# Trading Ontology for Ideology (and Vice Versa)



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# Abstract

In this paper, I defend modal dimensionalism against the objection that it is ontologically and ideologically heavy. First, I briefly outline the theory and the objection against it. The objection relies on the widely accepted view that ontological and ideological parsimony are operational criteria when comparing metaphysical theories. Second, I outline the conventional distinction between ontology and ideology in the metaphysical tradition. Third, I challenge a particular kind of parsimony: reduction by identification. Fourth, even if reduction by identification is accepted, I show that theories that pursue this often minimize differences, and that such minimization paves the way to epistemic underdetermination. Finally, I demonstrate that some theories in modal metaphysics also suffer from difference minimization and should thus not be measured on the ontology/ideology scale (contra the objection from heaviness).

# 1 Modal Dimensionalism and the Heaviness Problem

Modal realism (hereafter MR) is realism about possible worlds. Possible worlds, the ways the world could be, exist in the very same way the actual world does. As opposed to, say, Stalnaker's account (Stalnaker 1976), Lewis's MR (Lewis 1986a, b) identifies 'ways things might have been' with possible worlds'.<sup>1</sup> According to MR, possible worlds are concrete, spatiotemporal and causally isolated systems inhabited by concrete, spatiotemporally and causally isolated possibilia. Modal ersatzism (hereafter ME) is a sort of MR to the extent that it holds that possible worlds exist. In addition, however, it holds that they merely represent how concrete reality could be. They are usually considered abstract entities that either do or do not have an internal structure. Modal dimensionalism (hereafter MD) is not MR. MD is not ME either. MD lies somewhere between the two positions.<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup>Stalnaker dubs MR as 'extreme' realism about possible worlds since, for him, it is not true that 'possible worlds are things of the same sort as the actual world-'I and all my surrounding''. (Stalnaker 1976, 67). <sup>2</sup>For the comparison of MD and MR, see Yagisawa (2010) and Kim (2011).

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Possible worlds, according to MD, are neither concrete nor abstract and do not provide us with a reduction of modality. They are points in modal space at which the universe is a certain way (cf. Yagisawa 2010, 2). What we can positively say about them, though, is that they are real<sup>3</sup> in the same way spatial and temporal indices are real.

Another important feature of MD is that it relies on modal tensing. The crux of this feature is that we take spatial and temporal tenses seriously as spatial and temporal modifiers of verbs and introduce their modal analogue—modal tense. Modal tense, spatial tense and temporal tense match each other in the following way: a possible individual, say a possible talking donkey, exists in a sense that is analogous to the sense in which dinosaurs exist. That is, dinosaurs exist in the sense that they existed at past temporal locations as well as exist where their spatial parts are<sup>4</sup>.

Additionally, MD introduces a modal equivalent to the tense indicator. Provided that the prefix 'mo' stands for 'modal', we say that a possible talking donkey exists in the sense that it *mo*exists: it *mo*exists at nonactual modal locations.<sup>5</sup> MD thus takes it for granted that 'some important modal facts are modal-tensed facts (i.e. they can be designated or quantified over adequately only in modal-tensed terms) and that no important modal facts are modal tenseless facts (i.e. none of them are such that they can be designated or quantified over adequately only in modal-tenseless terms)' (Yagisawa 2010, 3).

MD thus combines ontology and ideology. Modality is taken to be a primitive feature of reality that is canonically expressed through the linguistic feature of modal tense but is to be structured and analysed via the notion of a metaphysical index. And these features gave rise to a dilemma: either MD's explanation of modality in terms of indices as *modal* indices is circular or its costs are qualitatively greater than those incurred by rival theories. This is because it involves two sets of mutually irreducible metaphysical resources: quantification over indices and the idiom of modal tense as metaphysically fundamental. In other words, it is both ontologically and ideologically heavy.<sup>6</sup>

I want to argue, however, that the objection from ontological and ideological heaviness stands on suspicious grounds. To do so, I shall first outline an orthodox ontology/ideology dichotomy which is very often appealed to in metaphysical disputes. I then consider two problems that are connected with this practice: reduction by identification and difference minimization. The conclusion I want to draw out involves three central claims: (i) metaphysical debates that are based on trading ontology for ideology (or vice versa) stand on suspicious grounds; (ii) some debates in modal metaphysic do involve trading

<sup>&</sup>lt;sup>3</sup> I shall put to the side what I mean by 'real' here. For more on this, see Yagisawa (2010).

