Nominalism's Modal Paradise Lost

Nominalism in all of its manifestations, from Abelard to Quine, grows out of ontological scruples. For William Ockham and his followers in the fourteenth century, nominalism was centrally concerned with a more parsimonious treatment of the ten Aristotelian categories of being. Lying at the heart of that Ockhamist program, which came to define 'nominalism' all the way into the modern era, was a new semantics for predicative sentences, intended to avoid the ontological naiveté of previous approaches. The new semantics had some success at avoiding the implausible postulate of a distinct property for each distinct predicate. But when it came to the alethic modalities of possibility and necessity, the nominalist program suddenly turns expansive, or so it has seemed to recent commentators, who have found in the nominalists a commitment to vast realms of merely possible beings, and even to a possible-worlds semantics for modality. Medieval nominalism seems unwilling either to acknowledge its ontological investment in such real possibles, or to surrender the explanatory power of modal discourse.

Here I offer a careful consideration of the evidence from Ockham and some of his fourteenth-century followers: John Buridan, Albert of Saxony, and Marsilius of Inghen. Quite contrary to how the nominalists are generally read, these authors take particular care to avoid an ontological commitment to real possibles. Indeed, although their broader semantic views make it quite natural for them to analyze modal sentences in terms of possible worlds, they deliberately eschew this way of proceeding, even at the cost of foregoing the explanatory power that their semantic theories have in other domains.

1. The Background Theory

Very roughly speaking, logic in the later Middle Ages comes in two waves, the *via antiqua* of the thirteenth-century realists and the *via moderna* of the fourteenth-century nominalists. The details are of course far more complex than this crude division allows for, and run across all the various branches of medieval logic, from the semantics of propositions to the validity of syllogisms and on to the analysis of paradoxes. For present purposes, however, what matters most is one very prominent and fundamental disagreement over the truth conditions for assertoric propositions. Consider this sentence:

(1) *Some dog is wise.*

On the standard realist analysis, this is equivalent to the claim that *There is a dog in whom the quality of wisdom inheres.*[1] This counts as progress toward an understanding of the sentence's meaning only if we are prepared to suppose there is such a thing as the quality of wisdom, and if we are prepared to embrace a relationship of inherence between a subject and its properties. And, indeed, almost everyone during the later Middle Ages was prepared to accept at least that much, even if there were ongoing doubts over what it means to speak of a property's inhering in a subject. By the fourteenth century, however, it had become very widely doubted that this so-called inherence theory of predication is adequate for very many kinds of sentences. Even if authors continued to believe in the reality of moral and intellectual virtues (such as wisdom) and in various sensible qualities (such as colors), it was regarded as increasingly implausible to suppose that, for instance, the predicate 'thin'

[1] See e.g. William of Sherwood, *Introduction* I.21: "An assertoric statement, then, is one that simply signifies the inherence of the predicate in the subject—i.e., without determining how it inheres. A modal statement, on the other hand, is one that does determine the inherence of the predicate in the subject—i.e., one that says how the predicate inheres in the subject." Where available, I cite published English versions of the texts I discuss, but the passages quoted are generally my own translation.

signified a property of thinness. Thus Ockham famously complained against those who "multiply entities according to the multitude of terms" (*Summa logicae* I.51 [OPh I:171]).

It was in fact Ockham, the venerable inceptor of nominalism, who crafted an alternative. The heart of his approach was a strategy that was then novel even if now it seems quite familiar: to analyze sentences such as (1) in wholly set-theoretical terms, so that their truth conditions could be given precise expression, shorn of metaphysical mystery, in terms of identity among members of sets. To see how this works, we need a first piece of technical vocabulary, the notion of a term's *supposition*. This is a way of talking about the things to which a term refers within the context of a sentence. All the parties to the dispute, realist and nominalist, agreed that, in the above example, 'dog' supposits for all the dogs that now actually exist. But what is distinctive of Ockham's new approach is that, rather than depend on the predicate's picking out a property that inheres in something the subject-term supposits for, he looks to the predicate's extension, or how it supposits. For Ockham and his followers, 'wise' supposits not for a property but for things that are wise—in this sentence, it supposits for all the wise things that now actually exist. So now we have two sets of objects: all the dogs and all the wise things. At this point we need to take account of the term 'some,' which tells us how these two sets overlap. Sentence (1) comes out true if and only if there is at least one member of the first set that belongs also to the second set. The sentence is true, as we would expect, if and only if there is at least one wise dog. And from here Ockham was able to show how this general strategy could be adapted to other kinds of cases, although of course the details quickly get quite intricate.[2]

[2] For a recent general overview see Christoph Kann, "Supposition and Properties of Terms." For some of the intricacies of Ockham's theory see *Summa logicae* I.63–77.

2. Introducing Tense

The one word not yet accounted for in (1) is the copula. It signals the sentence's subject–predicate structure, and also, through its tense, restricts the supposition to things that exist now. Tense has special importance for our purposes, because the nominalist's expansion of the theory to other tenses serves as an initially helpful, even if ultimately misleading, model for the expansion into modal discourse. Suppose we switch the verb in our sentence from 'is' to 'was,' giving us

(2) *Some dog was wise.*

The nominalists broadly agree on how the analysis should go. 'Dog' in (2) supposits for all current or previously existing dogs, whereas 'wise' supposits for all previously existing wise things. As Buridan puts it,

> The present-tense verb 'is,' as the copula in a proposition, makes both subject and predicate supposit strictly for present things…. But the verbs 'will be' and 'was,' and other similarly tensed verbs, limit the predicate to its time and ampliate the subject to its time plus the present time. (*Treatise on Consequences* I.6)[3]

Here the technical term 'ampliate' refers to the way the tense of the copula enlarges the supposition of the subject term. It is perhaps not immediately obvious why only the subject term is ampliated, whereas the predicate's supposition is merely shifted to the tense of the verb, but a moment's reflection shows why this must be so. If 'wise' in (2) is allowed to supposit for present things, then the force of the past tense is lost. But the supposition of 'dog' needs to include presently existing

[3] See also Marsilius of Inghen's very similar treatment in *Treatises* ch. 2, pp. 110-12 (past tense) and p. 114 (future tense). For technical reasons that need not concern us here, Ockham does not use the term 'ampliation' —see Priest and Read, "Ockham's Rejection"—but the essence of his approach is the same, as we will see below, and so I ignore this terminological nicety in what follows.

things, because a sentence of the form *Some F was G* might be made true by a thing that is now an F but was not previously an F. Consider the presumably true 'Some adult was a child.'

