that (*) is a natural analysis that gets every uncontroversial case right. In light of this and the problems just listed, it seems that there is excellent reason to think that the notion defined by (*) is what we mean when we say ‘entails’. Thus, if we define ‘true at’ as Stalnaker suggests, we are led to necessarily existing propositions, as I explained. I conclude that the “set” views are off limits for the foe of necessarily existing propositions. As I already

¹⁵ Similar arguments show that the present account has to reject the S4 and S5 axioms. The resulting modal logic is thus the extremely weak system M (sometimes called T).

mentioned, the “ways a world could be” conception is off limits as well. This leaves the “state of affairs” approach, to which we now turn.

2.3 Actualist Possible Worlds as States of Affairs

Following Plantinga (1974), let us say that a state of affairs S includes another state of affairs S^* iff it is impossible that S obtain and S^* not obtain. Then we might say that each possible world is a state of affairs S , where S is possible in the sense that it could obtain, and S is maximal in the sense that, for every state of affairs not included in S , the result of conjoining that state of affairs with S is a state of affairs that could not obtain. On this view, a proposition is true at a state of affairs S iff S includes the state of affairs of p 's *being true*.

This account is also committed to the thesis that some truths exist necessarily. According to this conception of possible worlds, every proposition p true at a possible world is such that p 's *being true* is included in that state of affairs. If p 's *being true* is included in a possible state of affairs, then it is possible that p 's *being true* obtains. And, necessarily, if p 's *being true* obtains, then p is true. So it is possible, on this view, that p should be true. That is, for every proposition p that is true at some world, p is possibly true. For the reasons mentioned previously, this is unacceptable to the foe of necessarily existing propositions. If there are no necessarily existing propositions, then the proposition that there are no propositions is true at some world. But then it would follow, given that every proposition true at some world is possibly true, that the proposition that there are no propositions is possibly true. Since (as above) this proposition is not possibly true, there must be necessarily existing propositions after all on the “state of affairs” approach to possible worlds.

One might try to alter the “state of affairs” approach by claiming that p is true at state of affairs S iff S includes, not p 's *being true*, but rather *the state of affairs to which p corresponds*. For example, if p were the proposition that Bill is a dog, then p would be true at S iff S included the state of affairs of Bill's being a dog (since the proposition that Bill is a cat corresponds to the state of affairs of Bill's being a dog). And, in general, p is true at S iff there is a state of affairs C such that p corresponds to C and S includes C . Then the idea is that a proposition need not exist in a world in order for its actual correspondent to be included in that world.

There is, however, a problem with this revised account. According to this account, we analyze ‘true at’ in terms of correspondence. But what is correspondence? Perhaps one could say something roughly like this: p

corresponds to S iff p and S have the same constituents, put together in the same way. If this is the account, then the resulting view is committed to necessarily existing, structured states of affairs. These serve the purposes of my overall argument just as well as necessarily existing propositions: we could move directly to section 4. Thus, if the nominalist is to make use of this version of the “state of affairs” view, he must regard states of affairs as coarse-grained. But, if states of affairs are coarse-grained, it is difficult to see how to explain correspondence. For example, the nominalist cannot give the following analysis:\

$$p \text{ corresponds to } S \leftrightarrow \Box (S \text{ obtains} \leftrightarrow p \text{ is true}).$$

For, if he says this, then he must agree that, if p corresponds to S, then it is necessary that, if S obtains, p is true, and so p exists. This is precisely what the account was designed to avoid, since the idea was to say that a state of affairs could obtain without its actual correspondent existing. So it appears that nominalists who take this route are forced to revert to the old metaphors about describing a state of affairs “from the outside.” As a result, this “account” simply exchanges ‘true at’ for ‘corresponds’.

On every known actualist account of possible worlds, then, the technical term ‘true at’ can be defined only in a way that requires the necessary existence of at least some truths (or entities, such as fine-grained states of affairs, that are truth-like in the relevant respects). I thus conclude that on no actualist conception of possible worlds is it possible to hold that there are no necessarily existing truths.