<sup>&</sup>lt;sup>4</sup> Although it is temporal tense that is mostly discussed, spatial tense is not any different. Consider a sentence 'China is tropical'. As Yagisawa, replying to Hayaki, claims there are a number of different readings of the sentence. Yagisawa prefers a truth relative reading according to which the assertion is true when certain regions of China are considered but untrue when other regions are considered. In terms of spatial tense terminology, the objective reality is such that China is<sub>Guangdongt</sub>tropical and in not<sub>Heilongjiang</sub>tropical. See Yagisawa (2011) and Hayaki (2011) for more details and Yagisawa (2010, 81) and Kim (2011, 295) for the importance of metaphysical tensing.

<sup>&</sup>lt;sup>5</sup> Cf. Yagisawa (2002, 31).

<sup>&</sup>lt;sup>6</sup> See also Ballarin (2011) for a similar, although not identical, objection to MD. She calls the position 'double souled' since it attempts 'to reconcile the best sides of two apparently incompatible positions'. According to Ballarin, 'metaphysical indices are meant to provide a non-reductive, primitive, yet clear and formally well-structured account of modality'. See Ballarin (2011, 277).

ontology for ideology (or vice versa); and (iii) to object against MD on such grounds is illegitimate.

# 2 Ontology vs. Ideology

The distinction between ontology and ideology in contemporary metaphysics is not new. According to Quine (1951), a theory's ontology is about whatever that theory says exists, while ideology is about the ideas expressed by its home language. Put differently, in order to describe reality completely, philosophers need to use some primitive piece of ideology that corresponds to those aspects of reality that do not belong to their ontological inventory (Cf. Fisher 2012). Such ideological commitments usually (i) come in the form of predicates and (ii) may be given through the expressions that are primitive.<sup>7</sup>

For example, suppose there is a possible world that contains exactly nine dimes. In order to respond to the question 'what exists in this world?' philosophers start counting the dimes. Given that this is a question of ontology, and thus existence, our response will depend on what our quantifiers quantify over. This response, however, does not provide a complete description of the world, for in order to provide a complete description, we need an additional device that enables us to express how things in the world exist. We need to introduce predicates into the language, namely the predicate 'is a dime', 'is a coin' and 'is round'. The answers to both the ontological and the ideological questions are consequently sufficient for a complete description of the world.

The list of ideological commitments is as important as the list of ontological commitments because it contributes to an informative and substantial characterisation of the universe. When dealing with the ideology/ontology distinction, it is preferable to consider the two dual norms, neither of which is asked about exclusively. In practice, any increase at the level of ontology should be followed by a decrease at the level of ideology. Alternatively, if one prefers a generous ideology through the introduction of more primitive notions, having fewer ontological commitments usually justifies one's ideological extravagance. This is the orthodox view. There have recently been attempts to challenge this orthodoxy, however. One such attempt focuses on reduction by identification—a strategy to which we now turn.

# **3 Reduction by Identification**

As mentioned above, the technique of cost/benefit comparison is widely accepted in contemporary metaphysics. The core of the analysis is to measure a theory's strength on several dimensions, e.g. consistency, coherence, simplicity, explanatory power, its aesthetic features and, importantly, its ideological and ontological commitments. Again, the goal of ideological parsimony is to minimize the number of kinds of entities. This is accomplished by minimizing the number of primitive predicates in the home language of the theory. The goal of ontological parsimony, on the other hand, is to minimize the number of things in the theory. A theory with a commitment to

<sup>&</sup>lt;sup>7</sup> See also Cowling (2013).

m things, for example, is more ontologically parsimonious than a theory committing to n things, assuming m < n.

