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A Puzzle About Parsimony

Peter Finocchiaro

In this paper, I argue for the instability of an increasingly popular position about how metaphysicians ought to regard parsimony. This instability is rooted in an unrecognized tension between two claims. First, we as metaphysicians ought to minimize the number of ontological kinds we posit. Second, it is not the case that we ought to minimize the number of ideological expressions we employ, especially when those expressions are of the same ideological kind (e.g., the compositional predicates 'is a part of' and 'overlaps'). I argue that the two claims are in tension with one other. At the very least, minimizing the number of ontological kinds posited entails minimizing the number of expressions employed—more specifically, the "ontologically committing" predicates. But, plausibly, the tension runs deeper than that. I suggest that minimizing the number of ontological kinds just is a specific way of minimizing the number of ideological expressions employed in stating a theory. The two activities target the same aspect of reality, the world's metaphysical structure. I end by evaluating three different responses to this puzzle. Ultimately, I suggest that metaphysicians should treat the minimization of the number of ideological expressions as more important than it currently is treated.

Parsimony is among the most prominent methodological considerations in metaphysics. Yet beneath the surface there lurks a puzzle. I will bring this puzzle about parsimony to light. As I will show, the puzzle highlights a conceptual tension between several prominent positions in metaphysics. I will then offer three responses to the puzzle. Each response faces unique challenges.

First, I will make some starting assumptions. These assumptions are not unassailable. But each is independently plausible and each has broad support amongst metaphysicians.

Parsimony has traditionally been restricted to ontology: do not multiply entities beyond necessity. Lately, however, metaphysicians have turned their attention toward *ideological parsimony*. Ideological parsimony, as I understand it, concerns the primitive (i.e., undefined) terminology used to state a theory. Recently, many philosophers (Brenner 2017; Cowling 2013; Schaffer 2015;

Sider 2011; Turner 2015) have defended the claim that both ontological and ideological parsimony make a theory more worthy of our endorsement. I will assume that they are right.

I will also assume what is sometimes called a *realist* or *externalist* interpretation of ideology. Like an analogous interpretation of ontology, ideological externalism states that the quality of a theory's ideology is ultimately judged by the extent to which it corresponds to objective reality, i.e., the world's metaphysical structure.[1] (Ideological externalism can be contrasted with ideological internalism, which states that the quality of a theory's ideology is judged by details internal to the theoretic process—e.g., the intelligibility of the terminology employed.)

I will also adopt the orthodox approach to meta-ontology, *neo-Quineanism*. According to neo-Quineanism, a theory's ontological commitments are determined by what the theory quantifies over when regimented with a suitably perspicuous language.[2] Finally, I will focus on theories about the fundamental nature of the world. While there might be versions of this puzzle that extend to non-fundamental theories, I do not have much to say about them. That is in large part because I do not have much to say in general about the relationship between fundamental and non-fundamental theories.

These assumptions help generate a puzzle, one that highlights a conceptual tension in how some metaphysicians understand the role of parsimony in theory choice. This tension has, until now, gone unrecognized. To bring out the tension, I identify in section 1 four approaches to parsimony that differ along two axes: ontology/ideology and quantitative/qualitative. We seem to have an intuitive grasp on these approaches and understand the differences between them, in particular the differences between ontological and ideological parsimony. But in section 2, I argue that qualitative ontological parsimony entails a restricted version of quantitative ideological parsimony. This is a surprising and worrisome puzzle. It is surprising because it goes against our intuitive grasp of parsimony. It is worrisome because it seems inconsistent with a popular position amongst metaphysicians—i.e., that greater qualitative ontological parsimony makes a theory more worthy of endorsement but it is not the case that greater quantitative ideological parsimony makes a theory more worthy of endorsement. I then suggest that the entailment is no coincidence; qualitative ontological parsimony may be conceptually distinct

1 I discuss ideological externalism (as well as ideological internalism) in greater depth in Finocchiaro (2021, 963–969). See, also, Cowling (2013, 3983) and Sider (2011, 13).

2 See, inter alia, Quine (1948); Inwagen (1998); Lewis and Lewis (1970).

from quantitative ideological parsimony, but the most sensible applications of them target the same feature of reality, the world's metaphysical structure.