2.4 “Non-Proxy Reductions” of Possible Worlds

The actualist theories we considered in the last subsection accept the existence of merely possible worlds, but identify them with actual objects (actual sets and actual states of affairs). There are, however, actualists who reject merely possible worlds altogether, rather than identifying merely possible worlds with actual objects. These actualists nevertheless maintain that much (or perhaps all) of what possibilists want to say using the apparatus of merely possible worlds can be systematically translated into language that is acceptable to an actualist. Here I have in mind the so-called “non-proxy reductions” of possibilist discourse developed by Fine (1977, 1985, 2002), Rosen (1990), and Sider (2002). Sider’s view is explicitly committed to the existence of universals in my sense, so I will focus on Rosen and Fine.

According to Rosen’s modal fictionalism, it is possible that there be blue swans because the translation of ‘possibly there are blue swans’ into a possibilist idiom—namely, ‘in some possible world, there are blue swans’—is true according to the possibilist’s theory of possible worlds. There is no trouble with ‘S is true at w’ in a possibilist setting—it just means that the sentence S is true when its quantifiers are appropriately restricted to w (as discussed in section 2.1). So Rosen’s account takes advantage of this, and allows the actualist to say:

S is necessarily true \leftrightarrow according to the possibilist fiction, S is true at every world.

Now Rosen’s approach is fraught with difficulties, and it is a matter of controversy how successful its proponents have been at defending it.¹⁶ But, in any case, the proposal is of no use to a nominalist in the present setting. The fictionalist accepts every instance of this schema:

$\diamond A \leftrightarrow$ according to the fiction, A^*

where A^* is the possibilist analysis of the modal claim $\diamond A$. Given that every instance of this schema is a counterexample-free analysis of some modal claim, we may necessitate it:

$\Box (\diamond A \leftrightarrow$ according to the fiction, $A^*)$.

Distributing, we have

$\Box \diamond A \leftrightarrow \Box$ (according to the fiction, A^*).

As a result, on the assumption that it is at least in some cases necessary that a given claim be possible, it follows that, in some cases, it is necessary that something be the case according to the relevant fiction. As a result, it must be necessary that this fiction exist. Although the fiction need not be *true*, it is nevertheless a proposition-like entity which exists necessarily. As it turns out, this is all that I need to establish for the rest of my argument to go through. So modal fictionalism is no help to the nominalist in the present dialectical situation.

¹⁶ For discussion, see Rosen (1990, 1993, 1995), Brock (1993), Noonan (1994), Divers (1995), Hale (1995), Nolan and Hawthorne (1996), Chihara (1998), Sider (2002), and Fine (2002).

What about Fine's view? Fine's idea is that a claim such as 'Some possible swan is blue' can be translated as 'Possibly, some swan is blue'. 'Some possible world is waterless' can be translated as 'Possibly, the (actual) world is waterless'. In general, claims about the character of possible objects are translated into claims about the possibility of objects having that character.

Consider then how this approach deals with the expression 'For some world w , S is true at w '. According to the scheme we have been considering, this will be translated as

Possibly, the (actual) world is such that S is true at it.

But of course being true at the actual world is equivalent to being true, so we have

Possibly, the (actual) world is such that S is true.

Unfortunately, this seems to get things wrong. If sentences have their meanings contingently, it will turn out that no sentence is true at every world, since any sentence might not have been meaningful, and thus would not have been true. As a result, "being true at every world" will not underwrite an explanation of the sense in which some sentences are necessarily true (which was the point of introducing 'true at' in the first place). On the other hand, if sentences have their meanings necessarily, then the sentence 'There are no meaningful sentences', will not be true at any world, contrary to the intuition that it expresses a possibility. One could of course deny the intuition and embrace the thesis that, necessarily, there are meaningful sentences. But, once again, one would thereby embrace the existence of multiply applicable, mind-independent predicables (namely, the predicates in those necessarily existing sentences), abandoning nominalism (cf. note 7). Fine's "non-proxy" reduction is therefore no help to the nominalist.