It has recently been argued, however, that ontological parsimony is far from being a legitimate theoretical virtue of metaphysical theories. In his 'Properties are Potatoes? An Essay on Ontological Parsimony', Nick Effingham argues that ontological parsimony can be gained quite easily, assuming we accept reduction by identification. This identification takes entities from one category and identifies them with entities from another. Such identifications include the reduction of properties to sets, the reduction of possible worlds to maximal mereological sums of spatiotemporally interrelated individuals, the reduction of numbers to classes and the reduction of events to properties of spacetime regions. Importantly, what we do when we reduce categories by identification is start with more categories and end up with fewer.

Effingham offers an absurd theory of properties to help make his point. According to his 'Spudism', properties are reduced to potatoes: *red* is the potato Effingham ate last night; *blue* is the potato I ate the night before; *charge* is a potato from the eighteenth century that has long rotted away; *pain* is the first potato Sir Francis Drake ever ate, etc. No matter how absurd such identifications might seem, Effingham concludes that Spudism fares better than theories that take properties to be sui generis universals simply because it is more parsimonious. If ontological parsimony belongs among the theoretical virtues, and if reduction by identification leads to such parsimony, absurd theories will often turn out to be preferable to well-established theories.

At first glance, Spudism is an absurd view, and, unsurprisingly, objections against it are not hard to find. The charges range from absurdity, arbitrariness and unsystematicity to ideological extravagance. Effingham concludes, however, that if we accept the tools already accepted by proponents of reduction by identification, Spudism is defensible. To illustrate Effingham's strategy, I will briefly go through the most serious objections and alternative replies on behalf of Spudism.

When it comes to the absurdity challenge, proponents of Spudism have certain resources available to them. Of course, our initial beliefs go against the identification of potatoes with properties. Importantly, however, this is partly due to non-philosophers' ignorance of reduction by identification in the first place. Reduction by identification is a purely theoretical phrase not found in our everyday language. Since common sense language concerns property roles, while theoretical language introduces role players, there is no clash between common sense and Spudism. Moreover, to the extent that we deny the 'property role'/'role filler' distinction, another option is available: we might take the revisionary route. After all, contemporary metaphysics is no stranger to revising, modifying and neglecting certain beliefs in order to provide a systematic, simple and unified account of the phenomena at issue.<sup>8</sup>

The objection from arbitrariness runs as follows. Even if we accept reduction by identification as a guide to ontological parsimony, why pick potatoes over other objects? In other words, the privileging of potatoes when filling the role of property rather than, say, chairs, tables or sui generis abstract entities seems extremely arbitrary. This sort of worry is not unknown in metaphysics. Benacerraf (1965) raised it in the

<sup>&</sup>lt;sup>8</sup> Even in cases where the revisionary approach is of no help, defenders of Spudism can turn to the conciliatory strategy. The conciliatory strategy comes in two versions according to Effingham: the context shift solution and the analogical predication solution. See Effingham (2015, 289–293).

philosophy of mathematics, Lewis (1986a) in modal metaphysics, and Jubien (2001) and King (2013) in philosophy of language, where it is more or less arbitrary to identify numbers, possible worlds and propositions with sets, sui generis mereological atoms and sui generis proposition-like entities, respectively.

Note first that the objection comes in degrees in every case of reduction by identification. Since the reduction reduces the number of categories, we must always decide what the privileged category will be. Spudists, without serious consideration, chose potatoes. Deeper consideration would not eliminate the arbitrariness, however. Of course, we might have independent reasons to prefer realist universals, sets of individuals or particular tropes as occupants of the property role.<sup>9</sup> Whenever a 'new' entity is introduced, however, the decision always involves a degree of arbitrariness. The objection against Spudism apparently proves too much.<sup>10</sup>

A general conclusion is that if arbitrariness is indispensable to reduction by identification, this is more a reason to doubt the methodological principle as a whole than a reason to pursue the least arbitrary proposal. In any case, Spudism as a view about properties was meant to be a reductio of a particular methodological principle. If the principle cannot exclude apparently unsystematic theories, we have quite serious reason to doubt the principle itself, not the theories it legitimises.