By analyzing tense in this way, the nominalists retain their commitment to a set-theoretic analysis in terms of suppositional identity. But here already one might question whether the theory has made a wrong turn. The nominalists do not suppose that merely past and future objects *presently* exist. All our texts are very clear that, in a sentence like (2), the terms supposit for entities that have existed or will exist but do not presently exist, entities we can call *temporalia*. Nor do the nominalists show any signs of being interested in a view on which all such *temporalia*, past and future, exist just as much as present entities do. This sort of eternalism (to use the modern label) is exceedingly rare in medieval discussions.[4] Yet without something like eternalism, it is unclear whether the theory can achieve its explanatory purposes. The nominalist's semantic project is centrally concerned with explaining what makes sentences come out as true. Indeed, they regularly use in this context the verb '*verifacere*,' which literally means *to make true*. It is of course intuitive enough to appeal, in such an explanation, to features of what exists now in the actual world. But it is not clear that, if we want to explain why (2) is true *now*, we can legitimately appeal to things that *did* exist but no longer exist. And, given the nominalists' commitment to the contingent truth of many ordinary claims about the future, it is even less clear that the present truth of a future-tense sentence can be explained in terms of things that *will* exist but do not yet exist. Both of these strategies seem to violate the seeming truism, as widely accepted then as now, that the truth of a sentence consists in its correspondence with how things are.[5]

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[4] See, for instance, Ockham, *Expositio in librum Pradicamentorum* 10.4 (OPh II:211): "No part of time exists, since neither the past nor the future exists."

[5] See, for instance, Ockham, *Expositio in librum Pradicamentorum* 9.13 (OPh II:201): "An utterance is said to be true because it signifies that things are in reality as they are" (*Oratio dicitur vera quia significat sic esse a parte rei sicut est*). For an

In a remarkable passage right at the start of his *Treatise on Consequences*, Buridan makes it clear that he is well aware of the apparent explanatory problem:

> Some claim that every true proposition is true because things are just as it signifies they are—with respect, that is, to the thing (*re*) or things signified. But I believe this is not true literally speaking (*de virtute sermonis*). For if Colin's horse, which cantered well, is dead, then this is true
>
> *Colin's horse cantered well.*
>
> And yet things are not in reality (*in re*) as the proposition signifies, because the real thing (*res*) has perished…. But this proposition is plainly (*bene*) true, for the reason that things were in reality (*in re*) as the proposition signifies they were. (*Treatise on Consequences* I.1)

Buridan sees the worry about explanation, and yet he himself is not worried at all. He finds it entirely adequate to say that the proposition is true *now* because of things that *did* exist. And he immediately goes on, with equal complacency, to extend the point to future cases and to modal cases:

> In the same way, this is true,
>
> *The Antichrist will preach,*
>
> not because things are in reality (*ita est in re*) as the proposition signifies, but because things will be in reality (*ita erit in re*) as the proposition signifies they will be. Similarly, this is true,
>
> *Something that never will be can be,*
>
> not because things are (*sic est*) as the proposition signifies, but because things can be (*sic potest esse*) as it signifies they can be. (ibid.)

How can Buridan afford to be so apparently insouciant about this situation?

So that we may advance to this paper's proper topic, I will grant that *temporalia*—supposited for, but not presently existent things—can be plausibly said to ground the present truth of sentences. Even with that much granted, it remains very hard to see how the nominalists could tell

historically informed overview of such views, see Marian David, "The Correspondence Theory of Truth."

any sort of similar story regarding modal propositions. For here the problem is not just that we lack presently existing entities to populate the requisite sets, but that, at least in some cases, we seem to lack entities altogether. For whereas in the temporal case there is the prospect of appealing to entities existing at other points on the timeline, it is much harder to believe in an analogous modal dimension, on which our actual world occupies just one point, which could serve to furnish the possible entities needed to populate a set-theoretic semantics. Without such merely possible, never actual entities—*possibilia*, as I will call them—the nominalist semantics for modal statements seems to collapse. And so the question arises: might the nominalists have embraced such an ontology?

3. Introducing *Possibilia*

From a metaphysical point of view, the nominalists understood modality in much the same terms we do. They suppose, for instance, to repeat Buridan, that "something that never will be can be." They also distinguish between necessities that hold as a matter of logic, necessities that hold given the course of nature, and purely conditional necessities that obtain given a particular antecedent assumption.[6] These things need to be said, because the so-called realist logicians of the thirteenth century did not in general attempt to analyze modal claims in a way that most philosophers today would recognize as adequate. Their analyses, instead, were based on the sort of temporal understanding of modality that runs through many ancient and earlier medieval discussions. For Lambert of Auxerre, for instance, from the middle of the thirteenth century, "if one says 'A man can run,' 'man' is ampliated here to supposit for present and future men" (*Logica* n. 1287). This does not on its face seem to be an adequate account of modal discourse, but Lambert is taking for granted a picture, going back to antiquity, on which modal claims can be analyzed in terms

[6] See e.g. Simo Knuuttila, "Necessities in Buridan's Natural Philosophy."

of the actual history of the world. Hence, along the same lines, Lambert asserts that "when one says 'A man is an animal necessarily,' this is as if one were to say: 'At every time, being an animal belongs to a man'—namely, in the present, the past, and the future."[7] And even though this seemingly simplistic conception of modality was often rejected over the centuries, thirteenth-century logicians were in general content to embrace it. They accordingly did not have to face the difficulty of needing to supposit for mere *possibilia*. Might these authors have adhered to this kind of temporal analysis precisely so as to avoid such a commitment? They do not say. But from the fourteenth-century forward it was clear to everyone that an adequate conception of modality had to account for possibilities that would never be actualized. This forced the nominalists' hand.

That the nominalists do endorse supposition over *possibilia* can scarcely be denied. Just as a past (or future) tense copula causes the supposition of the sentence's terms to be ampliated over past (or future) objects, so, the nominalists all agree, a modal operator causes supposition to be extended to possibilia. Here, for instance, is Ockham:

> In the case of the proposition *Something white can run*, when the subject is taken for something that can exist, the subject supposits for things that can be white. (*Summa logicae* I.33, OPh I:95)[8]

Buridan makes it explicit that the theory requires supposition over non-actual possibilia:

> A term put before the verb 'can,' or before the copula of a divided-sense proposition about possibility, is ampliated to stand for possible things, even if they do not and did not exist. So it is that

[7] *Logica*, n. 1365. See also n. 1361. Similar accounts of modal ampliation, as extending supposition only to other temporal cases, can be found in Peter of Spain, *Summaries* 9.2, 9.3, 9.5, 9.6. So far as I can find, William of Sherwood does not commit himself on the question. For a good overview of the history of this conception of modality, see Knuuttila, "Time and Modality in Scholasticism." For a more skeptical discussion of the extent to which a temporal conception of modality took hold among medieval authors, see Klaus Jacobi, "Statements about Events."