2.5 Summing Up

I am aware of no other detailed account of the sense in which a sentence can be necessarily true which is otherwise adequate and avoids commitment to the necessary existence of at least some necessary truths. I conclude that some necessary truths exist necessarily. These necessarily existing truths are not sentences, since sentences do not exist necessarily (see note 7). Following tradition, then, let us call these necessarily existing necessary truths propositions.

If a thing might have existed in the absence of any minds, then it is mind-independent. Since some propositions exist necessarily, but there might not have been any minds, it follows that some propositions are mind-independent. The rest of the argument goes like this. First, I will argue that propositions are structured entities with predicable constituents. Then I will argue that a proposition depends for its existence on the existence of its constituents. It follows from this that some mind-independent propositions depend for their existence on the existence of their (in some cases multiply applicable) predicable constituents. Thus, some such predicables are mind-independent, and so there are universals.

3. Propositions have Constituents

Two conceptions of propositions dominate the development of intensional logic during the last century. According to one conception—the coarse-grained conception—necessarily equivalent propositions are identical.¹⁷ According to the other conception—the fine-grained conception—a proposition is a structured entity that is built up by the application of logical operations (predication, conjunction, negation, existential generalization, etc.) on objects and predicables which are sometimes called “constituents” of the proposition (though this may be taken as a metaphor).¹⁸ On the fine-grained conception, necessarily equivalent propositions can be distinct by having either different constituents or a different structure (or logical form).

The coarse-grained conception of propositions has fallen out of favor in recent years. There are a number of reasons for this. It has seemed incredible to a majority of philosophers that there is only one necessary proposition, since this would mean that the most esoteric and hard to understand propositions of mathematics are in fact identical to a trivial logical truth. Besides being intuitively incredible in this way, the view also seems to have absurd consequences concerning propositional attitudes: that we cannot believe or know a trivial logical truth without believing or knowing every necessary proposition.

¹⁷ See, for example, Stalnaker (1976) and Lewis (1986, pp. 55-9).

¹⁸ I opt for the elegant algebraic approach to structured propositions developed by Bealer (1982) here and in what follows. The discussion could be rephrased in terms of other approaches, such as the “sequence” approach (taken either as a “model” or as a reduction). For discussion of these matters, and various developments of the theory of structured propositions, see Russell (1903), Kaplan (1989), Lewis (1970, 1986), Cresswell (1985), Salmon (1986), Soames (1987), and many others.

The coarse-grained conception of propositions is, I think, mistaken. However, the above objections are inconclusive, at least without further elaboration. For one may answer the former objection by saying that the relevant intuition arises as a result of confusing features of the proposition with features of the sentences that express it. And the latter objection is of course embroiled in long-standing controversies about propositional attitudes and the role of propositions in belief reports. As a result, it would be preferable to find another objection which is not burdened by these controversies. This is the goal of the rest of the present section.

Consider the following claim:

It is logically true that everything is self-identical.

On the coarse-grained conception, propositions have no logical form and so are never logically true.¹⁹ Accordingly, there are two views that a proponent of the coarse-grained conception might adopt concerning this apparently true claim. The first is to say that this claim is true, in which case he will wish to interpret it as attributing logical truth, not to the *proposition* that everything is self-identical, but to the *sentence* ‘Everything is self-identical’. The other approach is to say that the claim is false, because it attributes logical truth to a proposition, but that it seems true, or is the sort of thing that we would ordinarily say, because it conveys something true—namely, the meta-linguistic proposition that ‘Everything is self-identical’ is a truth of logic—perhaps by means of Gricean or quasi-Gricean pragmatic mechanisms.

Both positions fail. To see why, consider this modal claim:

It might not have been logically true that everything is self-identical.