In section 3, I discuss three available responses to this puzzle. First, we could resist the puzzle by rejecting neo-Quineanism. Second, we could downplay the significance of the puzzle by offering a more nuanced application of parsimony. Finally, we could reevaluate the value of quantitative ideological parsimony as a theoretical virtue. Ultimately, I favor the third response. Metaphysicians should value quantitative ideological parsimony more than they currently do.

1 Four Different Approaches to Parsimony

Many metaphysicians think that parsimony should play a role in theory choice. They have cited parsimony in support of theories as wide-ranging as compositional nihilism (Horgan and Potrč 2008), bundle theory (Paul 2017), materialism (Churchland 1984), and nominalism (Melia 2008).

But such metaphysicians often differ in how they use parsimony. Even when restricted to the ontology of a fundamental theory, there are two importantly different approaches they take. Some (e.g., Nolan 1997) tend to prefer the theory that minimizes the number of entities posited. Others (e.g., Lewis 1973) tend to prefer the theory that minimizes the number of *kinds* of entities. Following a convenient shorthand from Cowling (2013), I will name these two different approaches (NO-Parsimony) and (KO-Parsimony), respectively.

I won't take a stand on which approach is best.[3] I simply note that even those inclined toward (NO-Parsimony) also tend to be inclined toward (KO-Parsimony). More generally, among the metaphysicians who care about parsimony at all, most of them accept (KO-Parsimony).[4]

We can also consider the parsimony of a fundamental theory's ideology. David Lewis, for example, claims that modal realism enables us "to reduce the diversity of notions we must accept as primitive" (1986, 4). Theodore Sider argues that compositional nihilism "allows us to eliminate the extra-logical (or perhaps quasi-logical) notion of 'part' from our ideology" (2013, 239). Both modal realism and compositional nihilism are ideologically parsimonious.

3 For two defenses of different uses, see Lewis (1973) and Tallant (2013).

4 For instance, Nolan (1997, 330) says "I claim that not only ought we not multiply types of entities beyond necessity, but that we should also be concerned not to multiply the entities of each type more than is necessary."

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For Lewis and Sider, the ideological parsimony of their theories provides a reason to endorse them.

Just as with ontology, there are two importantly different approaches to ideological parsimony. Metaphysicians may prefer the theory that minimizes the total number of terms that are employed but undefined within the theory ("bits of ideology"). Or they may prefer the theory that minimizes the number of kinds of terms so employed ("ideological kinds"). Adopting another shorthand from Cowling (2013), I will name these approaches (NI-Parsimony) and (KI-Parsimony), respectively.[5]

I should note that it's not obvious how to individuate ideological kinds. (The same could be said about ontological kinds.) Metaphysicians often rely on the imprecise but intuitive method of individuation by topic. For instance, there is an ideological kind corresponding to color. All color predicates like 'blue,' 'periwinkle,' and 'Pantone 19-4052' are of this kind, as are relational predicates like 'is more saturated than.' There is also an ideological kind corresponding to modality. Primitive modal operators, predicates like 'possibly true' and 'consistent,' as well as primitive dispositional predicates like 'fragile' are of this kind. There is much more worth saying about the individuation of ideological kinds.[6] Yet I do not think that my main argument is affected by this issue. In what follows I will stick to the intuitive understanding just sketched.

Some metaphysicians may deny that our use of ideological parsimony can be neatly divided into (NI-Parsimony) and (KI-Parsimony). Yet the distinction seems intuitive enough and many think there is something to it (e.g., Cameron 2012, 18; Cowling 2013, 3897). In addition, there are intuitive reasons to favor (KI-Parsimony) and reject (NI-Parsimony). For one, (NI-Parsimony) seems to force us to make objectionably arbitrary decisions. (NI-Parsimony) recommends that, all else being equal, we minimize the number of compositional predicates in our ideology. What this recommendation precisely amounts to will depend on the resolution of issues that are too large to address here.[7] To see the worry, though, suppose that there are no other relevant considerations regarding our choice of compositional ideology. (NI-Parsimony) then recommends that we employ a minimal expressively adequate set of predicates. For composition, this can be achieved by choosing one from among 'is

5 Some characterize ideology as concerning the *concepts* employed in stating a theory. I prefer my *linguistic* characterization, for reasons I state in Finocchiaro (2021, 961–963).