[8] See also *Summa logicae* I.72 (OPh I:216).

this is true: *A golden mountain can be as large as Mont Ventoux*. (*Summulae* 4.6.2, p. 299)[9]

Just as in the temporal case, the subject of a modal proposition needs a split reference, since we may want to say of some actual thing that it is possibly (necessarily) F, or we may want to make this claim about some merely possible thing. Unlike the leading figures of thirteenth-century logic, the nominalists all agree that, at least in some cases, modal claims are in some cases made true by mere *possibilia*.

Of course, it is this last way of talking that seems to involve the nominalists in a very unparsimonious ontology. Most commentators have simply accepted that this is the case. Thus Arthur Prior, more than a half century ago, wondered about the "weird" metaphysics of this "permanent pool of objects." Graham Priest and Stephen Read, pointing to Ockham's remark that "all men who can exist are infinite in number," happily accept this commitment in formalizing his theory of supposition.[10] Marilyn Adams sees no choice but to acknowledge the commitment, though she concludes that Ockham has no clear way to account for it.[11] Calvin Normore finds the same commitment in both Ockham and Buridan,[12] and Claude Panaccio has recently made the case in careful detail for Ockham.[13] Of course, if there are *possibilia*, then it is natural to want to make worlds of them, and interpreters have not hesitated to take this further step. George Hughes, focusing on the case of Buridan, has concluded that he "is implicitly working with a kind of possible worlds

[9] See also Buridan, *Treatise on Consequences* 1.6, 2.4, and 4.2 (18th concl.). The last passage is discussed by Lagerlund, *Modal Syllogistics*, 160-4, as a sign of Buridan's commitment to *possibilia*.

[10] See Prior, *Time and Modality*, pp. 30–31; Priest and Read, "Formalization of Ockham's Theory," p. 110, citing *Expositio in librum Perihermenias* Bk. I proem §6 (OPh II: 353): "illi qui possunt esse homines sunt infiniti."

[11] See Adams, *William Ockham*, ch. 11.

[12] Normore, "Buridan's Ontology," pp. 191, 193.

[13] Panaccio, "Ockham's Commitment."

semantics throughout."[14] Spencer Johnston, more recently, has gladly embraced Hughes's suggestion as a framework for formalizing Buridan's modal logic.[15]

These interpretations are doubly mistaken: mistaken that the nominalists are committed to anything remotely like a possible-worlds semantics for modal propositions; and mistaken even in supposing that they are ontologically committed to *possibilia*. These twin mistakes come from a single source: construing the modal semantics as if it proceeded fully on analogy to how the theory works in the temporal domain. In fact, as we will see, the nominalists carefully modify their account in modal cases, by refraining from requiring suppositional identity between *possibilia*, and instead by appealing to the device of appellation. These technical maneuvers greatly diminish the explanatory power of their theory, but the nominalists evidently judge this a price worth paying, to order to respect their parsimonious commitments.

4. A Paradise of *Possibilia*

Before looking at exactly how the nominalist account does proceed, let us briefly consider why it is so natural to read the nominalists as committed to a full-blown possible-worlds semantics. So far, all we have seen is that they let terms supposit for *possibilia*. But from here it takes only a few quick steps to reach a theory of possible worlds. Consider

(3) *Some dog is possibly wise.*

If we treat the usual temporal analysis as a template for constructing the modal analysis, then we will ampliate the subject to supposit for both *temporalia* and *possibilia*, and we will ampliate the predicate to do the same. Then we assess, in the usual way, for identity between members of the two

[14] Hughes, "Modal Logic," p. 97.

[15] Johnston, "Formal Reconstruction."

sets. If the subject-term set contains a possible dog who is also a member of the set of all possibly wise things, then (3) comes out true. (The modal and the past-tense cases will exhibit a slight disanalogy: in (2), as we saw, the predicate supposits only for things that *were* wise; in (3), since actuality entails possibility, the predicate will extend not just to *possibilia* but also to *actualia*.)

In fact, as we will see, this is not how the nominalists analyze modal sentences. But it is very natural to take the nominalists' talk of supposition over *possibilia*, together with the analogy to temporal cases, as licensing this sort of story. Terence Parsons, for one, makes this explicit. He writes that although it is "somewhat unclear" how modal truth conditions are to be understood, still

> One option works fairly clearly, and matches most of the discussion in the texts. This is to make modal propositions behave semantically as much like temporal ones as possible. In particular, in modal propositions we assume that the copula itself is unaffected by the modal sign, and the terms themselves are ampliated by the modal expression to possible things, or to necessary things. In particular:
>
> > The subject is ampliated to possible things (including things that exist at any time).
> >
> > The predicate is also ampliated; what it is ampliated to depends on the mode.
> >
> > There is no other effect.
>
> Examples:
>
> > *Every animal possibly-is [a] donkey* ≈ Every possible-animal is a possible-donkey
> >
> > *Every animal necessarily-is [a] donkey* ≈ Every possible-animal is a necessary-donkey.[16]

Once the analysis is carried this far, we can apply the usual set-theoretic analysis, and look to see whether the set of possible animals suitably overlaps with the set of possible donkeys.

Parsons is on firm ground, as we have seen, in letting the subject-term ampliate over

[16] Parsons, *Articulating Medieval Logic*, p. 296. It is quite unclear, as Parsons acknowledges, what a necessary thing might be. Since the texts themselves do not speak of any such entities, I will not belabor the issue.

possibilia. But he is unusual in explicitly appealing to ampliation of the predicate-term as well. Other modern scholarship, if it goes into the details at all, tends to follow the letter of the nominalists' discussion of modal cases in speaking only of ampliation on the subject side, without explicitly considering what happens to the supposition of the predicate. This is presumably why Parsons says that it is "somewhat unclear" how the full analysis is supposed to run. One might well suppose, however, that something like Parsons's story must be right if the nominalists are going to preserve their usual set-theoretic analysis. And once we embrace suppositional identity in this way, we are very close to a possible-worlds semantics. Suppose that no actual dogs are wise, but that there is a wise dog among the *possibilia*. This means, on the proposed analysis, that there is a merely possible dog—call her Perdita—who is identical to one of the merely possible wise things. In effect, to see why the sentence comes out true, we look over the (presumably infinite) set of possibly wise things until we find something we recognize as being also contained within the (presumably infinite) set of possible dogs.

