Ideology and Ontology

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§1. Introduction

Theories place demands upon what the world is like. If a theory is true, these demands are met. Consider a theory like arithmetic. If true, it seems to require at least the existence of numbers. In philosophical parlance, arithmetic therefore involves an *ontological commitment* to numbers. Roughly put, the ontology of arithmetic includes numbers in virtue of the fact that numbers must exist in order for arithmetic to be true. So, upon pain of inconsistency, it seems that we cannot accept the truth of arithmetic while, at the same time, denying that there are numbers.

Some philosophers have sought to show that the truth of arithmetic is, rather surprisingly, compatible with the view that there are, in fact, no numbers.¹ The prospects for such views are highly controversial, but, regardless of their merits, these efforts are often part of a more general inquiry that aims to determine how, if at all, we can extract specific ontological commitments from various theories. (See Quine (1948), Bricker (2016).) The pursuit of a comprehensive account of the ontological commitments of theories is, in turn, a central ambition of contemporary metaphysics. Among other things, it seeks to provide a way to move from questions about which theories we endorse to an inventory of what we ought to believe exists. This focus on ontological commitments and how theories acquire them is understandable enough, but it has arguably led some philosophers to ignore a related and perhaps equally important question about the demands theories place on the world: are the commitments of theories exclusively ontological?

An increasingly prevalent view in metaphysics is that the commitments of theories are not limited to ontology but also include what has come to be called "theoretical ideology." The most ready examples of the ideological commitments of theories include primitive predicates and operators. For example, on certain views, the predicate 'instantiates' is an ineliminable commitment of our best metaphysical theories, given the apparent truth of sentences like 'Plato instantiates humanity'. But, while we might abide an ontological commitment to both Plato and the property *humanity*, some views deny that there is any ontological correlate of 'instantiates'.² According to these views, while the predicate 'instantiates' does not express a relation, we are nevertheless required to accept into our theory the predicate, notion, or concept of "instantiation" as a theoretical primitive—a

¹ Nominalists deny the existence of abstract entities and therefore typically reject the existence of numbers. On nominalist options, see Hellman (1989), Burgess and Rosen (1993) and Cowling (2017).

² On instantiation and various metaphysics options, see Strawson (1959: 167-173) and Loux (1998: 30-36).

basic, undefined piece of ideology and perhaps an irreducible aspect of metaphysical structure.

According to what we can call *ideological realism*, theories place ideological demands on the world and seek to capture the metaphysical structure of reality in a different but no less objective or "worldly" way than ontological commitments. For this reason, ideological realists hold that there is an objective sense in which the ideological commitments of theories might "match" (or fail to "match") the non-ontological structure of the world to a greater or lesser extent. As Kment (2014: 150) puts it, "It shouldn't be assumed that all ingredients of reality must be individuals, properties, or relations—or entities of any kind, for that matter. For example, it's possible that in order to describe reality completely, we need to use some primitive piece of ideology that relates to some aspect of reality that doesn't belong to one of these three ontological categories, and which may not be an entity at all." If ideological realism of this kind is correct, then maximizing fit between the primitive ideology of a theory and the metaphysical structure of reality ought to be a central aim in devising our metaphysical theories. (See Sider (2009, 2011).)

While the division between ontology and ideology as well as the nature of ideological commitment is controversial, it is difficult to deny that theories are often compared or evaluated with respect to the variety or intelligibility of their primitive predicates or operators. In at least this limited respect, theories seem evaluable for their ideological economy in a manner roughly comparable to their ontological economy. But, if we are to evaluate ideological commitments in parallel to ontological ones, we require an adequate account of precisely how theoretical ideology places demands upon the world. A clearer conception of the metaphysical nature of theoretical ideology is therefore needed. In this regard, the work of W.V. Quine, David Lewis, and, more recently, Ted Sider has done much to bring the ideology-ontology distinction to the forefront of metaphysical inquiry and helped to map out the ways in which theory evaluation hinges on assessing ideological commitments alongside ontological ones. This entry sketches the recent history of the metaphysics of ideology while noting some of the central questions that arise in understanding ideological commitment. Throughout, remarks and running examples draw from what we can call *metaphysical* ideology—roughly, the distinctive ideological commitments of metaphysical theories-though much of what has been said regarding ideology has been intended to generalize to theoretical ideology regardless of subject matter.

