

# The Explosion of Being: Ideological Kinds in Theory Choice

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## Abstract

In this paper, I develop a novel account of ideological kinds. I first present some conceptual territory regarding the use of Occam's Razor in minimizing ontological commitments. I then present the analogous device for minimizing ideological commitments, what I call the Comb. I argue that metaphysicians ought to use both or none at all. This means that those who endorse a principle of ontological parsimony ought to also endorse some principle of ideological parsimony, where we ought to prefer the metaphysical theory that employs less ideology. In support of one such principle, I propose a novel account of ideological kinds. I individuate ideological kinds based on the satisfaction of two conditions: interdefinability and sameness of syntactic category. Ultimately, I think this account is the best available. It does, however, produce surprising results. For instance, my account shows that quantifier pluralism is ideologically parsimonious. I end by replying to some objections.

**Keywords:** ideology, metametaphysics, methodology, parsimony, quantifier pluralism, theory choice

## Introduction

All else being equal, we ought to prefer the metaphysical theory that employs less ideology. Mereological nihilism – the view that composition never occurs – is preferable to rival mereological positions partially because it allows us to remove mereological terminology (like the predicate ‘part’) from our ideology without any loss of explanatory power. (At least, that is what some defenders of nihilism argue.<sup>1</sup>) Perhaps a theory without mereological terminology is preferable because its more parsimonious ideology makes it more likely to be true. Perhaps such a theory is preferable because it entitles us to eliminate complicated laws of mereology. Perhaps it is preferable only because we have developed a taste for elegant theories.

No matter the justification for preferring ideologically parsimonious theories, considerable work must be done simply to explicate what the preference amounts to. In this paper I develop and motivate a principle of ideological parsimony. This principle states that (all else equal) we ought

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<sup>1</sup>See Sider (2013); Brenner (2015a).

to prefer the metaphysical theory that employs fewer ideological kinds. Ideological kinds, I argue, are individuated by what I call the *interdefinability* condition and the *syntactic* condition.

My account of ideological kinds and their role in theory choice has at least two intriguing applications. First, it can be used to disentangle metaphysical positions that are often incorrectly lumped together. For instance, recent A-theories of time offer analyses of change that use ideology beyond the standard Priorian tense operators.<sup>2</sup> Because most of these theories on my account employ different ideological kinds, they are not “mere notional variants” but instead offer importantly different characterizations of the world. Second, my account threatens to ignite an explosion of being. On my account all (singular) quantifiers are of the same ideological kind. The introduction of an additional quantifier does not, therefore, count against the ideological parsimony of a theory. In light of this fact, for any given metaphysical dispute we should seriously consider the plausible quantifier pluralist options. Insofar as a pluralist theory can put its additional quantifiers to good use, we can expect it to be the overall better choice. An A-theory developed using temporally-relativized quantifiers, for instance, is because of its greater ideological parsimony preferable to an A-theory developed using tense operators.

Others have employed principles of ideological parsimony.<sup>3</sup> But no one yet has proposed a sufficiently developed account of ideological kinds. What others *have* proposed thus far is so non-committal that it feels almost impossible to refute. For this reason, my account is an enterprising first attempt in an overdue conversation regarding ideological kinds. (I suspect it won’t be the final attempt; there are a few cases that my account does not handle well.)

A lack of commitment isn’t the only problem here. Most have also based their discussions of ideology on presuppositions about which reasonable metaphysicians can disagree. While that fact is understandable, at a dialectical level it is regrettable. In what follows, I motivate ideological parsimony from a relatively neutral starting point that does not presuppose answers to controversial disputes regarding the role of ideology. I do on occasion disclose my position on these disputes. But I do so merely to highlight interesting choice points on these issues. My hope is that the central arguments of the paper are unaffected by my background commitments.

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<sup>2</sup>Cameron (2015) analyzes change using predicates that pick out ages and temporal distribution properties. Sul-livan (2016) analyzes change using predicate modifiers. While I’ll focus on quantifier-based analyses in this paper, I think there are interesting applications of what I say to these other theories of time.

<sup>3</sup>See Cowling (2013); Sider (2013); Schaffer (2014); Turner (2015); Brenner (2017).

Here’s a roadmap for what follows. First, I set the stage with a discussion of current approaches to parsimony in theory choice. Next, I motivate the claim that we ought to prefer ideologically parsimonious theories. Most plausibly, that means we ought to employ fewer ideological kinds. To further explicate this position, I develop the notion of an ideological kind. I begin with an intuitive interdefinability condition. After demonstrating the shortcomings of that condition in isolation, I develop a supplementary syntactic condition. Finally, I discuss some implications of and objections to my two-condition account.

## 1 Parsimony in Theory Choice

In this section I first establish a groundwork regarding ontological parsimony. I then set up some parallels between ontological and ideological parsimony in theory choice and motivate the claim that we ought to prefer ideologically parsimonious theories. I end by briefly discussing the possible structures of kindhood.

### 1.1 The Razor and the Comb

Many metaphysicians use the Razor to help choose among competing metaphysical theories. The Razor’s instruction manual reads: use to avoid multiplying entities beyond necessity. Yet the Razor is a somewhat ambiguous device and can be used in at least two ways.<sup>4</sup> First, we can use the Razor to avoid multiplying the total number of entities we posit. If we only need to posit the existence of a single neutrino to explain the drop of energy during Beta decay, then we posit only the existence of a single neutrino.<sup>5</sup> On the second use of the Razor, we avoid multiplying the *kinds* of entities we posit. If we only need to posit the existence of concrete objects to explain the truth of “Spiders share some of the anatomical features of insects,” then we posit only the existence of concrete objects – we do not also posit the existence of seemingly non-concrete “features.”<sup>6</sup>

Those who use the Razor in the first way endorse a principle of *quantitative ontological parsimony*. All else being equal, among the competing metaphysical theories they prefer the one

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<sup>4</sup>Schaffer (2014) introduces the Laser, which is used to avoid multiplying *fundamental* entities. In what follows I mostly ignore the distinction between the fundamental and the non-fundamental. Those who would ditch the Razor for the Laser should interpret what I say as applying to fundamental ontology and ideology.

<sup>5</sup>See Nolan (1997).

<sup>6</sup>See van Inwagen (2004).

that posits fewer entities. Those who use the Razor in the second way endorse a principle of *qualitative ontological parsimony*. All else being equal, they prefer the metaphysical theory that posits fewer kinds of entities. Following a convenient shorthand from Cowling (2013), call these preference-guiding principles (NO-Parsimony) and (KO-Parsimony), respectively.

There is a longstanding disagreement about how the Razor ought to be used. I will not adjudicate that dispute, for I think the user manual has always been unclear.<sup>7</sup> It also is not necessary for me to do so here. The argument I present below requires at most (KO-Parsimony). Generally speaking, those who endorse (NO-Parsimony) also endorse (KO-Parsimony).