Finally, Spudism is thought to be suspicious on ideological grounds. If reduction by identification is arbitrary, then any systematic analysis that reduction by identification offers will involve too much ideology. Usually, the aim of the analysis is to provide necessary and sufficient conditions of a given systematisation and, at the same time, to do it as cheaply as possible, ideologically speaking. An example of an analysis that gives the necessary and sufficient conditions and succeeds in doing so as cheaply as possible runs as follows:

If worlds are certain regions (say, disconnected spacetimes), such that any- thing which is possible takes place at such a region, we can allegedly analyse modal primitives in terms of what goes on at those regions. (Effingham 2015, 294)

As Effingham correctly points out, if a world were any old object (e.g. my foot), the above analysis clearly would not work and would not deserve to enter into ideology comparison with its rivals. The same holds for Spudism and its theory of properties.

In response, a Spudist may admit that the theory is not ideologically beneficial but argue that the lack of benefit does not imply a cost and, as such, does not make the theory unacceptable per se. Effingham compares Spudism to the realist theory of universals, where the instantiation relation is primitive. Since the fact that the instantiation relation is primitive does not make the theory as such unacceptable, why should lack of ideological parsimony make Spudism unacceptable? As absurd as it may appear, it is still ontologically more parsimonious than realism. And we can press the point against reduction by identification even further since 'Spudism is just an example absurd theory and we can serve up another just as easily' (Effingham 2015, 295).

This overview is rather sketchy, of course, and the reader should refer to Effingham's original paper for the full defence. Nonetheless, I hope to have shown that if ontological

<sup>&</sup>lt;sup>9</sup> Note also Lewis's claim that: '[t]he question worth asking is: which entities, if any, among those we should believe in, can occupy which versions of the property role?' (Lewis 1986a, 55).

<sup>&</sup>lt;sup>10</sup> Compare this response to Van Inwagen's response to Lewis's critique of magical ersatzism. Van Inwagen formulates a *tu quoque* argument, according to which the set-membership relation is also magical. See Van Inwagen (1986) for the original argument and Divers's discussion in Divers (2002, 286-292).

heaviness implies the violation of ontological parsimony, and if ontological parsimony is reached by reduction by identification, then pursuing ontological parsimony as a goal is misguided.

Suppose, however, that we are not moved by Effingham's arguments and view ontological parsimony as a crucial principle, I would then offer another response to the heaviness objection, namely the objection that theories that pursue reduction via identification are epistemically indeterminate. This is because ontological parsimony goes hand in hand with ideological parsimony, and theories are usually compared on the basis of the extent to which they balance the two. This balance is reached by trading off ontology for ideology, or vice versa. It has recently been argued, however, that such trading off usually results in epistemic underdetermination. I will turn to this problem in the next section.

# **4 Difference Minimisation**

In 'Composition, Colocation, and Metaontology', Karen Bennett (Bennet 2009) provides an account of how two competitive theories can minimise the differences between them. The starting point is to assume that they both agree about the data to be explained and that any disagreement arises 'only' when we compare them at the level of ontology/ideology. Since the result of this dispute is underdetermination, there is no reason, epistemically speaking, to prefer one theory over the other. As an example, Bennett compares mereological nihilism and mereological anti-nihilism. According to mereological nihilism, there are no composite objects. There are only simples. According to mereological antinihilism, there are composite objects as well as simples of which those composites are constituted. Ostensibly, the latter view has a richer ontology than the former, simply on the basis of the number of entities it involves. On the other side, in order for the mereological nihilist to accord with (Moorean) intuitions that there are tables, books, cars and people, she needs to introduce table-wise, book-wise, car-wise and people-wise predicates, respectively.