6 I do say much more in Finocchiaro (2019a). See, also, Cowling (2013) and Lewis (1986).

7 For example, it depends in part on whether composition is classically extensional true (see Parsons 2014, 4).

a part of,' 'is a proper part of,' and 'overlaps' (supplemented with identity). We are then faced with an unsettling question: which of these three should we choose? Each option is unsavory because they all seem to commit us to an unreasonable view about the fundamental compositional structure of the world. Each option also seems impossible to motivate—what could justify choosing one over the other? These worries about arbitrariness disappear if we reject (NI-Parsimony) in favor of (KI-Parsimony). Compositional predicates are (plausibly) of the same ideological kind. So there is no methodological pressure to arbitrarily choose one predicate over the others.[8]

Many metaphysicians nowadays think that both ontological parsimony and ideological parsimony should play a role in theory choice. Why? Historically, parsimony-based considerations have been defended on non-alethic grounds: an ideologically parsimonious theory might be easier to comprehend, or an ontologically parsimonious theory might be more aesthetically pleasing. But such defenses are less popular nowadays since they are seen as relying on reasons that should be irrelevant to theory choice in metaphysics. Nowadays, most metaphysicians who think that parsimony should play a role in theory choice think so because they think parsimony is truth-conducive.[9] This connection between parsimony and truth holds for both ontological parsimony and ideological parsimony. According to ideological externalism, a more ideologically parsimonious theory conveys a more simple—and therefore more likely to be true—picture of the world's structure. Yet metaphysicians are less willing to extend this defense to quantitative ideological parsimony. (Intuitively, a theory that employs only 'is a part of' is not any more likely to be true than a theory that employs 'is a part of' and 'overlaps.') Thus, that approach to parsimony is under-motivated. Because of this lack of motivation and the aforementioned worries about arbitrariness, many metaphysicians reject (NI-Parsimony).

Thus far, I have presented four approaches to parsimony. I have suggested that the overall most attractive package for applying parsimony to theory choice is one that (i) can include (NO Parsimony), (ii) definitely includes (KO-Parsimony) and (KI-Parsimony), but (iii) does not include (NI-Parsimony). Not coincidentally, this is a package that has recently gained prominence amongst metaphysicians who care about the parsimony of their theories. Even the

8 Cf. Cowling (2013); Sider (2011).

9 Some philosophers contest the connection between parsimony and truth—either as it relates to metaphysical theories specifically or as it relates to any descriptive theory. Cf. Brenner (2017); Sober (2015); Willard (2014).

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most ardent supporters of parsimony have shied away from including (NI-Parsimony). Sider (2011, 258–259) admits that '[t]here *is* a real question about which of propositional logic's connectives carve at the joints, and similarly for ∀ and ∃,' and yet nevertheless 'egalitarian answers can be given. . . [o]ne might hold that both ∃ and ∀ carve at the joints, or that all the truth-functional connectives do, and thus avoid drawing invidious metaphysical distinctions.'[10]

But, as I will now show, there is a puzzle that undermines this package's credibility.

2 The Puzzle

In this section, I will argue that (KO-Parsimony) entails a restricted form of (NI-Parsimony). I will then suggest that this is no mere entailment; properly understood, (KO-Parsimony) and (NI-Parsimony) target the same feature of reality, the structure of the world. Thus, insofar as these two approaches to parsimony are motivated by a desire to posit a simple world, it is puzzling that metaphysicians should treat them so differently.

To illustrate these connections, I will work through a paradigm example of the neo-Quinean methodology at work in the metaphysics of composite objects.

According to compositional nihilism, there are no composite objects—no tables, no chairs, and no people (if people are composite objects). Yet natural language claims like

Some composite objects are larger than other composite objects

seem undeniably true.[11] The most straightforward regimentation of this English claim using first order logic is:

$$\exists x \exists y (C(x) \wedge C(y) \wedge (x \neq y) \wedge L(x, y))$$

10 Here, I avoid using truth-functional operators (like propositional logic's connectives) as examples, since someone may argue that truth-functional operators aren't primitive anyway. Instead, truth-functional operators may be defined in terms of their truth-tables, which ultimately depend on primitive notions of truth and falsity. Thanks to an anonymous reviewer for this suggestion.