But why should we use the Razor? Some think that the Razor gets us closer to the truth. Others think that the Razor merely makes things easier for us. And still others think that there is no good reason to use it.<sup>8</sup>

Here I will simply assume that, all else being equal, we should use the Razor. I don't have a defense of this assumption beyond what others have said; the Razor is just too tempting for me to resist. I personally use the Razor to find the truth and I will occasionally talk as if that is the right reason to use it. But I want my arguments to convince pragmatic Razor users as well. I will therefore attempt to remain neutral between the two types of justification.

There is another device we can use to help us choose among competing metaphysical theories. While the Razor helps us acquire a theory with a well-groomed ontology, the Comb helps us acquire a theory with a well-groomed ideology. The Comb's instruction manual reads: avoid employing undefined terminology beyond necessity. Yet the Comb is also an ambiguous device, and in much the same way that the Razor is. Identify the ideology of a theory with its stock of undefined terminology.<sup>9</sup> We can use the Comb to minimize the total number of undefined terms we employ in stating our theory. This amounts to endorsing a principle of *quantitative ideological parsimony*. We can also use the Comb to minimize the number of ideological kinds we employ. When we use the Comb this way we endorse a principle of *qualitative ideological parsimony*. Following Cowling's shorthand again, call these preference-guiding principles (NI-Parsimony) and

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<sup>7</sup>But see Lewis (1973); Tallant (2013) for discussion and application.

<sup>8</sup>See Brenner (2017); Huemer (2009) for discussion.

<sup>9</sup>I use 'undefined' as synonymous with both 'primitive' and 'unanalyzed' in the following sense: an expression is undefined/primitive/unanalyzed relative to a theory just in case that theory does not explicitly state a definition of the expression. Though I give the standard identification of ideology here, others do identify it differently. Some – e.g. Schaffer (2014) – identify ideology with the primitive concepts employed in stating the theory. See Finocchiaro (2019a) for further discussion.

(KI-Parsimony), respectively.<sup>10</sup>

I will say much more about what an ideological kind is in section 2, but it's helpful to start with some intuitive examples. Predicates like 'green', 'teal', 'chartreuse', and 'Pantone 572 UP' all seem to be contained within the ideological kind we might label "color terms". Similarly, the sentential modal operators ' $\Box$ ' and ' $\Diamond$ ' intuitively fall under the same ideological kind, that of modal ideology. Finally, the truth-functional logical operators (' $\wedge$ ', ' $\neg$ ', etc.) seem to form their own ideological kind.

As I indicated in the introduction, there are distinct reasons to care about ideological parsimony, reasons analogous to those given for ontological parsimony. Which of these reasons someone accepts will likely track what she thinks the role of ideology is in theory choice more generally. Sider (2011), for instance, thinks that the ideology of our theories ought to match the world's underlying structure. Accordingly, someone like Sider would likely care about ideological parsimony insofar as it correlates with a more accurate picture of said structure. Contrast this *externalist* approach to ideology with an *internalist* approach.<sup>11</sup> On an internalist approach, the quality of a theory's ideology is judged by some feature internal to the theory and the theorizer. For example, someone might think that a theory's ideology ought to be as clear to the theorizer as possible. Accordingly, such an internalist would likely care about ideological parsimony because a bloated ideology prohibits understanding.

I want to avoid this more broad (and more challenging issue) regarding the role of ideology in theory choice. One argument to motivate concern about ideological parsimony available to both externalists and internalists is what I call the *interaction argument*.

Often, a theory's ontology places demands on its ideology, and vice versa. For instance, suppose Mary wants to minimize the ontological kinds to which she is committed and therefore endorses a theory that eschews biological species. In order to explain the biological truth, "Some species are cross-fertile," she will have to engage in some ideological creativity. One option is to introduce an undefined dyadic predicate, 'consppecific'.<sup>12</sup> Intuitively, x is conspecific with y just in case x and y are of the same species. But, since Mary's theory eschews talk of species, within her theory the conspecific relation is primitive. Because Mary uses the Razor to eliminate species, she comes to

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<sup>10</sup>See, also, Cameron (2012) for explicit discussion of the distinction.

<sup>11</sup>In Finocchiaro (2019a), I argue that the internalist approach is exemplified by figures like Quine and Goodman.

<sup>12</sup>See van Inwagen (2008): 128–133.

possess a more unruly ideology.

This one-sided trade-off might not be problematic in a single case. But it is an instance of a pernicious strategy.<sup>13</sup> Anyone can eliminate any untoward ontological commitment by introducing some convoluted ideological device. Sometimes, an ontological elimination may come at a cost to something else of value. Mary might be unable to fully explain certain biological facts if she were to also eliminate mathematical objects, for example.<sup>14</sup> Set all that aside. The strategy of always replacing ontological commitments with new ideological devices remains pernicious. It is pernicious because it suggests that the pursuit of ontological parsimony is, by itself, little more than a game of linguistic creativity!

That's not an argument so much as a complaint. Here's a more constructive line of reasoning, one that I think is available to both externalists and internalists. All else being equal, we ought to prefer the simpler of two theories. Often, there are two rival theories where the first is more ontological parsimonious and the second is more ideologically parsimonious but the two are equal with respect to other theoretical virtues. Ontological parsimony contributes to overall simplicity. If ideological parsimony does not also contribute to overall simplicity, then the choice between these two theories is trivial. But the choice is not trivial. Thus, in order to avoid triviality, we need to think that ideological parsimony contributes to overall simplicity. We need to use both the Razor and the Comb, or use neither at all.<sup>15</sup>

The interaction argument shows that those looking for non-trivial applications of ontological parsimony ought to let ideological parsimony play a role in their choice of theory. It does not fully determine what this role should be. In particular, it does not determine the "exchange rate" between ontological commitments and ideological commitments. In what follows I will not presuppose any particular exchange rate, for I think that the appropriate exchange rate depends in large part on what someone takes an ideological commitment to be. I am an externalist who thinks that an ideological commitment is a commitment regarding the objective complexity of the world. For that reason, I think ontological commitments and ideological commitments are roughly

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<sup>13</sup>Thanks to an anonymous reviewer for pushing me to more clearly develop this point.

<sup>14</sup>See Baker (2005).

<sup>15</sup>See Cowling (2013): 3894 for a version of this argument. Note that Cowling operates with an externalist ("realist" in his terms) understanding of ideology. Bennett (2009) also discusses trading one form of parsimony for the other in what she calls "difference minimizing" disputes, such as the dispute between the mereological nihilist and the compositionalist.

on a par. Others endorse more internalist conceptions of ideology. They might, then, discount ideological commitments. At this point I take myself to have established only the weaker thesis that, all else being *equal*, we ought to prefer the more ideologically parsimonious theory.