In order to sustain agreement concerning the common sense data, both parties attempt to minimise the differences between them. To justify the view that common sense is what (all that) there is, the nihilist minimises the differences between her view and anti-nihilism by introducing x-wise predicates that correspond to the composites the anti-nihilist quantifies over. The anti-nihilist, also hoping to minimise the differences between the two views and to justify the richer ontology, adds that although '[a] whole is an extra item in our ontology', it is so 'only in the minimal sense that it is not identical to any of its proper parts; but it is not distinct from them either, so when we believe in the parts it is no extra burden to believe in the whole' (Lewis 1986b, 34).

As Bennett concludes, in some metaphysical debates, there is no real methodological gain, given the ontological and ideological trade-offs that run back and forth. Since the theories at issue are underdetermined by evidence about the 'philosophical data', the only way to decide between them is to position them on a cost/benefit scale. However, ontological and ideological parsimony play a significant role in determining where a theory will fall on that scale, which in turn results in difference minimisation between a small-ideology/big-ontology theory and a big-ideology/small-ontology theory. In other words, the aim of high-ontologists is to  $downplay^{11}$  the large number of objects they posit, while low-ontologists aim to *upplay* their expressive and explanatory power. Apparently, the low-ontologist is ontologically more parsimonious but pays a price at the level of ideology. Conversely, the high-ontologist pays a price at the level of ontology while remaining ideologically more parsimonious.

#### 5 Intermezzo

Where does this leave us? Recall that the objection discussed in this paper attacks MD on both ontological and ideological grounds. More precisely, it accuses MD of violating ontological and ideological parsimony. A closer look at the methodology, however, reveals two problems affecting (at least some) metaphysical debates. First, according to Effingham's result, pursuing ontological parsimony may have no merit in metaphysics, and at least some theories that rely on it should be considered suspicious. Second, according to Bennett's result, underdetermination by evidence arises in cases where two kinds of theories are compared with each other: small-ideology/big-ontology theories and big-ideology/small-ontology theories.

In the second part of the paper, I will attempt: (a) to show that (at least some) debates in modal metaphysics pursue ontological or ideological parsimony; (b) to show that, given (a), (at least some) debates in modal metaphysics identify categories by reduction and are also subject to difference minimisation; and (c) to establish that, given (a) and (b), MD should not be rejected merely on the basis of ontological and ideological extravagance. Put slightly more formally, my argument runs as follows:

- 1. Some debates in metaphysics pursue ontological and ideological parsimony. (assumption)
- 2. If debates pursue ontological and ideological parsimony, they turn out to be difference minimising. (assumption)
- 3. Difference minimising results in epistemic underdetermination. (Bennett's result)
- 4. Some debates in metaphysics are difference minimising. (MP, 1, 2)
- 5. Some debates in metaphysics are epistemically underdetermined. (3, 4)
- 6. Some debates in modal metaphysics pursue ontological and ideological parsimony. (Assumption)
- 7. Some debates in modal metaphysics are difference minimising. (6, 2)
- 8. Some debates in modal metaphysics are epistemically underdetermined. (7, 3)
- 9. MD does not pursue ontological and ideological parsimony. (Divers)
- 10. MD is not subject to difference minimization. (9, 2)

# 6 Conclusion:

This is a conclusion of the above argument, not a separate section. MD should be preferred to theories that pursue ontological and ideological parsimony and are subject to difference minimisation.

<sup>&</sup>lt;sup>11</sup> Here, I use Bennett's own 'downplay' and 'upplay' terminology.

Premises 1, 2 and 3 have been defended by Effingham and/or Bennett, and thus I will not discuss them further. On the other hand, premises 6 and 7 are crucial to my argument. Although premise 6 is usually taken to be true in the literature on possible worlds, its connection to premise 2 and their mutual consequence, premise 7, are considered problematic. I will therefore discuss them in turn.

#### 7 Modal Realism vs. Magical Ersatzism

Consider two theories of possible worlds: the already mentioned MR and a version of ME, magical ersatzism (hereafter MgE). According to MR, possible worlds are many and varied. For any way the world might be, there is a concrete spatiotemporal system that is that way. MgE is a different story. On its surface, it is a simplistic metaphysical proposal according to which possible worlds are abstract, structureless, simple mereological atoms that represent modality in a non-genuine way. Both MR and MgE analyse modality in terms of possible worlds via (P):

(P) It is possible that P if and only if there is a possible world, w, such that at w, P. In addition, they *reduce* possible worlds to concrete universes and abstract simples accordingly. They therefore fulfill reduction via the identification condition.