§2. Ideological Commitments

Let us return to the case of arithmetic. If we grant, as most do, that arithmetic requires an ontological commitment to infinitely many numbers, what other demands does it impose on reality? Consider, for example, the arithmetical claim that zero has a unique successor. Does this claim require that we accept, along with zero and its unique successor, an additional entity: *the successor relation*? Put differently, does the truth of the claim that zero

has a unique successor mandate ontological commitments that go beyond numbers alone to a domain of other kinds of entities like relations or operators?

If we answer in the negative, it is natural to hold that, while this claim does not require the existence of a successor relation, it nevertheless commits us to reality being a certain way–after all, we are deploying the notion, *successor*, which other theories might reject as unnecessary, incoherent, ambiguous, or whatever. To this end, we must distinguish our ontological commitment to numbers from our *ideological commitment* to the predicate 'is a successor of', which is employed in expressing the theory of arithmetic.

When broadly construed, ideological commitment concerns whatever predicates or concepts occur within a theory, regardless of whether they are defined or primitive notions. More narrowly construed, ideological commitment concerns only the undefined or primitive predicates or concepts that figure into our theories. Given that the predicate 'is a successor of' occurs in arithmetical sentences like 'Zero has a unique successor', it is among the ideological commitments of arithmetic. And, if we can provide no reductive analysis or definition of this predicate, we must treat it as a primitive notion and therefore count it as an ideological commitment in the narrow sense. In the construction of our theories, the judicious choice of primitives enhances expressive and explanatory power and permits the analysis and reduction of other theoretical terms—e.g.. we might analyze the notion of *is greater than* in terms of *successor*. Conversely, if we introduce primitive predicates willy-nilly, we obscure systematic analytic connections within our theories and induce gratuitous complexity. Since theories are typically thought to improve when the stock of basic notions is minimized (without reducing their perspicuity or explanatory credentials), the natural stance is that, when it comes to ideology in the narrow sense, less is more.

Although there is no clear sense in which one might reject ideological commitments as just defined, one could, in principle, oppose the ideological realist thesis that ideological commitments can do a better or worse job of matching the structure of reality. One way of opposing ideological realism is to hold that putative ideological commitments are little more than ontological commitments in disguise. Such a view would hold that there is no way in which we might admit 'is a successor of' into our theory without positing a relation correlated to the predicate. Similarly, the introduction of primitive modal and temporal operators would be held to require distinctive sorts of presumably abstract ontological commitments expressed by these operators. Below, we'll consider why assimilating all metaphysical disagreement to ontological disagreement implausibly distorts debates in the metaphysical of modality. Before doing so, it is worth explaining why ideological commitments seem both fruitful and arguable unavoidable in metaphysics.

Consider the familiar case of properties and instantiation. For almost all who accept an ontology of properties, talk of "instantiation" plays a key role in understanding the nature of properties. But, when pressed to elaborate upon such a view, problems quickly arise

and are exacerbated if "instantiation" is held to express an abstract relation.³ Very roughly: if we attempt explain the fact that *a* instantiates *F* as holding in virtue of the fact that *a* and *F* stand in the *instantiation* relation, then we must explain the fact that *a*, *F*, and *instantiation* are so related. To this end, we might posit some additional relation to do this work, but this merely generates another structurally similar explanatory burden. Upon pain of an infinite regress of posited relations, we seem required to treat our talk of instantiation as quite different from our talk of "is five feet from" or "loves." An attractive option is therefore to introduce 'instantiates' as a primitive predicate in our theory of properties—one required for describing reality but that has no ontological correlate.

The case of instantiation illustrates the appeal (perhaps even the necessity) of introducing primitive ideological commitments. It is worth noting, however, that the relation between primitives, ideology, and ontology is a complex affair. Notice that primitive notions are distinguished by their theoretical status. Where other theoretical terms admit of reductive definition, primitives do not. And, upon pain of circularity or a kind of infinite conceptual "descent" (i.e., a non-terminating chain of notions defined in terms of yet other notions), all theories must abide at least some primitives. There is, however, nothing about being a primitive notion that, in principle, precludes it from having an ontological correlate. One might, for example, take "goodness" to be a primitive and insist that it expresses a fundamental property, while others might take the predicate as a primitive and deny it has any ontological correlate. So, although philosophers often talk of taking something as a primitive as a shorthand way of communicating that it incurs no ontological commitment, it would distort the connection between definability and the ideology-ontology distinction to conflate these equally important but notably different questions.