This claim does not seem to be true; rather, it seems false. But, on the coarse-grained conception of propositions, the claim *should* seem true. There are two possibilities. The first possibility is that we are confusing the sentence and the proposition even here, in which case the claim should seem true because it conveys (or expresses) the true proposition that the sentence ‘Everything is self-identical’ might not have been logically true. The second possibility is that we are

¹⁹ Here and elsewhere, by ‘logical truth’ or ‘logical consequence’ I mean the intuitive notions of logical truth and logical consequence that we teach our students in introductory philosophy—the intuitive notions that formal notions of logical truth and consequence are supposed to capture.

not confusing the sentence and the proposition, in which case the claim should still seem true, since the proposition is not and could not have been logically true on the coarse-grained conception. Either way, then, this modal claim should seem true. Since the claim seems false, not true, the coarse-grained conception of propositions is inconsistent with our intuitions about logical truth.²⁰

One reply is that the sentence ‘Everything is self-identical’ is in fact necessarily logically true. One might think this implausible, since this sentence might have meant that Socrates is wise, in which case it would not have been logically true. But a number of philosophers have argued that there is a “thick” conception of sentences on which they mean what they do essentially.²¹ However, even if there is such a conception of sentences, it is quite plausible that sentences (and especially “thick” sentences) are contingently existing artifacts (see Belcher 2005, pp. 198-202). And, if they are not contingently existing entities—if they exist necessarily and also have their meanings necessarily—then their predicates are universals in my sense, because they are multiply applicable, mind-independent predicables.

The coarse-grained conception of propositions must therefore be abandoned because of its inconsistency with what we know about logical truth. In order to remedy this situation, we need to attribute logical structure to propositions, which leads us to the other conception of propositions—the fine-grained conception. According to the fine-grained conception, propositions have logical structure and thus have “constituents” in terms of which they are analyzed logically. We now consider the relationship between a proposition and its constituents.

4. Propositions Depend on their Constituents

On the view of propositions for which I have just argued, propositions have logical analyses in terms of ordinary logical operations: negation, conjunction, existential generalization, and so forth. Thus the proposition *that some men are not mortal* is a proposition which can be analyzed in terms of the predicables *mortal* and *man*, together with the logical operations of negation, conjunction, and existential generalization. The analysis can be presented like this:

²⁰ This is not to say that logically inequivalent sentences can never express the same proposition. For example, it may be that ‘Hesperus = Hesperus’ and ‘Hesperus = Phosphorus’ express the same proposition, even though they are not logically equivalent. This is consistent with the premises of the argument.

²¹ See Kaplan (1990), Bealer (1993a), and Belcher (2005).

[Some men are not mortal] =_{df} EG(conj(*man*, neg(*mortal*)))).

Why give the analysis in terms of operations on *predicables* rather than on entities from other ontological categories (such as sets, for example)? The reason is that predicables can be conceived as *intensional*: unlike a set, a predicable can be true of vastly different things in different worlds. Thus, for example, the proposition that everything is self-identical can be true with respect to an alien world containing only individuals that do not exist in the actual world only because the extension of the predicable *identity* can vary vastly across different worlds.

I called the above-displayed claim an *analysis* of the proposition that some men are not mortal. If an analysis is proposed having the form $\alpha =_{df} \beta$, then there is a counterexample to that proposed analysis if it is possible for something to satisfy (or be identical to) α without there being anything which satisfies (or is identical to) β , or conversely. For example, if it is possible for there to be something which is knowledge in the absence of any justified true belief, then that possibility is a counterexample to the justified true belief analysis of knowledge.

Now consider the proposition *that there is a proposition*, and suppose that this is one of the propositions that exists necessarily. This proposition is analyzed as the result of applying the existential generalization operation to the predicable *proposition*:

[there is a proposition] =_{df} EG(*proposition*).

Thus, if the above analysis is true, as it seems to be, then it is necessary that something is the result of applying existential generalization to the predicable *proposition*. (And, in general, if such analyses really are counterexample-free, then the objects and predicables on the right-hand side of the analysis must exist in every possible situation where the relevant proposition exists.) Hence, *proposition* must exist necessarily, for otherwise there would in some possible worlds be no such thing as the result of applying any operation to *proposition*.²²

²² The conclusion, that propositions depend on their constituents, seems to be at odds with the arguments in Plantinga (1983) and Bealer (1993b) for the thesis that they call *existentialism*. Whether this is correct depends on how that doctrine should be interpreted. Discussion of this issue would take us too far afield.