## 1.2 Two Structures of Kindhood

Both (KI-Parsimony) and (KO-Parsimony) target *kinds*. While I will say much more about the individuation of ideological kinds in section 2, I want to first explain how I understand kindhood. In particular, I want to explain two possible structures of kindhood as well as my motivations for assuming one over the other.<sup>16</sup>

Broadly speaking, kindhood can have one of two structures: hierarchical or non-hierarchical. To say that kindhood has a hierarchical structure is to say that kinds can be subsumed under larger and more general kinds. To say that kindhood has a non-hierarchical structure is to deny this, to say that no kind is a proper subclass of any other kind.<sup>17</sup>

Let's use the biological taxonomic system as an example to help us distinguish between the two structures. Consider Widget, Milo, and Kya. Widget and Milo are cats; Kya is a dog. All three are mammals, animals, and organisms. Suppose that there are hierarchically structured kinds corresponding to these taxonomic classifications. Widget, Milo, and Kya all fall under the kind *mammal*. But only Widget and Milo fall under the kind *cat* (or *Felis catus* or whatever you want to call it). Suppose I ask if Widget and Kya are members of the same kind. My question is underspecified. In one sense they are, in another they are not, and there is nothing about the question itself that privileges one sense over the other. To get a definite answer to my question I need to specify a particular kind or a group of kinds. I can ask, for example, if Widget and Kya are members of the same species kind.

Things are somewhat different if kinds are non-hierarchical. Continuing with our biological example, there is some fact of the matter about how organisms are sorted into non-hierarchical kinds. Most plausibly, this sorting would occur at a single taxonomic rank. Let's just assume

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<sup>16</sup>I am indebted to two anonymous reviewers here; their feedback has emphasized to me the importance of addressing this structural issue. Thanks, also, to Timothy Perrine for helpful discussions on how to formulate what I say here.

<sup>17</sup>Neither structure by itself entails anything substantive about the nature or individuation of kinds. Someone who thinks that kinds are socially-constructed groupings might think that they're constructed hierarchically or might think that they're constructed non-hierarchically. Similarly, both structures are compatible with all sorts of individuation principles.

that it's at the level of species. When I ask if Widget and Kya are members of the same kind my question can be definitively answered: no. The only kinds are the kinds that correspond to species classifications. Thus, there is no kind that contains both Widget and Kya.<sup>18</sup> If I want to explain the hierarchical sense in which Widget and Kya are "of the same kind", I cannot rely exclusively on sameness of kind but must instead appeal to something else, like abstractions from members of their respective kinds or their overlapping phylogenetic history.

Neither structure determines how many kinds there are. Nevertheless, I think that kinds are relatively sparse. At a minimum, it is not the case that for any description there is a kind populated only by things that satisfy that description. There is not, for example, a kind for crops native to the Americas. I don't really have an argument to offer here, primarily because any argument would presuppose substantive theses about the world and our theoretical relationship to it. Personally, I think that kinds objectively demarcate significant aspects of reality. Some descriptive demarcations ignore these aspects of reality and instead focus on human idiosyncrasies. So the mere fact that we can group some things together does not by itself show that there is a kind that corresponds to that grouping. That's an argument brimming with assumptions, though. Someone who thinks kinds are human constructions could offer an argument that turns on assumptions about the social role of kinds and how that social role requires that kinds be relatively sparse.

At any rate, the differences between these two structures do not impact what I say in this paper. Comparisons of parsimony should be made at the same hierarchical level. This is typically how such comparisons are already made. Lewis, for instance, suggests comparisons between kinds of abstracta (sets and unreduced numbers), between kinds of fundamental physical posits (particles and fields), and between kinds of substances (bodies and spirits).<sup>19</sup> If kinds are hierarchically structured, then comparisons of parsimony should remain fixed at a particular level. If kinds are non-hierarchically structured, then comparisons of parsimony are fixed automatically.

In what follows, I will assume that kinds are non-hierarchically structured. I don't think this assumption detracts from my account of ideological kinds. Those who think that kinds are hierarchically structured are welcome to interpret my account as one that individuates the hierarchy's terminal kinds. In addition, by assuming that kinds are non-hierarchically structured I can avoid

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<sup>18</sup>This verdict is, strictly speaking, consistent with the possibility that kinds overlap as well as the possibility that kind membership is sometimes vague. I'll address these issues in subsection 3.3.

<sup>19</sup>See Lewis (1973): 87.

at least two issues that needlessly complicate discussions of parsimony.

First, I can avoid discussing the extent to which a kind's place in the hierarchy determines its "theoretical price". The choice between physicalism and dualism seems to carry greater ontological weight than the choice between mereological nihilism and universalism. Why? It's not because of the number of entities that would be eliminated; physicalism might only eliminate a finite number of mental entities whereas nihilism might (if there are an infinite number of simples) eliminate an infinite number of composite entities. Maybe it's because higher-level kinds are more expensive than lower-level kinds. But how much more expensive are they? I don't know. Maybe, instead, the choice between physicalism and dualism carries greater weight because of the number of kinds of entities that would be eliminated – namely, all the kinds that would be found along that hierarchical branch. But then why not just directly appeal to those kinds?

Second, I can avoid discussing the extent to which a hierarchical structure settles what should be open questions. Here's an example. Some metaphysicians argue that parthood is a relation that holds between many kinds of things, including physical objects (a wheel is part of a car), fictional objects (Hogwarts is part of the Pottermore universe) and mathematical objects (the multiplication operator is a part of many equations). If kinds are hierarchically structured, then it seems like this metaphysical position about parthood entails that there is no kind *composite object*. *Composite object* cannot be placed above *physical object*, for that would entail that all physical objects are composite. *Composite object* also cannot be placed below *physical object*, for that would entail that all composite objects are physical. A non-hierarchical structure is less restricting. Maybe there is a *composite physical object* kind, a *composite fictional object* kind, and a *composite mathematical object* kind. Maybe there is a *composite object* kind that overlaps *physical object*, *fictional object*, and *mathematical object*. Maybe there really is no such kind!

In summary, I think that kinds are non-hierarchically structured and minimally sparse. But my account of ideological kinds should be of use even to those who think differently.

## 2 The Individuation of Ideological Kinds

The interaction argument I gave in subsection 1.1 does not decide between (NI-Parsimony) and (KI-Parsimony). But, plausibly, we ought to endorse a principle only if it is conceptually coherent.

Central to (KI-Parsimony) is the notion of an ideological kind. Thus, those who are inclined to endorse (KI-Parsimony) must give an account of ideological kinds and their individuation.

In this section, I give such an account. I offer two conditions: interdefinability and sameness of syntactic category. I offer these as necessary and jointly sufficient conditions for when two terms are of the same ideological kind. I do not, however, directly argue that they are necessary and sufficient. Rather, I argue through a sort of reflective equilibrium: my account provides a general means of individuating ideological kinds that respects our strong intuitions about particular cases.

My account does have surprising implications, some of which I address at the end of this section. These implications might motivate some to reject my account. But the onus is on them to provide an alternative. Otherwise, (KI-Parsimony) lacks the conceptual clarity requisite for endorsement.

## 2.1 The Interdefinability Condition

First, if two terms  $\phi$  and  $\psi$  are of the same ideological kind then  $\phi$  and  $\psi$  are *interdefinable*.<sup>20</sup>

At first pass, interdefinability might amount to what I call Truth Equivalence:

**Truth Equivalence:** Two terms  $t_1$  and  $t_2$  are interdefinable  $=_{df}$  every truth-apt sentence containing  $t_1$  corresponds to a truth-apt sentence containing  $t_2$  such that the former sentence is true if and only if the latter sentence is true, and every truth-apt sentence containing  $t_2$  corresponds to a truth-apt sentence containing  $t_1$  such that the former sentence is true if and only if the latter sentence is true.