11 Some metaphysicians (e.g., Merricks 2001) say that such claims are false. Nevertheless, there is a sense in which such claims are "nearly as good as true." Nothing in what follows depends on the difference between what is true (and later paraphrased) and what is nearly as good as true. Cf. Bennett (2009, 58–59).

which informally reads 'There is an x and there is a y such that x is a composite object, y is a composite object, x is not identical with y, and x is larger than y.' According to orthodox neo-Quineanism, if we endorse this regimentation we thereby incur an ontological commitment to composite objects.

But we want to avoid an ontological commitment to composite objects. This is in part because (KO-Parsimony) recommends reducing the number of posited ontological kinds when feasible. Composite objects form an ontological kind. So we ought to avoid positing them.

How do we accomplish that goal? It is not enough merely to reduce the number of references to composite objects or to relegate claims about composite objects to a theoretically insignificant role. On the neo-Quinean methodology, we posit an ontological kind when, in stating our theory, we employ a predicate that ranges over entities found within that kind. Thus, we need to avoid the mention of composite objects altogether. To accomplish that, we need to find an alternative regimentation to the English sentence ('Some composite objects are larger than other composite objects.') that uses only nihilistically acceptable ideology.

Here's how we can do that. First, we replace the composite object predicate, '*C*,' with the predicate '*AC*,' which reads as 'arranged composite-object-wise.' This predicate ranges over the things that are spatially distributed as if they composed an object. If contemporary physics is correct, the entities that satisfy this predicate are quarks, leptons, and bosons. But so as to not presuppose any particular theory, let's call them—whatever they are—"simples." '*AC*' ranges over simples, but in a non-distributive manner. No single simple is arranged composite-object wise. Rather, all of the simples are collectively arranged composite-object-wise. Finally, we must be able to quantify over simples arranged composite-object-wise in a way that avoids committing ourselves to something "over and above" those simples. To that end, we supplement first-order logic's singular quantification with plural quantification. Following some fairly standard notation from Burgess and Rosen (1997), we can use doubled letters (e.g., '*xx*,' '*yy*') to represent the variables for plural quantification. We can then regiment the English sentence as follows:

$$\exists xx \exists yy (AC(xx) \wedge AC(yy) \wedge (xx \neq yy) \wedge L(xx, yy))$$

This sentence successfully avoids an ontological commitment to composite objects.

Yet things are not so simple. We can use plural quantification to eliminate singular references to composite objects. But English also plausibly includes

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plural references to composite objects.[12] Consider, for example, the following sentence:

> Some composite objects are in contact only with one another.

We would need to employ plural quantification in the regimentation of this sentence even with an ontological commitment to composite objects. For instance, where 'T' is a predicate that ranges over things in contact and '$\prec$' is a special relation between individuals and pluralities of individuals, functioning like the English expression 'among':

$$\exists xx[\forall u((u \prec xx) \rightarrow C(u)) \wedge$$
$$\forall v \forall w(((v \prec xx) \wedge T(v, w)) \rightarrow ((w \prec xx) \wedge v \neq w))]$$

From an ideological perspective, this regimented sentence is already quite ugly. But, because it employs a predicate for composite objects, it would commit us to the existence of composite objects. So, to avoid such a commitment, we must construct a different regimentation that does not use such a predicate. This nihilistically acceptable regimentation will be even uglier. That's because it must rely on plurally plural—i.e., perplural—quantification. Just as plural quantification ranges over pluralities of individuals, perplural quantification ranges over second-level pluralities of pluralities. Let's use tripled letters (e.g., 'xxx,' 'yyy') to represent the variables for perplural quantification. We then get the following regimentation:

$$\exists xxx[\forall uu((uu \prec xxx) \rightarrow AC(uu)) \wedge$$
$$\forall vv \forall ww(((vv \prec xxx) \wedge T(vv, ww)) \rightarrow ((ww \prec xxx) \wedge vv \neq ww))]$$

In this way, metaphysicians can avoid an ontological commitment to composite objects, thereby minimizing the kinds of objects to which they are ontologically committed. But their use of (primitive) perplural quantification increases the ideological kinds to which they are committed.