Someone might reply that the specification of how a proposition is built up from its constituents does not constitute an analysis of that proposition. This view is unattractive, since it seems plausible to regard structured propositions as having their structures essentially, and it also seems plausible that a specification of a thing by way of its essence is a definition or analysis. Still, as long as we suppose that the specification of how a proposition is built up from its constituents is at least true with respect to every world in which that proposition exists, we can derive our conclusion whether or not the specification is regarded as an analysis. The question is therefore whether a structured proposition could exist without being the value of any logical operation on its actual constituents.

There are two worries. One is that a proposition could exist without being the value of *any* logical operation. The other is that a proposition might have been the value of a logical operation on some objects that are *not its actual constituents*.

The second worry does little to disarm the overall argument. For it will still be admitted that various necessarily existing propositions could have had predicable constituents even in the absence of any minds. Thus it follows that universals are *possible*, and that they are the constituents of actual propositions in some worlds. One could still maintain that, as a matter of contingent fact, there are no universals. But the resulting position is unattractive, since whatever reasons nominalists have for avoiding commitment to universals are surely reasons against their possible existence as well. Furthermore, the view that actual propositions might have had constituents other than their actual constituents is implausible. For example, if propositions are (or can be correctly “modeled” by) sequences of their constituents, then they have their structures and constituents necessarily, since sequences have their structures and constituents necessarily. Alternatively, if we proceed within the algebraic approach, logical operations are “rigid” in the sense that, in each possible world, they map the same constituents onto the same proposition. Either way, then, propositions cannot change constituents across worlds.

What about the first worry? Could a proposition exist without being the value of *any* logical operation? There are two reasons to think not.

First, the argument of the last section in favor of structured propositions did not depend on any feature of the actual world—it would apply with respect to any possible world. Thus, the argument shows that propositions are *necessarily* structured: that each proposition is structured in every world in which it exists. But for a proposition to be structured just is for it to be the value of a (fine-grained) logical operation: to be structured as a conjunction, for example, just is

to be the value of the conjunction operation. So, since propositions are necessarily structured, and to be structured is to be the value of a logical operation, it follows that propositions have to be values of logical operations on their constituents.

Second, there are cases in which the only thing which distinguishes two propositions is that they have different structures. For example, the difference between the proposition that all bachelors are bachelors and the proposition that all dogs are dogs is that they differ in their constituents—one has the predicable *bachelor* where the other has the predicable *dog*. But, if there were a world in which these propositions existed without their constituents, then there would be no ground in that world for the distinction between the two propositions.

One could reply to both of these considerations by claiming that for a proposition to be structured is for it to be *possible* that it be the value of a logical operation. One could then deny the claim in the first consideration that to be structured is to be the value of an operation. And one could still regard the two propositions mentioned in the second consideration as distinguished by their structures, since they have different modal properties of the relevant sort. But there is an argument against this move. Consider some trivial logical truth, say the proposition that $A \vee \neg A$. According to the reply we are now considering, the fact that this proposition is the disjunction of a proposition and its negation is not a matter of its being built up in the obvious way by application of those logical operations. Rather, it is a matter of the propositions *possibly* being built up in that way. Now logical truth is truth in virtue of logical structure. Since the logical structure of this proposition is on the present view identified with the indicated modal feature, it follows that this proposition is true in virtue of having this modal feature. The fact that this proposition has the indicated modal feature, however, does not seem to explain its being true. Logical facts about the operations of disjunction and negation ensure the truth of any proposition that is built up from them in the way that the proposition that $A \vee \neg A$ is built up from them; they do not ensure the truth of any proposition that *merely could* be built up from them in the indicated way (unless of course being possibly built up in the indicated way entails being actually built up in that way, which would concede the point).

Thus, a structured proposition cannot exist without being the value of a logical operation. So some mind-independent entities—propositions—depend for their existence on the existence of their constituent predicables. Thus, these predicables are themselves mind-independent, since something that is mind-independent cannot depend upon something which is mind-dependent. It follows that there are

mind-independent predicables. And, of course, some of these predicables (e.g., *identity* or *proposition*) have multiple application. But, as we saw in section 1, if there are predicables of this sort, then they are universals. Hence, there are universals.

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