Truth Equivalence captures many intuitive cases of interdefinability. For instance, ‘ $\square$ ’ and ‘ $\diamond$ ’ seem interdefinable because every sentence of the form ‘ $\square(\phi)$ ’ is equivalent to a sentence of the form ‘ $\neg\diamond(\neg\phi)$ ’.

But Truth Equivalence fails to exclude intuitively inappropriate definitions. Suppose that there are two properties such that, for whatever reason, nothing ever instantiates both properties at the same time. Suppose that we use the predicates ‘F’ and ‘G’ to pick out these properties. We can introduce a third predicate, ‘H’, that characterizes the union of the things that are F and the things that are G. By definition, any sentence containing the predicate ‘F’ is truth equivalent to some sentence containing ‘G’ and ‘H’, any sentence containing the predicate ‘G’ is truth-equivalent to some sentence containing ‘F’ and ‘H’, and so on. But, intuitively, the fact that ‘F’, ‘G’, and

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<sup>20</sup>Cf. Cowling (2013): 3897–3989. Note that Cowling offers interdefinability as a “useful diagnostic” and not as a necessary condition.

‘H’ are truth equivalent fails to show that these expressions are interdefinable in any interesting sense.<sup>21</sup>

Let’s consider an example. Nothing is both a philosopher and an avocado. Suppose we have the predicates ‘is a philosopher’, and ‘is an avocado’ and decide to introduce the predicate ‘is a philocado’. This new predicate characterizes the union of philosophers and avocados. By definition, “Liz is a philosopher,” is true if and only if “Liz is a philocado and Liz is not an avocado,” is true. Similarly, “Everything is an avocado,” is true if and only if “Everything is a philocado and also not a philosopher,” is true. And so on. It follows that ‘is a philosopher’ and ‘is an avocado’ are truth equivalent. But the fact that these predicates are truth equivalent fails to show that they are interdefinable in any interesting sense. Truth Equivalence is therefore a relatively useless condition and won’t work as a standard of interdefinability.

Because we need conditions that are useful for individuating ideological kinds, we need a better notion of interdefinability. Here is a version that incorporates a more sophisticated constraint on adequate definitions:

**Substitutional Equivalence:** Two terms  $t_1$  and  $t_2$  are interdefinable  $=_{df}$  every truth-apt sentence containing  $t_1$  can be replaced with some truth-apt sentence containing  $t_2$  and some minimal supplementary ideology while preserving grammaticality, truth, and validity, and every truth-apt sentence containing  $t_2$  can be replaced with some truth-apt sentence containing  $t_1$  and some minimal supplementary ideology while preserving grammaticality, truth, and validity.

For many intuitive cases of interdefinability, negation is the only supplementary ideology required. But negation alone won’t be enough to cover all of the intuitive cases. Standard systems of mereology take one mereological notion as primitive and use it to define the others. Intuitively, the usual mereological predicates are all of the same ideological kind. But the standard definitions between them involve more than just negation. When ‘part’ is the primitive mereological term, ‘overlap’ is standardly defined as:

$x$  overlaps  $y =_{df} \exists z(z \text{ is a part of } x \text{ and } z \text{ is a part of } y)$

This definition uses conjunction and existential quantification. In fact, any plausible system of mereology will include definitions that employ ideology beyond negation. The same point applies

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<sup>21</sup>Thanks to Andrew Brenner and Callie K. Phillips for helpful discussion on this and related points.

to other bits of ideology that are plausibly of the same kind, like ‘perfectly natural’ and ‘more natural than’.

The class of minimal supplementary ideology permitted by Substitutional Equivalence should therefore include more than just negation. I suggest that it include other interdefinable terminology as well as broadly logical notions like those of first-order logics, including truth-functional connectives, quantifiers, and identity. By including broadly logical notions, we accommodate more intuitive examples of sameness of ideological kind while maintaining the straightforwardness of the definitions involved.

That being said, I might be wrong about what should be included in the class of minimal supplementary ideology. Here’s one reason why. The logical terminology that we typically employ might not match the world’s underlying logical structure.<sup>22</sup> Those of us who care about the world’s structure want to restrict our definitions to those that employ only “structure-matching” terminology. Thus, which expressions should be included in the class of minimal supplementary ideology is something of an open question.

Let’s set aside these worries about what to include in the class of minimal supplementary ideology. Substitutional Equivalence avoids the cheap counterexample I gave above. An artificial predicate like ‘philocado’ is clearly not included in the class of minimal supplementary ideology. Interestingly, Substitutional Equivalence also shows that ‘grue’ and ‘green’ are not interdefinable. Any definition between these predicates requires the use of terms that denote times. But such terms are plausibly excluded from the class of minimal supplementary ideology.

## 2.2 Interdefinability Is Not Sufficient

So far, I’ve claimed that if two terms are of the same ideological kind then they are substitutionally equivalent. Here, I argue that the substitutional equivalence of two terms is not sufficient for them to be of the same ideological kind. My argument is a *reductio*. Tense operators and temporally-relativized quantifiers are substitutionally equivalent. In addition, temporally-relativized quantifiers and bare quantifiers are substitutionally equivalent. But tense operators and bare quantifiers cannot be of the same kind. Therefore, substitutional equivalence is not sufficient.

According to *quantifier pluralism*, the best ideology is one that includes more than one existential

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<sup>22</sup>See McSweeney (2019); Russell (2018).

quantifier. More precisely, according to quantifier pluralism there is at least one ideology with more than one quantifier from distinct quantifier pairs that is better than all ideologies with quantifiers from a single quantifier pair.<sup>23</sup> Quantifier pluralism stands in contrast to the “orthodox” position, *strict Quineanism*. According to *strict Quineanism*, an ideology is better when it contains just one quantifier pair, namely those from first-order logic: ‘ $\exists$ ’, ‘ $\forall$ ’.<sup>24</sup> Call these the bare quantifiers. Call the non-bare quantifiers the restricted quantifiers.<sup>25</sup>

Plausibly, any total theory of the world will contain either bare or restricted quantifiers in its ideology.<sup>26</sup> This commitment to quantifiers need not come from metaphysics; quantification is indispensable for mathematics and for physics.