We still do not have possible worlds. But now we are very close, because once we allow ourselves to mix and match *possibilia* in this way, it becomes obvious that we need to allow not just for infinitely many individuals, but also for infinitely many combinations of those *possibilia*. For consider again our non-actual possibly wise dog, Perdita. She is, we may assume, only contingently wise, and so Perdita will also be found in the set of possibly not-wise dogs. And for every other contingent feature of Perdita, there will be a set of things possibly having that feature, in which Perdita will be found, and a set of things possibly not having that feature, in which Perdita will also be found. As long as we restrict our target sentences to simple enough cases, we can persist in focusing only on the overlap between two sets. But as soon as things get more complicated, and we find ourselves needing to make claims about multiple subjects and multiple predicates—for example, whether Perdita is possibly wise, fertile, spotted, and mated with Pongo—then it becomes useful to

organize this information differently, in terms of totalities of compossible arrangements of things. Whatever we wish to call these maximal compossible structures, we are now very close indeed to a possible-worlds semantics.

A final step that would have to be taken, for us to have something worth calling a possible-worlds semantics for modality, is to quantify over worlds in the usual way, so that '◊P' is true iff P is true at some world, and '□P' is true iff P is true at every world. Parsons himself does not take this step,[17] but other commentators do. Hughes, for instance, writes:

> If Buridan assures us that by 'Every horse can sleep' he means 'Everything that is or can be a horse can sleep,' we could understand this to mean that for everything that is a horse in any possible world, there is a (perhaps other) possible world in which it is asleep. It seems to me, in fact, that in his modal logic he is implicitly working with a kind of possible worlds semantics throughout.[18]

Presumably the parallel necessity claim would involve universally quantifying over every possible world that contains a horse. So, following Hughes's lead, consider this sentence:

(4) *Every dog is necessarily wise.*

To evaluate (4), we would consider all the dogs, actual and possible, and then, for each of these, we would consider all of their possibilities—all of the ways in which Perdita might exist, to take just one instance—and then look to see whether every possible Perdita is wise. This is perhaps a bit clearer if we convert to ¬◊¬, and then consider whether Perdita is to be found in the set of possibly not-wise

[17] Indeed, Parsons describes the account as "neutral" even with respect to its ontological commitments, remarking that if there turn out to be no necessary-things or possible-things, then the sentences simply come out false (*Articulating*, p. 297). But this supposed neutrality is not available to the nominalists in practice, since they are hardly prepared to abandon all modal truths.

[18] Hughes, "Modal Logic," p. 97. The passage is quoted approvingly in Hodges and Johnston, "Medieval Modalities," p. 1034.

things. If not, then she is necessarily wise. However we run the analysis, it is hard to avoid thinking of what we are doing in terms of inspecting possible worlds. The ontological commitments of such an approach look on their face to be staggering, inasmuch as the theory must supposit for every way Perdita might possibly exist—a Perdita for every pattern of spots on her fur—and then do the same for every other actual and possible dog. But this is just a way of seeing what it means to be committed to a distinct possible world for every way things might be.

We can now turn to seeing why this story gets the nominalists wrong.

5. Appellation, the Path from Paradise

The path to this modal paradise of possible worlds requires ascribing to the nominalists an analysis of modality that they in fact consistently do not endorse, and requires ignoring the analysis that they consistently do endorse. The nominalist analysis of modal sentences does begin with the subject-term's ampliation over *temporalia* and *possibilia*. But this gets them only so far. Consider how Buridan describes the subject's ampliation:

> A divided-sense proposition concerning possibility has a subject ampliated by a mode following it so as to supposit not only for things that exist but also for things that can exist although they do not.….
> So the proposition 'B can be A' is equivalent to 'That which is or can be B can be A.' (*Treatise on Consequences* 2.4)

The last sentence, with its stated equivalence, shows that, if we ampliate only the subject, we hardly get very far in a semantic analysis of modality. We get to make a first move: we get to see that the truth of a claim about possibility may involve a merely possible entity. But ampliating the subject in that way leaves untouched the modal expression and the predicate. In effect, we have advanced from

(3) *Some dog is possibly wise*

to

(5) *Perdita is possibly wise.*

And if, in fact, Perdita were an actual rather than merely possible dog—"a dog that is" rather than a dog that "can be"—then this sort of analysis would have explained hardly anything about the distinctively modal force of such sentences.[19]

Evidently, if we are to make any more progress in analyzing the modal operator, something needs to be done with the predicate. But if one looks only at the nominalists' discussions of ampliation, there is no way of seeing what that might be, because the nominalists do not think that the path to analyzing modal expressions runs through ampliating the predicate. The place to look instead is in their discussions of a different semantic operation that they call *appellation*. As before, it will be helpful to look first at how the story goes in the temporal case. Here is Albert of Saxony:

> Second rule: in a proposition about the past, a predicate following the verb appellates its form—that is, the truth of such a proposition requires that its predicate, in its proper form, was at some time verifiable, in a proposition about the present, of a pronoun demonstrating that for which the subject of that proposition about the past supposits. (*Logica* II.12, p. 396)

This is barely intelligible on first encounter, but Albert mercifully offers an example:

> For example, the truth of 'Something white was black' requires that the following was at some time true, if it were formed: 'This is black,' where 'this' demonstrates that for which the subject supposits in the proposition 'Something white was black.'

Albert is closely following Ockham in this discussion.[20] Neither one wants the analysis, even in a

[19] For similar accounts of ampliation as yielding only this kind of partial analysis, see Albert, *Logica* II.11 and Marsilius, *Treatises* ch. 2, pp. 118–19.

[20] I quote Albert because he is somewhat clearer and more concise. For Ockham see *Summa logicae* II.7 (OPh I:269–70). For helpful general remarks on appellation see Claude Panaccio, "Ockham and Buridan on Epistemic Sentences."

temporal case, to involve ampliating the predicate. Rather, they want the predicate to "appellate its form." What this amounts to, in a temporal context, is that we descend to the particular case that is the truthmaker for the target sentence, and check to see whether that particular case is indeed true at the proper time. The analysis takes for granted that the subject term ampliates over *temporalia* in the way we have seen already in §2, but adds a further necessary truth-condition to temporal claims: that the predicate be "verifiable" in the particular case that we can call a *descended sentence*.