So far as the metaphysics of composite objects goes, we have two options. First, we can employ a predicate that ranges over composite objects. Or, to avoid the ontological commitment, we can remove the predicate. Choosing this second option seems to involve a trade-off between a specially problematic predicate and a more complicated form of quantification.

12 It is contentious whether English contains genuine perplural locutions (see Linnebo and Nicolas 2008; McKay 2006, 46–52). I cannot speak to other natural languages.

Our intuitive grasp of the relevant concepts initially suggested that ontology and ideology are quite distinct. So it's surprising that a commitment to (KO-Parsimony) entails a *de facto* commitment to (NI-Parsimony). This connection cries out for explanation.

In fact, I think the explanation is quite straightforward for ideological externalists. If we use a theory's ideology to pick out features of the world, then it's entirely plausible that in doing so we sometimes pick out ontological kinds.

Think of it this way. The elimination of a single object from a metaphysician's ontology improves its quantitative ontological parsimony. So, too, does the elimination of every object of a given kind. But the elimination of an ontological kind does not necessarily result in the elimination of any objects. It's perfectly ordinary for a reductive project to "relocate" the objects of one kind into the province of another. For example, David Lewis's modal realism (1986) is ontologically parsimonious insofar as it avoids an ontological commitment to *sui generis* possible worlds. But it does not minimize the overall number of objects; in a manner of speaking, what would have been *sui generis* possible worlds are instead causally isolated concrete entities. So, (KO-Parsimony) should not be understood as an efficient means of reducing the overall number of objects posited. Similarly, (KO-Parsimony) should not be understood merely as a preference for "empty kinds" over "populated kinds." In many cases, whether or not an ontological kind is populated should depend on contingent facts of the world rather than metaphysical necessities. (KO-Parsimony) should be understood as a preference for the *elimination* of ontological kinds. As the compositional example above suggests, the elimination of an ontological kind is achieved by the abandonment of its corresponding predicate. Here is where ideological externalism is relevant. When a theory commits to an ontological kind, it is not committing to some object that it quantifies over. Rather, when a theory commits to an ontological kind, it is committing to a structural feature of the world that corresponds to a predicate employed by the theory's ideology. Similarly, when a theory eliminates an ontological kind, it eliminates a structural feature of the world. Ontological kinds are features of the world's metaphysical structure.

Compare this theoretical identification to the theoretical identification of water and H_2O. Our concept of water is quite different from our concept of H_2O: our concept of water predates our concept of H_2O; our concept of water is rooted in its geographic, biological, and sociological functions whereas our concept of H_2O is rooted in the scientific discipline of chemistry; and so on.

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As a matter of fact, though, the two concepts pick out the same substance. Of course, in some sense our concept of water "could have" picked out a different substance. Perhaps, even, our concept of water "could have" picked out a metaphysically gruesome disjunction of substances. But that's not how things turned out. Consequently, to be concerned with water is to be concerned with H_2O. Imagine someone who stressed the importance of bringing water on a camping trip. If they stressed the importance of bringing *water* but denied the importance of bringing H_2O, we would be confused—and rightly so.

So, too, for ontological kinds and the world's metaphysical structure. While our concept of an ontological kind may predate our concept of the world's metaphysical structure, the two concepts ultimately pick out the same feature. Of course, there may be some differences between the two theoretical identifications. Those who maintain a firm distinction between the *a priori* and the *a posteriori* would likely consider "Water is H_2O" to be an *a posteriori* identification and "Ontological kinds are metaphysical structure" to be an *a priori* identification. But, assuming the identities hold, many of the comparisons are apt. If a metaphysician stresses the importance of minimizing the ontological kinds posited by a theory, we should expect them to stress the importance of minimizing the structural complexity posited by a theory—it's the same thing that is being minimized! At a minimum, the metaphysician owes us an explanation for the difference in attitude.