The difference between the two lies in ontology and ideology and can be summarised in the following fictitious dialogue:

MR: you make a great mystery, because you tell me nothing at all about the nature of the elements.

MgE: I told you that they are abstract and they are simple. That was not what you wanted to hear. You wanted to be told that they had some sort of complex structure, as if they were linguistic descriptions or pictures. I deny that they have any such structure. Why is my denial any less informative than some positive story about their structure would have been?

MR: you make a second mystery, because you don't tell me what it is for the concrete world to 'select' an element. For, it is a selection of just one alternative out of a range and given that selection depends on what goes on within the concrete world, any binary relation that the concrete world bears to whichever elements it selects is unexplained.

MgE: that's primitive. All theories have their primitives, and 'selects' and 'elements' are mine.

MR: you cannot explain modality, because you took that as primitive also.

MgE: I did<sup>12</sup>. I don't pretend to explain modality, but there are plenty of other purposes for the theory to serve. (Fair enough.) The choice is between primitive modality and **crazy ontology** like yours, and I choose the former.

MR: what's so sane about your ontology? You multiply entities at least as much as I do.

MgE: your ontology flies in the face of common sense, mine doesn't. You require a lot of extra donkeys, and so forth; everybody knows what that means, and nobody

 $<sup>^{12}</sup>$  Interestingly, (P) provides us with the analysis of modality in some sense. Namely, it says what possibility *is*: to be possible is to hold in some possible world. What it does not say, however, is what possibility *there is*, namely what the extent of possibility is. Divers formulate the so-called separatist approach according to which two questions are distinguished: the nature-question of what possibility is, and the extent-question of what possibilities there are (Divers 2013, 189). We can then say that given the separatist approach, MgE is not a complete explanation of modality. If, on the other side, we take the accurate analysis to concern the nature-question only, MgE plays just as well as MR. Many thanks to the anonymous reviewer for pointing that out.

believes it. I require a lot of abstract simples; common sense has no opinion about them one way or the other.

MR: you're taking refuge in your denials. If you'd come clean and say something positive about the nature of your abstract simples, then we'd see what common sense might have to say about them.

MgE: there's nothing positive I could say that would be true.

And Lewis continues:

So far, a deadlock. But I think I can advance my case by asking him to tell me something more about the primitive apparatus of his theory. (Lewis 1986a, 176)

When it comes to MR, a couple of positive features can be extracted from the dialogue. MR includes a *crazy ontology* that flies in the face of common sense, yet it has a straightforward story about what it means for a world to represent a merely possible situation. It also appears to explain modality away, given that it claims to provide a non-modal definition of 'possible world'. When it comes to MgE, on the other hand, a couple of negative features can be extracted from the dialogue. First, we are not told what elements are, except that they are inexpressible, mysterious entities. Second, the relation of selection is not articulated properly, if it is not taken as primitive. Third, modality is not reducible to something non-modal, but is rather taken as primitive as well. Consequently, the disagreement between the two parties has several dimensions. The views disagree on what possible worlds are, what possible worlds there are, what kinds of things possible worlds are, and the theoretical role they play.<sup>13</sup> The theories do share one important element, however: their subject matter. The subject matter of both theories is modal talk and the same modal data.<sup>14</sup>

The fact that mereological nihilism and mereological anti-nihilism agree about what the relevant data is, while they disagree about the ontology/ideology balance, reveals an interesting structural feature of the debate in particular and various metaphysical theories in general. We can say that metaphysical theories consist of the triad <Opinion, Definitions, Metaphysical Base>,<sup>15</sup> where 'Opinion' stands for common sense, pre-theoretical data to be explained, 'Definitions' stands for a network of analytic hypotheses understood as 'specifications of meaning, or sense, or world-invariant truth-conditions', and 'Metaphysical Base' stands for the domain of a theory's ontological commitments. A successful theory will combine a metaphysical base and definitions that capture opinion appropriately.