Albert (again following Ockham)[21] treats modal sentences analogously:

> The fourth rule is that a predicate following the verb 'can' appellates its form—when we say, for example, 'Something white can be black.' That is, the truth of this proposition requires that the mode 'possible' is verifiable of a proposition in which the predicate of the aforesaid proposition is predicated in its proper form of a pronoun demonstrating that for which the subject of the above proposition supposits. (*Logica* II.12, p. 404)

In light of the temporal case, this rule should be tolerably clear. But again, Albert usefully gives us an example:

> For example, the truth of the proposition 'Something white can be black' requires that the proposition 'This is black' is possible, where 'this' demonstrates what the subject supposits for in the proposition 'Something white can be black.'

With this we have a second step in the nominalists' analysis of modal sentences, one that adds a necessary truth-condition not in terms of suppositional identity, but as a shift similar to the shift above from (3) to (5)—that is, from the general to the particular. Here, however, the analysis has advanced a step, because instead of a sentence in the form of (5), we get a sentence of this form:

(6) *'Perdita is wise' is possible.*

[21] Ockham, *Summa logicae* II.10 (OPh I:276). See also Marsilius, *Treatises* ch. 3, pp. 150-1 and Buridan, *Summulae* 4.5.2, although these discussions are not developed in the detail that Ockham's and Albert's are.

Or, if we are dealing with a claim of necessity, then we get this:

(7) *'Perdita is wise' is necessary.*[22]

And if, instead of the 'some' in (3), the subject is modified by 'every,' as in

(4) *Every dog is necessarily wise*,

then what is required is that, for *each* individual the subject supposits for—Perdita, Pogo, and every other dog, including *actualia*, *temporalia*, and *possibilia*—necessity is truly predicated of any descended sentence that is formed along the lines of (7).[23]

This appeal to appellation counts as a kind of progress because it takes a divided-sense modal proposition, of the sort we had been considering in (3), (4), and (5), where the modal operator modifies the copula, and turns it into a composite-sense modal proposition like (6) and (7), where the modal operator is predicated of a sentence that is mentioned as the subject of the main sentence. Obviously, we would now like to know how the nominalists will analyze the modality in (6) and (7), hoping to flatten out this latest modal bump in the linguistic carpet. But at this point the only further move to be made is to apply the familiar sort of analysis deployed back in (1). That is, we look at the set of things that the two terms supposit for, and assess for the right kind of identity between set members.[24] In the case of (6) and (7), the subject supposits for itself—that is, for the very sentence inscribed there within quotation marks—and the predicate supposits for all possibly true or necessarily true sentences. If 'Perdita is wise' is contained in that set, the sentence comes out true. End of analysis.

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[22] Thus Albert goes on: "rules can be set out in a similar way for 'contingent' and 'necessary,' and this is clear from the rule already set out" (ibid.).

[23] For an example of the analysis working this way with a subject modified by 'every,' see Ockham, *Summa logicae* II.10 (OPh I:276), where the example—discussed below in §6—is the false sentence 'Everything true is necessarily true.'

[24] For this sort of approach to composite-sense modal propositions, see Buridan, *Quaest. in Analytica priora* I.25.

The overall nominalist account, then, comes in three stages: (a) ampliate the subject; (b) appellate the predicate; (c) evaluate the resultant composite-sense descended sentence in the usual way, in terms of suppositional identity. Does this amount to any real progress? One reason it would have looked that way to the nominalists is that they think that only divided-sense modal sentences are genuinely modal.[25] Composite-sense modals, in contrast, can be treated in straightforwardly extensional terms, and so can be given the preferred set-theoretic analysis. And with regard to the divided-sense modals, the analysis offers a measure of greater perspicuity which the nominalists were keen to highlight. In the case, for instance, of Albert's above example, *Something white can be black*, the three-stage analysis explains why this can be true even though it is impossible that something white *is* black.[26] Still, in a larger sense, their story explains shockingly little about modality. After all, even if (6) and (7) can analyzed in terms of suppositional identity, we have hardly done anything by way of *explaining* what makes these sentences true. Everything ultimately turns on the question of what sentences are contained in the set of all possible (or necessary) sentences, and here, ultimately, the nominalists' analysis is wholly silent. The most they offer at this level are the usual remarks about how necessity and possibility can be interdefined.[27]

Why, ultimately, is the analysis so unsatisfactory? It is so for the reason that makes

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[25] See, e.g., Buridan, *Quaest. in Analytica priora* I.26 and *Summulae* I.8.2, p. 69.

[26] Thus Albert writes that "the truth of *Something white can be black* does not require that the proposition *Something white is black* be possible" (*Logica* II.12, p. 404).

[27] See, e.g., Ockham, *Summa logicae* II.9, I:275: "a proposition is not said to be necessary for the reason that it is always true, but rather because it is true if it exists and cannot be false." I agree with Strobino and Thom, then, who comment regarding sentences like (6) and (7) that "Ockham seems to have no general account of the grounding of such singular propositions" ("Logic of Modality," p. 366). In a similar vein, Perini-Santos describes Ockham's modal theory as merely a "metatheory," ultimately lacking a first-order account of possibility and necessity ("La structure de la proposition modale Ockhamienne," p. 361).

nominalisms of all kind so often seem unsatisfactory, an unwillingness to commit the sort of ontological resources that might offer explanatory purchase. So, with a clearer sense in hand of the nominalists' position, we can now return to the central ontological question.

6. Paradise Lost

The mistaken impression that the nominalists embrace something like a possible-worlds semantics can arise at two different points along the three-stage analysis. The first point comes at the first stage, as we saw in §4, if one supposes their truth conditions for modal sentences turn on ampliating both subject and predicate and assessing directly for suppositional identity. But another path into this paradise of *possibilia*, likewise mistaken but with somewhat more direct textual support, comes at the second stage, with the theory of appellation. It is again a comparison to the temporal case that might fuel this misreading. Both Ockham and Albert describe appellation in the temporal case as a matter of the truth of a descended sentence "at some time." This way of talking makes perfectly good intuitive sense: we look to the relevant portion of the world's timeline and assess the sentence for truth. One might then suppose that something quite analogous will hold for the modal case: that we take our descended sentence and evaluate its truth at various spaces of *possibilia*, looking, say, for that possible entity that both is a dog and is wise. Indeed, Marsilius of Inghen goes so far as to write, repeatedly, that appellation in modal cases applies "to a time that can be."[28] So conceived, appellation effectively involves a commitment to possible worlds, because one would then be thinking of the space of possibility as stretching out along one or more dimensions in the