Thus far, I have argued that those committed to (KO-Parsimony) should be committed to a restricted version of (NI-Parsimony). I have also suggested that there is an identity between the targets of these two principles of parsimony; both seek to minimize the structural complexity of the world. It does not follow that qualitative ontological parsimony *just is* quantitative ideological parsimony. There will still be instances of the latter that aren't instances of the former. Consider, for instance, a choice between two competing modal theories. Some forms of actualism (like those in Prior and Fine 1977) eschew quantifying over possible worlds and take the sentential modal operators as primitive. Suppose that actualist theory T_1 takes both '$\Box$' and '$\Diamond$' as primitive and actualist theory T_2 takes only '$\Box$' as primitive, defining '$\Diamond$' in the standard way. (NI-Parsimony) would recommend T_1 over T_2 because it employs one less bit of ideology. But by hypothesis neither theory posits more or fewer kinds of entities. Thus, some disputes about ideology are not reducible to disputes that involve ontology.[13]

13 I develop this point more fully in Finocchiaro (2019b).

Here's a small, but important, complication that I've ignored.[14] Thus far, I have worked through a single case, the metaphysics of composition. Even if what I have said holds for this case, does the point generalize? Or is it merely an artifact of the case that might or might not apply to others?

The point generalizes. On the neo-Quinean paradigm, there is no ontological commitment to something unless there is a regimented sentence held to be true which includes a bound variable that must refer to that thing. But there is no need to have such a referring bound variable unless that variable attaches to a predicate of some kind. In other words, because ontological parsimony is a difference in ontology and because ontology is always expressed through ideology, ontological parsimony always involves a difference in ideology.

There is one slight exception. Some metaphysicians adopt principles of parsimony that discriminate on the basis of fundamentality. For example, Schaffer (2009) adopts the Laser, which recommends minimizing the number of *fundamental* entities but does not care about the number of *non-fundamental* entities. Such a principle makes the connection between ontology and ideology weaker. More specifically, when using the Laser there will be predicates—the ones corresponding to non-fundamental entities—whose elimination or introduction would not impact ontological parsimony.

But this exception does not solve the puzzle. First, it's unclear what the status of such predicates is. Plausibly, non-fundamental ontology is expressed through non-fundamental ideology. If so, then this exception is simply irrelevant to the puzzle I've presented. Second, this exception still entails a strong relationship between fundamental ontology and fundamental ideology. So, at best, it would solve only part of the puzzle.

3 What to Do?

I will end by briefly discussing three ways to respond to the puzzle about parsimony. Each has its advantages and disadvantages. While I do favor one of the ways over the others, I think all three are worth developing more fully.

First, we could try to resist the puzzle. I generated the puzzle by assuming orthodox neo-Quineanism. One way of resisting, then, is to reject the claim that a theory's ontology is that over which the theory quantifies. There are several alternatives to the Quinean criterion of ontological commitment, but one promising option is the truthmaker view. On the truthmaker view,

14 Thanks to an anonymous reviewer for pushing me to address this issue.

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a theory's ontology is that which makes the theory's sentences true.[15] Importantly, the view explicitly permits two theories to differ with respect to their ideologies without also differing with respect to their ontological commitments. For instance, on the truthmaker view a theory might truly state "Some composite objects are larger than other composite objects" without incurring an ontological commitment to composite objects. What matters is not what the sentence quantifies over but rather what makes the sentence true—and what makes the sentence true need not be composite objects. More importantly, the view entails that the two regimentations offered above—"$\exists x \exists y(C(x) \wedge C(y) \wedge (x \neq y) \wedge L(x, y))$" and "$\exists xx \exists yy(AC(xx) \wedge AC(yy) \wedge (xx \neq yy) \wedge L(xx, yy))$"—have the same ontological commitments. The change in ideology does not impact the ontology. Thus, on the truthmaker view of ontological commitment, (KO-Parsimony) does not entail any version of (NI-Parsimony), nor does it suggest an identity between their targets. In a way, then, the puzzle about parsimony could motivate us to reject orthodox neo-Quineanism.

Those of us not yet ready to abandon orthodoxy have to either embrace the puzzle or downplay its significance. I suspect many would prefer the second option. Some metaphysicians (e.g., Bennett 2009) have characterized many metaphysical disputes as being, as bottom, trade-offs between ontology and ideology. This characterization is hard to maintain if they have the same target (i.e., the world's metaphysical structure). It seems, then, that my puzzle puts that characterization in a hard place. But perhaps the essence of their characterization can be maintained. I can see two strategies for doing so.