§3. Lewis' Contribution

While inquiry into ideology and its interface with ontology is implicit in a range of metaphysical debates, the prevalence of inquiry into metaphysical ideology owes greatly to its role in discussions regarding modality and its analysis. Moreover, the nature and significance of ideology is perhaps made clearest by attending to the case of modal operators.

Possible worlds theorists hold that our modal thought and talk is properly analyzed in terms of quantification over a specific kind of entities: *possible worlds*. Necessary truths obtain in all possible worlds. Impossibilities obtain at none. Contingent truths obtain at some but not all possible worlds. The backbone of possible worlds theory is a pair of biconditionals, which analytically connect the operators of modal logic with quantification over possible worlds: (i) $\Box P$ iff, at all possible worlds, *P* is true; and (ii) $\diamondsuit P$ if and only if, at some possible worlds, *P* is true.

³ On Bradley-style regresses, see MacBride (2011) and Maurin (2012). On ideological resolutions of the regress, see Armstrong (1978: 109-111), Nolan (2008), and Cowling (2017: 120-129).

Setting aside certain exceptions, possible worlds theorists purport to analyze modality by taking on an ontological commitment to worlds. Possible worlds theory is, however, far from mandatory as a metaphysics of modality. (See Divers (2002).) One competing view, modalism, holds that our modal thought and talk is in perfectly good standing, but denies that it is rightly analyzed in terms of possible worlds or any other additional ontological commitments. (See Melia (1992) and Forbes (1989).) One kind of modalism rejects the above biconditionals and contends that facts like $\Box P$ and $\Diamond P$ admit of no further analysis. On such a view, reality has an irreducibly modal aspect that cannot be assimilated into a special kind of ontological commitment to possible worlds. A second competing and considerably more radical view, modal eliminativism, denies that our modal thought and talk is in working order. (See Sider (2003: 185).) Instead, modal claims are either meaningless or systematically mistaken. It is neither true or false that $\Box P$, since reality has no modal aspect whatsoever.

Possible worlds theory, modalism, and modal eliminativism are markedly different views and aptly characterizing their differences is a matter of much importance for modal metaphysics. Notice, though, that it seems quite possible for the modalist and the modal eliminativist to agree on all ontological matters since each denies there are possible worlds. Upon close inspection, we would badly distort the character of their disagreement if we assimilate it to a disagreement about what things exist. The modalist's view is not distinctive for believing that there are special entities—the box and diamond of modal logic—that the modal eliminativist does not believe in. Rather, the modalist believes reality exhibits modal structure that is aptly expressed using the ' \Box ' and ' \diamond ' of modal logic. In stark contrast, the modal eliminativist denies reality has any modal structure. The difference between these views is therefore not an ontological one. Instead, it concerns metaphysical ideology—in this case, modal ideology pertaining to necessity and possibility.

According to Lewis, the pitfalls of primitive modal ideology are best avoided by endorsing modal realism, a view on which quantification over concrete possible worlds furnishes us with a reduction of our modal notions. It is in the context of this project that Lewis offers arguably the most influential remarks on ideology. In setting the stage for his defense of modal realism, Lewis speaks of the ideological commitments of set theory, their importance, and their relation to ontology with a casualness that belies the paucity of preceding philosophical inquiry into ideology. Summarizing the case in favor of set theory, Lewis (1986: 4) says:

Set theory offers the mathematician great economy of primitives and premises, in return for accepting rather a lot of entities unknown to *Homo javanensis*. It offers an improvement in what Quine calls ideology, paid for in the coin of ontology. It's an offer you can't refuse. The price is right; the benefits in theoretical unity and economy are well worth the entities.