[28] *Treatises* ch. 3, p. 150: "Et intelligo talem terminum appellare rationem suam pro tempore isto pro quo predicatum est ampliativum…. Si autem terminus ampliativus ampliaret terminum positum a parte subiecti pro suis significatis que sunt vel possunt esse, terminus appellativus appellaret suam rationem adiacere suo determinabili pro tempore presenti vel pro tempore quod potest esse." Exactly the same phrase is used on pp. 152 and 154.

way we intuitively think of times as arrayed along a timeline. There would be a place ("a time that can be") where Perdita is wise and has exactly 73 spots, and if such a place is not yet an entire possible world, that is only because we have not asked enough questions about what is true at that possible time. Answer every question about what obtains there and one has described a world.[29]

Marsilius's incautious phrasing aside, this is simply not how the nominalists think about appellation in modal contexts. Instead of directly applying the temporal analysis to the modal case, both Ockham and Albert quite deliberately tell the story differently. In the temporal case, Ockham says, the descended sentence "either was true at some time, if it is a proposition about the past, or will be true at some time, if it is a proposition about the future."[30] In the modal case, his analysis is closely analogous except that what it ultimately requires is not truth at a time, but that "the mode expressed in such a proposition be truly predicated of the non-modal proposition…."[31] In other words, the modality—possible or necessary—must be truly predicated of the descended sentence, as with (6) and (7). In principle, these sentences still could be read, *à la Marsile*, as a matter of truth at a possible time or world, but both Ockham and Albert explicitly deviate from the analogy with the temporal case so as to avoid conceiving of them that way. And this is particularly clear with respect to necessary truths. The quasi-Marsilian analysis, applied here, would require not just finding a single

[29] E. A. Moody, though deserving praise for having clearly identified the role of appellation in these contexts, describes the view in a way that is prone to mislead along Marsilian lines: "the predicate has 'appellation' according to the tense or mode of the verbal copula, whereby the condition signified by the predicate is posited as verifiable, *in the time or mode connoted by the verbal copula*, of that for which the subject term stands…. Verbal copulas of past time, or of possibility, operate correspondingly" (*Truth and Consequence*, pp. 54–5, emphasis added). Since Moody says nothing more than this about how the modal case works, readers might be forgiven for supposing that the view thinks of modal space as analogous to temporal space.

[30] *Summa logicae* II.7 (OPh I:270). For Albert's equivalent version, see *Logica* II.12, p. 396, as quoted in §5.

[31] *Summa logicae* II.10 (OPh I:276). For Albert's equivalent version, see *Logica* II.12, p. 404, as quoted in §5.

possible time at which the descended sentence is true, but instead finding that the descended sentence is true at all possible times. Marsilius himself gives no indication of wanting to take this further, critical step, which strongly suggests that he himself is not serious about his offhand appeal to possible times. And Albert's and Ockham's way of dealing with necessary truths makes the point even more clear, since for them appellation simply stops with composite-sense modals like (6) and (7). Nothing in their analysis offers the slightest encouragement for thinking of modal claims as analyzable in terms of truth at a possible world.

Although this second, Marsilian path to modal paradise arises at a later stage, it effectively misconstrues the theory in the same way as does a misreading at the initial ampliation stage. What encourages the mistake, at each stage, is that the nominalists do, undeniably, allow supposition over both *temporalia* and *possibilia*. Indeed, strictly speaking, both subject and predicate in modal sentences supposit for *possibilia*,[32] even if the predicate's supposition does not enter into their analysis of modal truth conditions. For the nominalists, then, the only constraint on the number of entities supposited for is the constraint on the number of sentences that exist. But to treat this suppositional profligacy as providing an ontology for a possible-worlds semantics requires commitments that the nominalists nowhere endorse: not just an unlimited pool of *possibilia*, each capable of being given its own maximally determinate description, but also the ability to identify these *possibilia* across different descriptions. Whether the story be told in terms of suppositional identity or appellation at a possible world-time, the nominalists would have to find it meaningful to say that in

(3) *Some dog is possibly wise*

among the things that 'dog' supposits for is a particular merely possible dog about whom we can say

[32] Ockham makes this explicit at *Summa logicae* I.72 (OPh I:218). The general theory of supposition in a broad sense, set out at *Summa logicae* I.63, requires that "whatever can be a subject or a predicate of a proposition supposits" (OPh I:193).

whether or not she is wise, whether or not she has exactly 73 spots, and so on, for every predicate we might devise. There is no obstacle in principle to conceiving of *possibilia* in this way, but for the nominalists it would have looked like an idle exercise. Their goal, after all, was to discover the truth conditions that would *explain* what makes modal sentences true. It counts as a kind of progress to see that (3) can be true in cases where the relevant dog is a mere possibility. But is there something further to be gained by indulging in the fiction that the terms of (3) supposit for fully determinate but merely possible individuals, with a certain precise history and future, for whom there is a fact of the matter about whether any given predicate holds of it? In effect, this is what a possible-worlds semantics for modality does maintain. The nominalists were close enough to a theory of this sort to see it as a potential theoretical move, but the details of their accounts show them to have turned away from this sort of faux explanation.

Of a piece with this suspicion of determinate *possibilia* is a suspicion of *de re* necessity. Modal facts about an individual, on the story being imagined, require identities among *possibilia* of just the sort that these authors refuse to countenance. Even if the subject of the sentence is an actual dog, evaluating what is necessary or possible for that very dog depends on describing a space of *possibilia* and then supposing that facts about the nature of this world-time explain what possibilities for that dog are and are not open. Rather than indulge in that sort of fiction, the nominalist theory seeks to understand the *de re* in terms of the *de dicto*. This emerges when Ockham contrasts the divided *de re* sentence

(8) *Everything true is necessarily true*

and the composite *de dicto* sentence

(9) '*Everything true is true' is necessary.*[33]

[33] See *Summa logicae* II.10 (OPh I:276).