Quantifier pluralism *simpliciter* is just the view that some multiple-quantifier ideologies are better than the contrasting single-quantifier ideologies. Two pluralists could agree on that but disagree on which ideologies are better. Regardless, the bare quantifier can be defined in terms of an arbitrary selection of restricted quantifiers in the following way:

For any restricted quantifiers  $\exists_1 \dots \exists_n$ , if they are the totality of restricted quantifiers, then  $\exists x(\phi) =_{df} \exists_1 x(\phi) \vee \dots \vee \exists_n x(\phi)$

Using this definition, any sentence that contains the bare quantifier can be replaced with the appropriate restricted quantifier substitute. This definition meets the Substitutional Equivalence condition from subsection 2.1, since it helps itself only to disjunction.<sup>27</sup>

Going in the other direction, any restricted quantifier can be defined in terms of the bare quantifier and other restricted quantifiers:

For any restricted quantifiers  $\exists_1 \dots \exists_n$ , if they are the totality of restricted quantifiers, then for any restricted quantifier  $\exists_q$ ,  $\exists_q x(\phi) =_{df} \exists x(\phi) \wedge \neg \exists_1 x(\phi) \dots \wedge \neg \exists_{q-1} x(\phi) \wedge \neg \exists_{q+1} x(\phi) \dots \wedge \neg \exists_n x(\phi)$ <sup>28</sup>

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<sup>23</sup>I distinguish quantifier pluralism from ontological pluralism, the view on which “there are different ways, kinds, or modes of being” (Turner (2010): 5). Ontological pluralism need not be understood in terms of quantifier pluralism – see McDaniel (2009): 301–305. Though the two views are symbiotic, quantifier pluralism is a claim about ideologies and ontological pluralism is a claim about BEING. Thus, even ideological internalists can endorse quantifier pluralism as defined here.

<sup>24</sup>Cf. van Inwagen (2009)

<sup>25</sup>For simplicity I ignore non-singular quantification, e.g. plural, mass, and second-order quantification.

<sup>26</sup>See Sider (2011): 9.6.4. This is not an unassailable assumption; see Dasgupta (2009); Turner (2016).

<sup>27</sup>Doesn’t the above also help itself to “are the totality of”? Sort of. The statement in the meta-language helps itself to that ideology. But once the relevant quantifiers are identified, the definition itself helps itself only to disjunction. In determining the number of ideological kinds employed by a theory, we ought to only consider the ideology employed by the theory itself and ignore the ideology employed by any meta-language statements about the theory.

<sup>28</sup>Cf. Turner (2012): 422.

Or, if we quantify over quantifiers within the definition:

For any restricted quantifiers  $\exists_1 \dots \exists_n$ , if they are the totality of restricted quantifiers, then for any restricted quantifier  $\exists_q$ ,  $\exists_q x(\phi) =_{df} \exists x(\phi) \wedge \forall \Pi((\Pi \neq \exists_q \wedge \Pi \neq \exists) \rightarrow \neg \Pi x(\phi))$ <sup>29</sup>

Again, the definition satisfies Substitutional Equivalence.<sup>30</sup>

Bare and restricted quantifiers are interdefinable. Now consider the following version of quantifier pluralism. Past, present, and future entities all exist, in the generic sense. But they exist in fundamentally different ways. Call this view *temporal pluralism*. Now, there are different ways to develop temporal pluralism.<sup>31</sup> One way is to introduce three restricted quantifiers, ‘ $\exists_{past}$ ’, ‘ $\exists_{present}$ ’, and ‘ $\exists_{future}$ ’, that range over past, present, and future entities, respectively.

Contrast temporal pluralism with a standard version of presentism. According to presentism, the only things that exist are the things that exist presently. To characterize indispensable truths about the past or the future, this presentist theory introduces the Priorian tense operators ‘P’, ‘F’, ‘H’, and ‘G’. In order, these operators can be interpreted as saying, “It has at some time been the case that...”, “It will at some time be the case that...”, “It has always been the case that...”, and “It will always be the case that...”. Because Boudica would be located in the past, according to presentism she does not exist. Yet it is still true that Boudica led the Britons in revolt against the Romans. The presentist theory thus states, among other things, ‘P(Boudica is leading a uprising)’.

Temporally-relativized quantifiers and tense operators behave differently at a syntactic level. But sentences formed using one can be matched to equivalent sentences that use the other:

$$P(\phi) =_{df} \exists_{past} t_1 (\neg \exists_{present} t_2 (t_1 = t_2) \wedge \neg \exists_{future} t_3 (t_1 = t_3) \wedge \phi \text{ is true at } t_1)$$

That is to say,  $\phi$  is true at some time in the past if there pastly exists some time such that  $\phi$  is true at that time. Similar definitions can be given for the other tense operators. Interdefinability can be shown by moving from a pastly existing time to a past-tensed claim, from a presently existing

<sup>29</sup>This definition won’t work if the domains of some restricted quantifiers overlap. For example, an object might exist presently and exist concretely. I’m not sure how to give a definition that allows for that without specifying how the restricted quantifiers interact, which is to say I’m not sure how to give a non-committal and perfectly general definition. But that won’t affect my argument. The cases I discuss do not require overlapping quantifiers.

<sup>30</sup>See van Inwagen (2014) for an attack on the claim that quantifier pluralism preserves validity. For a reply, see Turner (2010): 23–25.

<sup>31</sup>See McDaniel (2017): Chapter 3 for an incomplete taxonomy.

time to a present-tensed claim, and from a futrely existing time to a future-tensed claim. This should come as no surprise. All theories of time are trying to characterize the same phenomena. They are *designed* to be more-or-less equivalent.

The above definition uses three temporally-relativized quantifiers. But, as I showed above, all quantifiers are substitutionally equivalent. That they are used in the definition therefore does not count against its adequacy. (Compare: an adequate definition of conjunction will require both disjunction and negation.) The definition also requires identity and the ‘true at’ predicate. But, plausibly, both are broadly logical notions. It is therefore permissible to use these notions to demonstrate substitutional equivalence.

Yet trouble awaits anyone who accepts both (a) that all quantifiers are of the same kind and (b) that temporally-relativized quantifiers and tense operators are of the same kind. If we assume that sameness of kind is transitive, then *all* quantifiers, not just the temporally-relativized ones, are of the same kind as tense operators. It follows that anyone who employs the bare quantifiers can also employ tense operators without violating the Comb’s instruction manual. That’s absurd.

(Why should we assume that sameness of kind is transitive? In short, because it is much more plausible to assume that it is than to assume that it isn’t. I return to this issue in subsection 3.3.)

The trouble extends beyond the philosophy of time, for quantifiers abound. We can produce a similar result with modally-relativized quantifiers and modal operators. So all quantifiers would be of the same ideological kind as modal operators. If that’s not bad enough, then consider that this result can be combined with the first result to show that tense operators and modal operators are of the same ideological kind!

While substitutional equivalence might be a necessary condition on sameness of kind, it cannot be a sufficient condition. If it were, it would leave us with an implausibly wide-toothed Comb.

### 2.3 The Syntactic Condition

Here’s a new condition on sameness of kind: if two terms  $\phi$  and  $\psi$  are of the same ideological kind then  $\phi$  and  $\psi$  are *of the same syntactic category*.

How do we determine when two terms are of the same syntactic category? On this issue I do not want to be dogmatic and am happy to defer to the relevant experts. That being said, I think we can answer this question by observing the terms’ syntactic behavior. Restricting ourselves to a

simple form of first-order predicate logic, we can distinguish between names, variables, predicates, logical connectives, and quantifiers. Loosely speaking, a name can always be joined with a predicate to form a closed sentence. A variable behaves differently; only when bound by a quantifier can it form a closed sentence. Along similar lines, a predicate can be joined to names and variables but not to other predicates. A logical connective joins with one or more sentences to form a new sentence, but – unlike a quantifier – a logical connective is unable to form a closed sentence from open constituents. More on quantifiers shortly.