A parallel is then swiftly drawn with the hypothesis of modal realism and its vast ontology of concrete possibilia. And, in that regard, Lewis notes that the ontological commitment to a plurality of concrete worlds provides "the wherewithal to reduce the diversity of notions we must accept as primitive." (*Ibid*.) The philosophical result is an improved, more unified, and more parsimonious theory, not just regarding modality, but in "the theory that is our professional concern - total theory, the whole of what we take to be true." (*Ibid*.)

The picture of theory choice Lewis points to in these early pages goes largely unelaborated in *On the Plurality of Worlds*. There is no sustained investigation into the metaphysics of ideology. There is no careful defense of the assumptions regarding ontology and ideology. There is no examination of other methodological orientations that might discount the value of minimizing ideology. But, despite the sparse character of Lewis' remarks on ideology, it is hard to understate the influence these passages have exerted on subsequent metaphysics. They have prompted others to follow methodological suit and make explicit the practice of weighing ontological commitments against ideological ones. (See, e.g., Rodriguez-Pereyra (2002: 199-210), Melia (2008: 112-113), and Van Cleve (2016).) And, although the pursuit of fewer basic notions in our theories is by no means novel, the rise of this Lewisian picture of theory choice has changed how metaphysicians describe and evaluate competing theoretical alternatives. Talk of "bloated ontology" is now regularly set against the appeal of a "lean" or "minimal ideology."

For all its influence, the ideological "turn" inaugurated by Lewis' remarks has unfolded with conspicuously little in the way of explicit comment. For better or worse, this is because Lewis' remarks presuppose several intuitively plausible theses about ideology that have met with wide, albeit largely implicit, approval.

<u>Ideological Virtues</u>: Metaphysicians frequently appeal to theoretical virtues like conservatism, simplicity, and fertility that extend beyond the constraint of empirical adequacy. The most familiar of these appeals are Ockhamist ones that caution us to dispense with unnecessary ontological commitments. Lewis' remarks, in *On the Plurality of Worlds* and elsewhere, presuppose that attending to these virtues (and correlative vices) while assessing ideological commitments is a route to delivering better theories. Indeed, the reduction of primitives is a recurring aim in Lewis' work on metaphysics. By applying these theoretical standards to both ontology and ideology, Lewis' methodology marks them, not only as comparable concerns, but as among our better grounds for preferring certain theories over rivals that differ only in ideological terms. (See Sider (2013) for an application of ideological parsimony to the metaphysics of mereology.) As a consequence, differences in ideology cannot be discounted or ignored as merely notational variants. These differences bear upon what theories we ought to accept since they have direct implications for what reality is ultimately like.

<u>Comparative Ontology and Ideology</u>: Throughout Lewis' work on metaphysics, we are often invited to consider competing theories that differ in how they allocate their theoretical spending. Where some theories take on vast ontological costs and spend little on ideology, others minimize ontological commitments in favor of a wealth of primitive notions. For instance, in the metaphysics of time, we can contrast eternalist views that posit non-present entities with presentist views that reject such entities while introducing primitive tense operators. (See Cowling (2013).) In these and other cases, explanatory work needs to be done and we ought to seek out those theories that maximize their theoretical efficiency. Quite often, the space of competing theories includes pairs of theories that can be seen to differ in whether to invoke ontological or ideological resources to achieve a given explanatory end. In certain cases, this induces epistemic indecision. Memorably, Bennett (2009: 65) describes theory choice under these circumstances as follows: "At this point, it starts to feel as though we are just riding a see-saw-fewer objects, more properties; more objects, fewer properties. Or perhaps-small ontology, larger ideology; larger ontology, smaller ideology. Either way, it starts to feel as though we are just pushing a bump around under the carpet." A standard Lewisian strategy for addressing theoretical impasse (apart, of course, from simply abiding it) is to note that the construction of our metaphysical theories is a global affair with different ontological and ideological commitments generating interlocking theoretical virtues and vices. For example, we can usefully ask how our modal metaphysics ought to align with our temporal metaphysics. It might, for instance, seem unprincipled to eschew primitive modal operators and accept merely possible entities while, at the same time, rejecting nonpresent entities and introducing primitive temporal operators. In hopes of selecting from among theoretical rivals, Lewis' work on ideology often points towards an expansive and daunting task: discerning what cumulative ideological commitments yield a principled and internally consistent view of reality and its structure.