Ockham wants to say that (8) is false, since there are many contingent truths, whereas (9) is true, since, trivially, there cannot be anything in the set of true things that is not in the set of true things. His semantics thus needs to distinguish the two sentences. As we have seen, aside from the usual appeal to suppositional identity, the nominalists do not have an analysis of composite-sense modals like (9)—indeed, they are inclined not to think of them as truly modal at all. As for (8), that receives the three-part analysis we have been discussing: identify the *supposita* on the subject side; construct the appellated descended sentence(s); evaluate for truth. What that yields is a list of composite-sense propositions of the form

(10) *'Perdita is wise' is true' is necessary.*

The fact that not all such descended sentences come out true explains why (8) is not true. But even if Perdita—a *res*, albeit a merely possible one—is named in (10), this is not a claim of *de re* modality, just as (6) and (7) were not. It is instead a *de dicto* claim, a claim about the nested *dictum* "Perdita is wise' is true.' Plainly, (8) has not been reduced to (9), nor does Ockham even say that (8) is equivalent to an exhaustive list of sentences of the form (10), inasmuch as the truth of these descended sentences is said to be merely a *necessary* condition for the truth of (8). Still, inasmuch as Ockham (and his followers) have nothing more to say, beyond these three steps, about how to analyze a divided-sense proposition like (8), the theory suggests that its goal is to understand the *de re* in terms of the *de dicto*. This strategy is all the more striking once one realizes that, when the nominalists arrive at the *de dicto*, their analysis effectively stops, leaving us with no further story about why some sentences are necessary and some are not.

7. Supposition without Ontological Commitment

So it is that the nominalist story about modality is every bit as disappointingly limited as one might have expected from a bunch of nominalists. Their account invites, twice over, a possible-

worlds analysis of modal discourse, but twice refrains from taking that very natural step, by eschewing the cosmology of determinate *possibilia* that such an analysis requires. But if the nominalists' *possibilia* are not sufficiently determinate, are they then committed to indeterminate *possibilia*? Does the theory require dogs that are neither wise nor foolish, neither spotted nor solid nor even striped? This of course is not what I mean to suggest. The nominalists do not commit themselves to determinate *possibilia* because, contrary to what has been generally supposed, they do not endorse the existence of *possibilia* at all.

Yet how can this be, one may still wonder, given that the nominalists are perfectly clear that modal claims supposit for such non-actual entities? Does not supposition—or at any rate supposition in a true sentence—require ontological commitment? This is how Adams put it:

> for Ockham, we may say, a theory has an ontological commitment to entities of a certain sort, if, in order for the theory to be true, a term must be taken to supposit or stand for such entities in a proposition included in the theory.[34]

This principle seems to have been generally accepted in the literature, so much so that the most developed attempt to acquit Ockham of ontological commitment to *possibilia*, due to Alfred Freddoso, takes the fairly desperate course of denying that his theory supposits over *possibilia* and *temporalia* at all.[35] But this is untenable, given that Ockham and the whole tradition explicitly speak of

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[34] *William Ockham*, p. 81. Panaccio, "Ockham's Commitment," careful considers and endorses this principle and, on that basis, embraces the conclusion that Ockham is committed to *possibilia*. He does not, however, discuss the role of appellation in modal truth conditions, which I take to be the critical move in their avoidance of ontological commitment.

[35] Freddoso arrives at this conclusion somewhat obliquely, by maintaining that a term cannot supposit for what does not actually exist, because "only actually existing things can have properties or stand in relations" ("Ockham's Theory," p. 34). This then creates a dilemma: either *possibilia* actually exist, or Ockham does not supposit over them. Against all the textual evidence, Freddoso opts for the latter, and constructs an account on which Ockham needs not actual supposition but merely facts about what a term "might have supposited for" (p. 59). The more plausible solution is to

such supposition at the first stage of the theory, and given that the second stage of appellation itself critically depends on supposition over non-actuals.

The nominalists not only appeal to supposition over non-actuals, but do so in full awareness that they are thereby divorcing supposition from ontological commitment. We saw this already in Buridan's blithe dismissal of the principle that "every true proposition is true because things are just as it signifies they are." If Buridan was prepared to endorse the reality of *temporalia* and *possibilia* then he could have retained the principle. Albert of Saxony makes a similar point: "this is not a valid inference: a given term supposits for something; therefore it supposits for something that exists" (*Logica* II.11, p. 380). In saying this, he means that it might instead supposit for something that did or will or could exist. But if those forms of supposition themselves entailed existence, then he could not deny the validity of the inference.

This is not to say that the nominalists completely reject the idea that supposition carries ontological commitment. In the sort of standard case we began with, of a present-tense, non-modal, affirmative proposition such as

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deny Freddoso's starting point, and insist that supposition, for the nominalists, if it is a relation at all, is a relation that does not require the existence of the *relata*. And Ockham, in fact, seems to have been generally untroubled by intentional relationships to nonexistent entities. He takes it that God, for instance, has thought about the created world from eternity, without the world's needing to have any sort of reality, even in the divine mind (see *Ordinatio* I.43.2, OTh IV:646) and the discussion in Adams, *William Ockham*, pp. 1076–78). And he labels as fallacious the inference, "the Antichrist does not exist; therefore you are not thinking of the Antichrist" (*Summa logicae* III-4.13, OPh I:831).

For an extended argument that Ockham endorses *possibilia*, founded on the mind's ability to think about them, see McGrade, "Plenty of Nothing." McGrade recognizes that one might deny that intentional representation requires the reality of the object, but McGrade thinks such a denial would contravene Ockham's direct realism (pp. 151, 154–55). I would deny that his direct realism requires anything as strange as *possibilia*, but adjudication of these issues would require separate discussion.

(1) *Some dog is wise*

the sentence's truth requires what I have been calling suppositional identity: the appropriate sort of overlap between the set of things that are dogs and the set of things that are wise. For the nominalists, this is understood in the most straightforward and literal of ways: there must be at least one thing that is both a dog and is wise. Even here, it need not follow that *everything* for which a term supposits exists, but it does that follow that, if a sentence like (1) is true, then at a minimum the truthmaker that delivers suppositional identity must exist. In contrast, in temporal and modal cases, not even this much is true. For Buridan, the truth of

(2) *Some dog was wise*

is sufficiently explained by the past existence of something that was a dog and was wise. Here supposition is ontologically committing, but only for the time indicated by the tense of the verb.