There are, of course, many other formal symbols to categorize. Most saliently, there are the intensional sentential operators from tense logic and modal logic. Unfortunately, I cannot provide a complete taxonomy of the syntactic categories here. This is partially because there are just too many expressions to categorize. But, more importantly, there are legitimate disputes as to what the syntactic categories are and I do not want to build into the definition of an ideological kind any specific resolution to these disputes. For instance, there is a longstanding disagreement as to whether mass expressions (like ‘coffee’) are importantly different from count expressions (like ‘cup’), or whether all instances of mass expressions should be reduced to equivalent count expressions (e.g. ‘coffee’ into ‘a cup of coffee’).<sup>32</sup> Even if mass expressions are not reduced, there is still a further question about the level of composition at which they manifest. Is ‘coffee’ by itself a mass expression, or is it more precise to say ‘coffee’ can be used to form either a mass expression (‘much coffee’) or a count expression (‘many coffees’)? I cannot adjudicate either dispute here.

All of this is to say that a precise determination of the syntactic categories relevant to metaphysics is an endeavor best pursued through careful deliberation. More practically, I recommend that metaphysicians be more mindful of the syntactic behavior of their preferred ideology and in particular be explicit about how that behavior differs from the behavior of rival ideology. In partially basing the individuation of ideological kinds on the syntactic features of their constituents, we open up a range of new theoretical possibilities. I maintain that these possibilities are worth exploring.

*Why* they are worth exploring is an issue fraught with complications. From my own externalist perspective, syntactic differences matter because they present different representations of how the world operates. An ideology restricted to modal predicates interprets modal reality as, at bottom,

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<sup>32</sup>See, e.g., Cartwright (1979); Laycock (1979).

one where objects instantiate properties. But an ideology that employs modal operators interprets modal reality as more pervasive, less particularist, and in some sense non-ontic.<sup>33</sup> An ideological internalist likely does not have such a grand vision about the correspondence between ideology and modal reality. Yet even she should care about syntactic differences. Admittedly, the nature of her concern will be shaped by the particular internalist criteria she employs. But consider an internalist that desires clear ideology. Plausibly, some syntactic formulations are harder to understand than others.<sup>34</sup>

Let's set aside these competing justificatory positions. One motivation for the syntactic condition available to both externalists and internalists is that it allows us to avoid the absurdities I developed in subsection 2.2.

One component of an expression's syntactic category is its inferential role. Expressions of the same category will appear in similar valid inference patterns and, generally speaking, expressions of different syntactic categories will not – or at least the ways in which they appear will differ.

We can use inference patterns to distinguish between temporal pluralism and presentism. Interestingly, temporally-relativized existential quantifiers are commutative:

$$\exists_{past}x(Bx \wedge \exists_{past}y(Dy)) \equiv \exists_{past}y(Dy \wedge \exists_{past}x(Bx))$$

But tense operators are not commutative:

$$P(\exists x(Bx \wedge P(\exists y(Dy)))) \not\equiv P(\exists y(Dy \wedge P(\exists x(Bx))))^{35}$$

Using the resources of temporal pluralism, we would say that there exists<sub>past</sub> something that is identical to Boudica and there exists<sub>past</sub> something that is a dinosaur. We could embed the second claim in the first: there exists<sub>past</sub> something such that (i) it is identical to Boudica, and (ii) there exists<sub>past</sub> something that is a dinosaur. We could *also* reverse the order of the existential statements: there exists<sub>past</sub> something such that (i) it is a dinosaur, and (ii) there exists<sub>past</sub> something that is identical to Boudica. The analogous inference using the resources of presentism is *not* valid. We would say that it was the case that there exists something identical to Boudica and it was

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<sup>33</sup>For more on the externalist take on ideology and syntactic features, see Finocchiaro (2019b).

<sup>34</sup>Cf. Cameron (2012): 16–20.

<sup>35</sup>Cf. Sider (2006): 84–92

the case that there exists something that is a dinosaur. We could say that it was the case that there exists something such that (i) it is identical to Boudica, and (ii) it was the case that there exists something that is a dinosaur. But we *could not* say that it was the case that there exists something such that (i) it is a dinosaur, and (ii) it was the case that there exists something that is identical to Boudica. This is because of the simple fact that dinosaurs predate Boudica. Presentism bakes sequential information like this into its operators. Consequently, tense operators are not commutative. Temporal pluralism’s quantifiers are, in this respect, less informationally rich.

The fact that temporally-relativized quantifiers are commutative but tense operators are not is a good reason to think that they are not of the same syntactic category.

To be clear, I do not claim that this is a decisive reason. I also do not claim that commutativity is always a litmus test for sameness of syntactic category. To clarify further, my point is *not* that sentences employing tense operators are unable to be matched to equivalent sentences employing temporally-relativized quantifiers. My point, rather, is that the behavior of tense operators is different than that of quantifiers. We therefore have reason to think that the two are not of the same syntactic category. But if they are not of the same syntactic category then they are not of the same ideological kind. Thus, on my account of ideological kinds, we can show how the *reductio* from subsection 2.2 fails.

Does the introduction of the syntactic condition also show that quantifiers are not of the same kind? To answer that question I must first answer a more basic question: what is a quantifier?

We can identify two answers to this question, the semantic and the inferential.<sup>36</sup> Restricting ourselves to existential quantification, the semantic answer says that an expression  $\mathcal{E}$  is an existential quantifier when its semantics is such that  $\ulcorner \mathcal{E}x\phi(x) \urcorner$  is true just in case something satisfies the open sentence  $\ulcorner \phi(x) \urcorner$ . The inferential answer holds that  $\mathcal{E}$  is a quantifier just in case it obeys a set of inference rules, in particular existential generalization and existential instantiation.

To keep with the syntax-oriented theme of my account, let’s adopt the inferential answer. It turns out that quantifiers are still of the same ideological kind. Strictly speaking, ‘ $\exists_{past}$ ’ and ‘ $\exists_{future}$ ’ do not obey the same inference rules. But they do obey structurally equivalent rules. Imitating the free logician, we can formalize existential generalization for any existential quantifier,  $\exists_q$ , as:

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<sup>36</sup>Cf. Turner (2010): 14–15. See also Lewis (2004): 14 and McDaniel (2017).

$$F(t), \exists_q x(x = t) \vdash \exists_q x F(x).$$

Likewise, we can formalize existential instantiation as:

$$\text{If } F(t), \exists_q x(x = t) \vdash \phi, \text{ then } \exists_q x F(x) \vdash \phi \text{ when } t \text{ does not occur in } F(x) \text{ or } \phi.$$

Restricted quantifiers satisfy the above formalizations. They are therefore “genuine” quantifiers and of the same syntactic category. Because restricted quantifiers are also substitutionally equivalent, it follows that they are of the same ideological kind.

If what I’ve said so far is correct, then according to (KI-Parsimony) the addition of a restricted quantifier does not impact a theory’s ideological parsimony. I’m genuinely ambivalent about this result. As a fan of quantifier pluralism, I appreciate any argument in its favor. Yet I also suspect that in some cases the addition of a restricted quantifier should impact a theory’s ideological parsimony.