§4. Quine's Contribution

Although Lewis' remarks on ideology have exerted greater influence on recent metaphysics, the relation between ontology and ideology as well as the term 'ideology' owe to Lewis' predecessor, Quine. At the same time, the distinctively Quinean conception of ideology is tethered to Quine's controversial account of theories and meaning (an account too broad to summarize here). Quine offers an early statement on this front while clarifying his treatment of ontological commitment:

Given a theory, *one* philosophically interesting aspect of it into which we can inquire is its ontology: what entities are the variables of quantification to range over if the theory is to hold true? Another no less important aspect into which we can inquire is its *ideology* (this seems the inevitable word, despite unwanted connotations): what ideas can be expressed in it? (Quine (1951: 14))

On this Quinean conception of ideology, theories are to be viewed as comprising (at least)ontology and ideology.⁴ The divide between these notions owes the irreducibility of ideological commitments and ideological distinctions to exclusively ontological matters. For, as Quine (*lbid.*) notes, "the ideology [of the theory of real numbers] embraces many such ideas as sum, root, rationality, algebraicity, and the like, which need not have ontological correlates in the range of the variables of quantification of the theory." Given that these are separable domains of commitment and inquiry, Quine (*lbid*,) concedes the possibility of ideological variation even in the face of ontological agreement: "Two theories can have the same ontology and different ideologies. Two theories of the real numbers, for example, may agree ontologically in that each calls for all and only the real numbers as values of its variables, but they may still differ ideologically..."

The prospects for ideological variation in the face of ontological agreement owe to the amorphous connection between these two aspects of theories. Quine (*Ibid.*) notes that the "ontology of a theory stands in no simple correspondence to its ideology," but adds that ideological matters arguably constrain ontological commitments in virtue of the kinds of admissible ideas or predicates it permits.⁵ Quine (*Ibid.*) says:

The ideology of a theory is a question of what the symbols mean; the ontology of a theory is a question of what the assertions say or imply that there is. The ontology of a theory may indeed be considered to be implicit in its ideology; for the question of the range of the variables of quantification may be viewed as a question of the full meaning of the quantifiers.

Quine's distinction between ontology and ideology is of particular significance for understanding his account of ontological commitment, but his subsequent remarks make clear either an inability or unwillingness to hammer the notion of ideology into clearer or more tractable terms. Quine (1951: 15) says:

I have described the ideology of a theory vaguely as asking what *ideas* are expressible in the language of the theory. Urgent questions of detail then arise over how to construe 'idea.' Perhaps, for what is important in ideological investigations, the notion of ideas as some sort of mental entities can be circumvented... Now the question of the ontology of a theory is a question purely of a theory of reference. The question of the ideology of a theory, on the other hand, obviously tends to fall within the theory of meaning; and, insofar, it is heir to the miserable conditions, the virtual lack of scientific conceptualization, which characterize the theory of meaning.

⁴ On Quine's on ontology and ideology, see Burgess (2008) and van Inwagen (2008).

⁵ The connection between ideology and ontology proves yet more complicated in light of the interaction of ideology with identity and indiscernibility. For discussion, see Geach (1967) and Kraut (1980).

Some years later, Quine abandoned the invocation of "ideas" in characterizing ideology and suggests that, alongside ontology, "what may be called ideology [is] the question of admissible predicates." (Quine (1957: 17).) In doing so, Quine moves the subject matter of ideological comparison away from what seem to be shadowy mental entities to the more familiar realm of theoretical vocabulary. The resulting strategy for evaluating ideology continues even during Quine's later flirtations with Pythagoreanism in Quine (1976). In mapping out the prospects for a pythagorean ontology comprising only sets but replete with a rich ideology, Quine simply identifies ideological commitment with a theory's proprietary predicates and functors:

We must note further this triumph of hyper-Pythagoreanism has to do with the values of the variables of quantification, and not with what we say about them. It has to do with ontology and not with ideology. The things that a theory deems there to be are the values of the theory's variables, and it is these that have been resolving themselves into numbers and kindred objects—ultimately into pure sets. The ontology of our systems of the world reduces thus to the ontology of set theory, but our system of the world does not reduce to set theory; for our lexicon of predicates and functors still stands stubbornly apart. (Quine (1976: 503).)