In modal cases, where, as we saw, this sort of approach will not work, the nominalists have recourse to appellation, which cancels any such ontological commitment. This is obvious enough if one reflects again on the examples. Suppose it is true that

(3) *Some dog is possibly wise.*

Since (3) supposits over *possibilia*, it would follow, if (3) were given the standard analysis in terms of suppositional identity, that we would be committed to an ontology of *possibilia.* But the nominalists nowhere require this: the condition they instead impose deploys the device of appellation, which is to say that the truth of (3) requires the truth of a sentence along the lines of

(6) '*Perdita is wise' is possible.*

For (6) to enter into the truth conditions of (3), Perdita (a merely possible dog) must be among the things that 'dog' supposits for in (3), which is why the theory requires supposition over *possibilia*. But nowhere does the theory require suppositional identity between Perdita (as a dog) and Perdita (as wise). To be sure, (6) is analyzed in terms of suppositional identity, but the terms of (6) supposit for

sentences, not for dogs, and so the truth of (6) turns on whether the sentence named there is found in the set of all possibly true sentences. In this way, ontological commitment to *possibilia* is neatly sidestepped.[36]

Given this story, Adams's above-quoted principle for ontological commitment has to be framed more precisely. The nominalist's modal analysis does satisfy Adams's criterion that "a term must be taken to supposit or stand for such entities in a proposition included in the theory." This obtains, since the first two stages of the theory depend on suppositing over *possibilia*. But the whole point of the analysis is ultimately to get rid of this commitment, and so in the final stage, with a sentence like (6), supposition over *possibilia* drops out. That's the stage that matters, in terms of ontological commitment, because this is the stage that shows the truth conditions for the sentences in question. So we should revise Adams's principle to read as follows:

> A given sentence has an ontological commitment to entities of a certain sort if the truth conditions for that sentence require that one of its terms be taken to supposit for such entities.

Ever so carefully, the nominalists' strategy of appellation steps around this condition.

Admittedly, the story is not quite as neat as one might want. One complication—hinted at earlier—is that the nominalists, in good nominalistic fashion, treat sentences (what they call *propositiones*) as concrete linguistic items—spoken, written, or mental. Recognizing this makes it easier to see why analyzing (6) in terms of suppositional identity avoids *possibilia*, but creates its own difficulty, which is that (6) cannot come out true unless the named sentence actually exists. Obviously, we do not want the truth of (3) to be hostage to the contingencies of whether the

[36] Freddoso, "Ockham's Theory of Truth Conditions," pp. 37–38 and 60, makes a similar point, but the significance of his insight is obscured by his quixotic attempt to show that Ockham does not need to supposit for *possibilia* at all.

appropriate descended sentence presently exists *in concreto*. In fact, the nominalists were aware of the issue. Thus Albert, when he offers an example of how appellation works in temporal contexts, is careful to say that the descended sentence must be "at some time true, *if it were formed*."[37] This raises a host of intricate issues, among them the problem that appellation itself now seems to presuppose some understanding of counterfactual conditionals.[38]

However this issue is to be resolved, it is instructive that the nominalists must wrestle with an ontological commitment to sentences, as a way of escaping an ontological commitment to *possibilia*. This underscores why Adams's principle needed to be revised, not wholly rejected: the nominalists' semantics really cannot run on anything less than a full commitment to the entities with which they work. To see why this is so, imagine someone suggesting that all this talk of suppositing for *temporalia* and *possibilia* is merely a *façon de parler,* meant to describe an abstract logical structure for analyzing certain expressions, but without any pretensions to enumerate what there is in the world. We are, the suggestion would be, in the domain of the nominalists' *logic*, not their *metaphysics*. This cannot be right, at least not for the nominalists. Whatever value there may be in constructing purely abstract logical systems, we know that this is not what the nominalists were after, because the very point of their innovations in semantics was to avoid the unacceptable metaphysical commitments of their predecessors. That a logic *is* ontologically committing is the very starting point of Ockham's critique of his predecessors. The nominalists see their semantics this way because they are not interested merely in constructing abstract logical structures for analysis, but in identifying the truthmakers for language, where these truthmakers cannot be mere fictions, but must be entities in the world being described. Given that the nominalists do not countenance *possibilia* to explain the

[37] See *Logica* II.12, p. 396, as quoted in §5. Ockham routinely issues a similar proviso, e.g. in note 27 above.

[38] For further discussion see Freddoso, "Ockham's Theory of Truth Conditions," pp. 40–43, Adams, *William Ockham*, pp. 411–16. The worry about counterfactuals was noted already in Moody, *Truth and Consequence* p. 55n.

truth of modal claims, it is no surprise to see them converting the *de re* into the *de dicto*, and treating linguistic entities as the ultimate modal truthmakers.

For similar reasons, it also will not serve the nominalists' purposes to treat *possibilia* as if they were a kind of abstract, ersatz substitute for concrete individuals. For even if entities of that sort could in principle satisfy the demand to serve as truthmakers for modal statements, they will not work within the nominalist story. That story, after all, turns on describing sets of individuals, picked out by the terms of the sentence, and then assessing for truth in terms of whether the two sets have the correct amount of overlap. If all the denizens of these sets were abstracta, then we might be able to construct a coherent story. But consider the *de re* modal sentence

(11) *Josie is possibly wise*

and suppose this is true in virtue of an actual dog named Josie who is possibly but not actually wise. The subject term supposits for Josie. To deploy suppositional identity would require treating the predicate as suppositing for all the things that are or could be wise, and then looking for Josie within that set. Yet if Josie is not actually wise, and if *possibilia* are abstract entities, then we lose the ability to explain the sentence's truth in terms of identity. After all, a concrete dog cannot be identical to an abstract object. Hence if the theory is going to make use of *possibilia* in the way that recent scholars have supposed, these entities cannot be abstracta; they must be real, concrete individuals. The possibly wise Josie for whom the predicate supposits would have to be a concrete entity, a denizen of a possible world that is real in very much the way that David Lewis has notoriously proposed in modern times.[39]

Indeed, such a view would be even more radical than Lewis's, for whereas he thought that individuals on nearby possible worlds are mere counterparts of actual individuals, the nominalists, so

[39] Startlingly, this affinity between Ockham and Lewis is endorsed by McGrade, *Plenty of Nothing*, p. 155.

construed, would be committed to trans-world identities. So, if I am possibly wise, then there is a possible me who *is* wise, and who, somehow, is in fact *me*. The ethical and theological implications would be worrisome. Presumably, for instance, I should hope for this person's salvation in the next life, since it would be *my* salvation, and since any real and concrete person, even a possible one, ought to be at least eligible for an eternal reward. In general, since salvation is held to be a contingent matter for everyone living, there will be possible versions of each of us who are damned and other possible versions of us who are saved. Intuitively, we would hope that salvation comes to the version of us that is actual. But, on the theory being ascribed to the nominalists, since all my possible outcomes are equally real and equally *my* outcomes, it would hardly seem to matter which one is actual.

These results makes it very clear why the nominalists need an alternative approach to modality, one that supposits over *possibilia* without being committed to their reality. Unsurprisingly, the price they pay for their parsimony is a corresponding inability to go very far in explaining what it is that makes modal claims true.

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