Thus far, I’ve been relying on a sort of reflective equilibrium, moving from generally applicable conditions to intuitions about specific cases and back again. This is a place where reasonable people may disagree about what conclusion to draw – especially if they already disagree about the underlying metaphysics. Personally, I’m inclined to embrace the explosion of being. But some might decide to revise one or both of the conditions for individuating ideological kinds. Others might decide to introduce a third condition. These are all legitimate responses. Neutrality can only get us so far.

Here is one more case for those who want to pursue that last decision. For (nearly) every predicate  $\Gamma$  we can define its *complement*  $\Gamma'$  such that everything either satisfies the predicate or its complement. By definition,  $\Gamma'(x) \leftrightarrow \neg\Gamma(x)$ . Because the definitions use only negation,  $\Gamma$  and  $\Gamma'$  are substitutionally equivalent. For all I’ve said,  $\Gamma$  and  $\Gamma'$  would be of the same ideological kind. But that seems wrong. To take just one example: many believe there to be exactly two ontological categories: substance and property. Everything is either a substance or a property. Nothing is both a substance and a property. By the above definitions, we could show that ‘is a substance’ and ‘is a property’ are of the same ideological kind. Intuitively, though, a theory that employs both predicates is (all else being equal) more ideologically complex than a theory that employs just one. Those who share this intuition might offer a new condition, one that shows why  $\Gamma$  and  $\Gamma'$  are not in general of the same ideological kind.

### 3 Objections & Replies

In this section I raise and respond to some objections to my account. I do not take my responses to be definitive. I do, however, think that they emphasize the strength of my account relative to the alternatives.

#### 3.1 The Messy Approach

I've offered necessary and jointly sufficient conditions on sameness of kind and challenged those who are unsatisfied with my account to offer their own conditions. In so doing, I've engaged in what I call the *systematic* approach to ideological kinds. On the systematic approach, we attempt to analyze sameness of kind into generally satisfiable conditions. When we are presented with a counterexample, we try to fix the conditions or replace them with better ones.

One objection is that the systematic approach is misguided. Cowling gives voice to this thought when he says:

[W]hile some examples of kindred primitives are straightforward (e.g., necessity and possibility in modality, parthood and overlap in mereology), it is unlikely that any reductive account of this notion is forthcoming. To be sure, certain diagnostics are useful for discerning ideological kinds—e.g., whether the concepts in question are interdefinable—but fixing upon the particular ideological kinds is (and should be) a matter of careful, case-by-case metaphysical examination (Cowling (2013): 3897–3898).

Following Cowling's suggestion, someone might reject my general account of ideological kinds without feeling compelled to offer an alternative. Call this alternative the *messy* approach to ideological kinds.

The messy approach to ideological kinds is motivated by the fact that a similar approach seems appropriate for ontological kinds. We have an intuitive grasp of what an ontological kind is, and can provide paradigm cases. But we disagree as to what an ontological kind is, precisely, and we lack generally satisfiable necessary and sufficient conditions for when two objects are of the same ontological kind. We nevertheless get by just fine with this messy approach to ontological kinds. More importantly, our inability to establish generally satisfiable conditions for when two entities are of the same ontological kind does not impact the legitimacy of (KO-Parsimony).

I'm willing (though hesitant) to grant that the messy approach to ontological kinds is appropriate and unproblematic. But I think that ontology is in this respect unlike ideology. The messy approach to ideological kinds is methodologically problematic and we should at this stage avoid it.

We should avoid it because ideology is much less familiar than ontology. Ontology is a bread-and-butter topic within metaphysics. Furthermore, the categorization of objects into different kinds is practically instinctual in our understanding of the world. We employ the notion of an ontological kind whenever we contemplate the nature of fictional characters, debate the existence of numbers, or argue about whether the world contains tropes or universals. In contrast, we rarely discuss ideology, and we even more rarely discuss ideological kinds. Lewis is an exception; he motivates his theory of modal realism by demonstrating how it enables us to “reduce the diversity of notions we must accept as primitive” (Lewis (1986): 4). Yet even he says little about primitives *per se*, opting instead to discuss the more specific notion of “primitive modality.”

I am not saying that the messy approach to ideological kinds is eternally forbidden. I am rather saying that our understanding of ideology is still developing. Accordingly, we ought to try to give generally satisfiable necessary and sufficient conditions for sameness of kind. Perhaps I am overly optimistic in thinking that this systematic project can succeed. Yet even those who are pessimistic ought not to so easily give up. The systematic approach might fail. But it would be better to first discover why.

### 3.2 Imprecision Replaced with Imprecision

At the outset of section 2, I claimed that we should endorse (KI-Parsimony) only if we can sufficiently develop the notion of an ideological kind. One objection is that I've merely relocated the imprecision I meant to remove. Recall that my syntactic condition states:

If two terms  $\phi$  and  $\psi$  are of the same ideological kind then  $\phi$  and  $\psi$  are of the same syntactic category.

I then suggested how we might determine if two expressions are of the same syntactic category.

But I also said that “a precise determination of the syntactic categories relevant to metaphysics is an endeavor best pursued through careful deliberation.” That sounds dangerously similar to the messy approach to ideological kinds I rejected in subsection 3.1. If that approach is unacceptable,

then shouldn't the messy approach to syntactic categories also be unacceptable? More specifically, I claimed that we ought to endorse (KI-Parsimony) only if we can provide generally applicable necessary and sufficient conditions for sameness of kind. But on my account one such condition involves syntactic properties that are themselves not generalizable. So it seems that I have failed to meet my own dialectical challenge.

In response, I would like to highlight two differences between ideological kinds and syntactic categories. These differences, I think, permit a messy approach to syntactic categories.

First, there are plenty of diagnostic procedures based on well-established formal features that we can follow to give us a sense as to whether or not two terms are of the same category. In subsection 2.3, I focused on inferential role. If two items find themselves in different valid patterns of inference that is a good reason to think that they are in different syntactic categories. We can then use well-studied formal properties to discern when this occurs. For example, I argued that temporally-relativized quantifiers and tense operators are of different syntactic categories (and therefore different ideological kinds) because temporally-relativized quantifiers are commutative but tense operators are not.

Of course, a test for commutativity will not always be decisive. Not all commutative terms are of the same syntactic category (e.g. truth-functional connectives and quantifiers). And some commutative terms seem to be in the same category as some non-commutative terms (e.g. addition and subtraction). Further, for many terms commutativity doesn't even apply (e.g. names).

But commutativity is just one well-understood feature among many that can be examined to determine sameness of syntactic category. In contrast, well-understood features that can be examined to directly determine sameness of ideological kind are in short supply. Following Cowling, we might treat tests for interdefinability and conceptual similarity as "useful diagnostics". But in isolation these tests are much less credible than tests for formal features like commutativity, validity, grammatical sentence construction, etc. We already know how to identify syntactic features. This knowledge makes the messy approach to syntactic categories feasible. The same cannot be said for ideological kinds.