Quine's insights into theories extend to recognizing the need for something beyond his conception of ontology and to tethering this additional category to what is expressible within a theory. Understandably, for Quine, what is expressible proves to be a matter of roughly which predicates are admitted within a theory. And, while this notion is useful to facilitate the rough evaluation of theories, it falls short of a viable metaphysics of ideology in a number of ways. Not only is it unclear whether ideology is inherently tied to the syntactic types Quine points to (i.e., predicates and functors), there is a clear temptation in Quine to tie ideological commitments to linguistic items. There is, however, nothing metaphysically special about uninterpreted word types or linguistic items, so, when we find Lewis picking up Quine's ontology-ideology distinction, he often speaks loosely (or perhaps equivocally) of linguistic items like operators and predicates, "notions," "concepts," or simply of "primitives." And, while there seems to be a variety of ways to regiment ideology within a broader metaphysical picture, Lewis, like Quine, offers us rather little to go on.

§5. Sider's Contribution

Sider (2011) stands out as the leading effort in articulating a full-fledged metaphysics of ideology. Where Lewis' methodological commitments require an implicit commitment to ideological realism, Sider (2011: 13) is explicit on this point:

The term 'ideology', in its present sense, comes from Quine. It is a bad word for a great concept. It misleadingly suggests that ideology is about ideas—about *us*. This in turn obscures the fact that the confirmation of a theory confirms its ideological choices and hence supports beliefs about structure. A theory's ideology is as much a part of its worldly content as its ontology.

For Sider, ideological commitments "are as much commitments to metaphysics as are ontological commitments." (Sider (2011: 230).) Moreover, Sider's variety of ideological realism is one that extends the realm of ideological commitment beyond predicates to operators, quantifiers, and an unspecified variety of other syntactic categories. Sider defends this expanded conception of ideology by drawing upon Lewis' influential view that certain properties are metaphysically privileged or perfectly natural in virtue of inducing objective resemblance, figuring into natural laws, and occurring in analyses of intrinsicality and other notions.⁶ On Lewis' view, there is an objectively privileged structure to reality and the predicates deployed in our theories can do a better or worse job of capturing it. For example, a theory that invokes a predicate 'is a shmelectron' that applies to electrons and shuttlecocks is worse than one that invokes a predicate 'is an electron' that applies to all and only electrons. For, while either theory might (with some encumbrances) be put to work, the former is inferior for its lack of perspicuity or, as it is often put, for failing to carve reality at its (objectively distinguished) joints. A chief aim in introducing our theoretical vocabulary-in this case, predicates-is to accord with reality's underlying structure. As Sider (2011: 12) puts it:

A good theory isn't merely likely to be *true*. Its ideology is also likely to carve at the joints. For the conceptual decisions made in adopting that theory—and not just the theory's ontology—were vindicated; those conceptual decisions also took part in a theoretical success, and also inherit a borrowed luster. So we can add to the Quinean advice: regard the ideology of your best theory as carving at the joints. We have defeasible reason to believe that the conceptual decisions of successful theories correspond to something real: reality's structure.

Sider argues that objective metaphysical structure is not exhausted by the kind of structure which predicates do a better or worse job of carving at reality's joints. Rather, Sider (2009: 404) says "[w]e should extend the idea of structure beyond predicates, to expressions of other grammatical categories, including logical expressions like quantifiers. (Interpreted) logical expressions can be evaluated for how well they mirror the logical structure of the world."

If Sider is correct, our pursuit of concordance between theory and reality requires, not merely an apt choice of predicates, but also the judicious choice of quantifiers, operators, and perhaps other sorts of theoretical vocabulary. And, in each of these domains, we are faced with a choice that runs parallel to our above decision between introducing predicates 'electron' or predicates like 'shmelectron'. We can, according to Sider, obscure or illuminate metaphysical structure by making errant or apt conceptual choices. This raises the exceptionally difficult question of what, if any, quantifiers might "carve at

⁶ On Lewis' conception of naturalness and related theoretical options, see Lewis (1983). Sider (2013) demarcates objective structure via a "structure" operator that attaches to expressions of various grammatical types to single them out as structural.

reality's joints." But it also provides a backdrop to frame the earlier debate between the modalist and eliminativist about modality: at bottom, this disagreement concerns whether the world has any objective modal structure and, in turn, whether the box and diamond aptly render this structure.