On the first strategy, there are many more ideological kinds than previously assumed. More specifically, each predicate that expresses an ontological kind forms its own ideological kind. If this is so, then (KO-Parsimony) actually entails (KI-Parsimony) and the methodological tension vanishes. But here's a challenge that this strategy must overcome. By following the neo-Quinean orthodoxy, we eliminate ontologically committing predicates but we do not eliminate the complements of those predicates. So, for instance, the compositional nihilist eliminates 'composite object' but does not eliminate 'not a composite object,' otherwise known as 'simple.' Yet, intuitively, "positive"

15 See Rettler (2016, 21). Rettler even appears to gesture toward a version of my puzzle when he says, "[I]t's true, just looking at the sentences will no longer tell you which theory wins the day with respect to parsimony of ontological commitments. But it never should have." In what follows I will simplify my discussion by ignoring Rettler's distinction between the general truthmaker view and the specific truthmaker view.

predicates like 'composite object' and "negative" complements like 'simple' are of the same ideological kind. So, those who want to pursue this first strategy of downplaying the significance of the puzzle must offer a more sophisticated means of individuating ideological kinds.

On the second strategy, there are two categories of ideology such that (i) we ought to minimize the number of ideological bits from the first category, and (ii) it is not the case that we ought to minimize the number of ideological bits from the second category. Obviously, those who pursue this strategy must offer some explanation for the difference in treatment. One somewhat radical explanation is to say that structural simplicity is more important in some domains than it is in others. I do not see how this explanation can be plausibly maintained. Parsimony is currently treated as a comprehensive value: choose the theory that is *overall* more simple. Why would simplicity in one domain be less important (i.e., less truth conducive) than simplicity in another domain? On an alternative explanation, the relationship between ideological bits and metaphysical structure is more nuanced than previously thought. Perhaps ideological bits are more fine-grained than the corresponding structure. If so, then some ideological bits (like 'is a part of' and 'overlaps') would correspond to the same aspect of the world's metaphysical structure, and so there is no need to choose between the two. In contrast, other ideological bits (like 'composite object' and 'simple') would correspond to different aspects of the world's metaphysical structure, and so there is value in eliminating one if not the other. This explanation is interesting. But as it stands it is *ad hoc*. In the absence of a worked-out account of ideological correspondence, why should we think that it works the way this strategy needs it to work?

That leaves the third response: embrace the puzzle. If we embrace the puzzle, we ought to claim that (NI-Parsimony) is no less justified a principle than (KO-Parsimony). This claim is quite shocking (well, as shocking as an esoteric claim about the proper methodological application of parsimony can be, anyway). (KO-Parsimony) has a rich history and is likely the most broadly endorsed approach to parsimony. In contrast, almost no one explicitly endorses (NI-Parsimony). Nevertheless, by embracing the puzzle we can save neo-Quineanism as well as the standard characterization of metaphysical disputes as disputes that involve trade-offs between ontology and ideology. Yet those who pursue this third strategy have their own explaining to do. Intuitively, it seems objectionably arbitrary to choose between functionally equivalent terminology. So why isn't it? For example, why should we reduce the number of compositional predicates we employ in stating our theories?

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Perhaps we can extend the standard motivations for parsimony-based considerations and say that we should reduce the number of compositional predicates because the resulting theory posits a more simple structure and is therefore more likely to be true. This might still generate an epistemic deadlock with regard to competing "equivalent" theories. (NI-Parsimony) would suggest that a theory that employs only 'overlaps' is more likely to accurately represent the compositional structure of the world than a theory that employs both 'overlaps' and 'is a part of.' *Mutatis mutandis* for a theory that employs only 'is a part of.' But at this point our methodology fails us and we do not know which of the two predicates we ought to employ.[16]

Personally, I think we ought to embrace the puzzle. It's not a perfect response, but it is the best available. Neo-Quineanism is battle-tested orthodoxy. (More modestly, neo-Quineanism is much closer to the center of my web of belief than are the other elements of the puzzle.) For that reason I reject the first response. The second response raises a number of issues regarding ideological correspondence. I am doubtful that those issues can be addressed satisfactorily. So I also reject the second response. Finally, I do not think that the third response is that bad. I don't know how to choose between overlap and parthood. I don't even know how to think about that choice. But a hard choice is not *ipso facto* a bad choice.*

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16 Cf. McSweeney (2019, 127–128).

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