Second, and relatedly, there is little room for reasonable disagreement when it comes to syntactic category. Take any arbitrary expression  $\alpha$ . If I thought  $\alpha$  were a verb and you thought  $\alpha$  were a noun, it would be almost certain that one of us had made an egregious error. Admittedly, we

might reasonably disagree on what syntactic categories there are. But once we settle that issue we will likely agree on which terms go where. To illustrate: we might disagree on whether there are genuinely distinct mass expressions or if they should be interpreted as elliptical count expressions. For that reason we might disagree on whether ‘coffee’ is a mass expression or a count expression. But if we assume that there are genuine mass expressions we will likely agree that ‘coffee’ is among them.

In contrast, disagreements about ideological kinds linger at the ground level. Consider again Lewis’s reductive argument for modal realism. In order for the argument to succeed, it must eliminate every element of primitive modality – i.e. the ideological kind or kinds that we call modal ideology. But Cowling, amongst others, thinks that Lewis’s argument fails. This is because (i) Fine (1994) has decisively established that essence cannot be analyzed in terms of modal logic or possible worlds, and (ii) essence and modality are “plausibly held to be of the same general ideological kind” (Cowling (2013): 3903). The disagreement here between Lewis and Cowling does not rest on which ideological kinds we employ, but rather on how we sort bits of ideology into those kinds. This is a dicier sort of disagreement, and one that ought to be avoided.<sup>37</sup> Insofar as disagreements about syntactic category are not of this sort, my messy approach to syntactic categories is not similarly problematic.

### 3.3 Transitivity of Sameness of Kind

My argument in subsection 2.2 for the insufficiency of interdefinability relied on the following assumption:

If (i) term a and term b are of the same ideological kind, and (ii) term b and c are of the same ideological kind, then a and c are of the same ideological kind.

That is, sameness of kind is a transitive relation. Using this transitivity assumption, I argued that an account that uses only interdefinability to individuate ideological kinds generates wildly implausible results.

The transitivity assumption is motivated by a conception of ideological kinds as equivalence classes of terminology under some relevant relation. This relation can be defined by the conditions

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<sup>37</sup>For a similar point, see Cameron (2012): 16–19.

given for individuation. On my account, this relation is the relation of being substitutionally equivalent and of the same syntactic category. The truth-functional connectives ( $\wedge$ ,  $\neg$ , etc.) belong to the same ideological kind because they are substitutionally equivalent to and of the same syntactic category as each other. Similarly, terms like ‘green’, ‘teal’, ‘chartreuse’, and ‘Pantone 572 UP’ belong to the same ideological kind; they are predicates that can be interdefined with other predicates like ‘value’ and ‘hue’. By partitioning all expressions into equivalence classes in this way, we can individuate the kinds as well as determine which bits of ideology belongs to which ideological kind.

But maybe that is not the right way to conceive of ideological kinds. It is not obviously mistaken to think that ideological kinds sometimes overlap. Suppose that sameness of kind is a type of similarity relation – two terms are of the same kind when they express similar things or share similar syntactic features. This similarity conception suggests that my transitivity assumption is too strong. It’s possible for one term to be similar to a second, the second term to be similar to a third, and the first term to not be similar to the third. For example: the bare existential quantifier ‘ $\exists$ ’ is similar to the temporally relativized quantifier ‘ $\exists_{Past}$ ’ in that they both express existential content, the temporally relativized quantifier ‘ $\exists_{Past}$ ’ is similar to the tense operator ‘ $P$ ’ in that they both express content about the past, ‘ $\exists_{Past}$ ’, but ‘ $\exists$ ’ is not (in either way) similar to ‘ $P$ ’.<sup>38</sup>

Though not obviously mistaken, the similarity conception of kinds doesn’t adequately explain the appeal behind eliminating kinds. I’ll use compositional nihilism and the elimination of the ontological kind *composite object* as an example, but the point can be extended to other ontological kinds as well as to ideological kinds.

First, Mary might want to eliminate composite objects because she thinks that a commitment to composite objects leads to unacceptable consequences, for example that existence is vague or that objects can perfectly coincide. I admit that this motivation fits just fine with the similarity conception of kinds.

Mary might instead want to eliminate composite objects because she has a taste for desert landscapes. But Mary’s taste is satiated only if the objects that fall under that kind are eliminated. All she gets otherwise is a slightly more simple description of a no-less-lush ontology. It does seem like compositional nihilism contributes to ontological desertification, but only because it seems like

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<sup>38</sup>Thanks to Michael Rea for raising this alternative conception of ideological kinds.

members of the kind *composite object* are necessarily members of that kind. This necessity claim fits nicely with the equivalence conception of kinds, where each entity belongs to (at most) one ontological kind. But the necessity assumption does not fit as nicely with the similarity conception. On the similarity conception, any given individual is a member of multiple ontological kinds. Mary is a composite object, but she is also a human being, a woman, and a philosopher. Plausibly, not every similarity that defines an ontological kind also characterizes a necessity; Mary could have been a surgeon. What, then, justifies the necessity claim as it applies to composite objects? I don't mean to suggest that this question is unanswerable. But I do think that the question reveals an inegalitarian separation of kinds within the similarity conception. This separation does not fit nicely with principles of qualitative parsimony, which don't ordinarily distinguish between the kinds that are to be eliminated.

Finally, Mary might want to eliminate the kind *composite object* regardless of the number of entities that are thereby eliminated. This is often how qualitative parsimony is employed in metaphysics, where the elimination of the kind itself carries advantages independent the elimination of the members of that kind.<sup>39</sup> But, once more, on the similarity conception there seems to be an inegalitarian separation of kinds. The elimination of philosophers is not nearly as valuable as the elimination of composite objects. Why? Again, this is not an unanswerable question. Yet principles of qualitative parsimony do not ordinarily distinguish between kinds that are worth eliminating and those that are not. In contrast, on the equivalence conception it's quite plausible that kinds are on a par with respect to their parsimonious value. The equivalence conception thus provides an egalitarian separation of kinds that matches seemingly egalitarian principles of qualitative parsimony.

The fact that the similarity conception does not nicely pair with the motivations for kind-based parsimony is not a decisive reason to reject it. But I think its enough of a reason to prefer the equivalence conception. On the equivalence conception, though, sameness of kind is transitive.

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<sup>39</sup>Sometimes these are advantages not strictly attributable to ontological parsimony. See Brenner (2015b).

## Conclusion

It seems like we should minimize the number of ideological kinds we employ in stating our metaphysical theories. But we should first attempt to specify what an ideological kind is. In this paper, I've presented a novel account of when two terms are of the same ideological kind. This account is based on two necessary and jointly sufficient conditions: interdefinability and sameness of syntactic category.

With this account in hand, we get the surprising result that quantifier pluralism is an ideologically parsimonious view. For this or other reasons some might reject my account. But those who reject my account face their own challenge. They must either provide an alternative account or they must abandon (KI-Parsimony). Given the seemingly crucial role that (KI-Parsimony) plays, I hope that they will choose to explain when they think two terms are of the same ideological kind.

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