Sider's conception of metaphysical inquiry increases the breadth of ideological inquiry and compounds its theoretical importance. It also forecloses any hope of extracting ideological commitments simply by scrutinizing a theory's stock of primitive predicates. For, if Sider is correct, our ideological choices are reflected across the diversity of grammatical categories we deploy in our theorizing. Notice, also, that if the kinds of operators and quantifiers we introduce constitute substantial ideological decisions, we seem required to provide reasons in favour of their adoption and, in turn, against rival theoretical structures. Mapping out these rival views has required increased attention to heterodox metaphysical options, often with noteworthy ontological consequences. To take an extreme example, we might opt for metaphysical theory that dispenses with quantification altogether in favor of predicate functors. Such a view requires a expanded ideology, but, on a roughly Quinean conception of ontological commitment, dispenses with any ontological commitments whatsoever. (See Quine (1960), Dasgupta (2009), and Turner (2011).) While there is little to recommend such a radical view, utilizing ideological resources like predicate functors in more modest ways generates some promising alternatives.⁷ At the same time, considerable methodological issues arise when trying to determine how to evaluate competing options that differ in increasingly radical respects. But, if Sider is right, the differences among these options are not merely notational or representational; they concern "worldly" structure and so ontology and ideology require equal attention. As Sider (2011: 14) puts it,

We often face a choice between reducing our ontology at the cost of ideological complexity, or minimizing ideology at the cost of positing new entities. If ideology is psychologized, the trade-off is one of apples for oranges; whether to posit a more complex world or a more complex mode of expression. But on the present approach, both sides of the trade-off concern worldly complexity. A theory with a more complex ideology posits a fuller, more complex, world, a world with more structure. Thus ideological posits are no free lunch.

§6. Open Questions about Ideology

Inquiry into the nature of the non-ontological commitments of theories is a metametaphysical project in its nascent stages. In fact, it remains an open question whether we are best served by using "ideology" as a catch-all label for whatever

⁷ A largely unexplored option is to more selectively apply the tools required by ontological nihilism—namely, a suitable powerful language of predicate functors—in order to replace certain bodies of quantified discourse—e.g., theories concerning merely possible, non-present, or abstract entities. For discussion of nominalist options of this kind, see Burgess and Rosen (1997: 185-188) and Cowling (2017: 238-242).

commitments are non-ontological or for some more narrow domain of theoretical aspects. There is also little consensus how, if at all, we might most usefully taxonomize ideological commitments or even explicate the notion of ideology except by appeal to a carefully tailored range of examples.⁸ If, for example, a puzzled metaphysician asks for a general characterization of an "ideological disagreement," it is unclear whether an informative answer—one that illuminates the notion of ideology without simply invoking it—can be offered. Perhaps, then, the notion of ideological structure must itself be taken as primitive. (Whether this leaves it in better or worse shape than the notion of ideology seems to be improved through our examination of competing metaphysical options that differ in their deployment of ideological and ontological resources.

If a comprehensive account of ideology and its connection to metaphysical structure can be provided, the central challenge for ideological inquiry is likely to be a species of a more general challenge for metaphysics: accounting for the epistemic significance of theoretical virtues. The absence of a consensus rationale for this pervasive methodology is a bit of a scandal in its own right, but, for ideological realists like Lewis who rely upon theoretical virtues, the story is bound to be worryingly complex. This is because the diversity of ontology and ideology seems to rule out any straightforward account of how we ought to compare theoretical costs across the ontology-ideology divide. For example, should we quantify ideological commitments by grammatical category, conceptual kind, or via some other means? And, once we can count up ideological commitments, how do they compare with ontological ones? Is every primitive worth exactly one fundamental entity or twelve derivative entities or what? Absent a recipe for comparing ontology and ideology or calculating overall theoretical cost, it remains mysterious how we might make principled choices from among competing "package deals" of ontology and ideology. Articulating some principles for theory choice that attend to the ideology-ontology interface is therefore a central task for the broader challenge of understanding the role of theoretical virtues in metaphysics.

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⁸ For discussion of ideological kinds and the individuation of ideological commitment, see Finocchiaro (forthcoming).

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