### 8 MR, MD and the Incredulous Stare

Recall for a moment the debate between the mereological nihilist and the mereological anti-nihilist. The former was charged with denying everyday objects like chairs, tables and cities. The latter, on the other hand, was charged with having an overly inclusive ontology

<sup>&</sup>lt;sup>13</sup> How distinct these questions are is outlined in Cameron (2012) and Divers (2013).

<sup>&</sup>lt;sup>14</sup> The same phenomenon appeared in the constitution talk between mereological nihilism and mereological anti-nihilism. They also share the same subject matter, the common sense data, although their theoretical explanations differ. I am using the neutral notion 'data' instead of the philosophically controversial notion 'intuition', and what I mean by it is strongly entrenched opinions that ought not to be denied by any metaphysical approach. See, for example, Lewis's (1973) claim that '[i]t is not the business of philosophy either to undermine or to justify these pre-existing opinions (Lewis 1973, 99).

<sup>&</sup>lt;sup>15</sup> I borrow this structure from Divers (2013).

since, besides simples, she accepts the existence of ordinary objects composed of simples. To avoid unwelcome consequences, each either downplays the ontology to weaken the objection from ontological extravagance or upplays the explanatory power by including an additional piece of ideology. In particular, in order for the mereological nihilist to square the Metaphysical Base with Opinion, she introduces primitive predicates that provide her with chair-wise, table-wise and city-wise configurations of simples. The anti-nihilist goes in the opposite direction. She claims that the extra objects in her ontology are extra only in a minimal sense. Although they are not identical to any of the composites' proper parts, they are not distinct from them either, full stop.

MR is controversial mostly because of its ontology.<sup>16</sup> In the words of our fictional ersatzist, the modal realist proposes a 'crazy ontology' and thus cruelly violates Opinion concerning what there is. In order for the modal realist to square the Metaphysical Base with Opinion, she must take an additional step. The situation is analogical to that of the antinihilist since both the modal realist and the mereological anti-nihilist need to downplay their extravagant ontologies. Here is one way in which the modal realist might do so.

First, she may declare false a lot of our pre-theoretical opinions about what does and does not exist. In fact, there is uncertainty about what counts as the 'common opinions' with which MR disagrees. Consider, for instance, the following:

(O1)Dragons, talking donkeys and philosophizing cats do not exist.

If this counts as common opinion, then MR, of course, agrees with common sense (Lewis 1986a, §1.1). Consider, however, the following:

(O2)Dragons, talking donkeys and philosophizing cats (unrestrictedly) do not exist.

In this case, MR does not agree with common sense. But what is the difference? There is no difference in Opinion regarding (O1), for Lewis agrees with the spokesman for common sense about actual existence. The difference is on the theoretical level and concerns the internal structure of Opinion. Since the spokesman cannot distinguish between (O1) and (O2), the modal realist's finer grained account of Opinion enables him to preserve the truth of the data at stake: (O1).

To strengthen the point, consider Quine's famous rhetorical query. When arguing against the existence of merely possible individuals, he writes:

Take, for instance, the possible fat man in the doorway; and again, the possible bald man in the doorway. Are they the same possible man, or two possible men? How do we decide? How many possible men are there in that doorway? Are there more possible thin ones than fat ones? How many of them are alike? Or would their being alike make them one? Are not two possible things alike? Is this the same as saying that it is impossible for two things to be alike? Or, finally, is the concept of identity simply inapplicable to unactualized possibles? But what sense can be found in talking of entities which cannot be meaningfully said to be identical with themselves and distinct from one another? (Quine 1963, 4)

Notoriously, Quine does not expect to receive a meaningful answer to his query to the extent that he considers the question 'how many possible fat men are in the (actually vacant) doorway?' unanswerable.<sup>17</sup> The problem, on his view, rests in the indefinite

<sup>&</sup>lt;sup>16</sup> Lewis himself admits that MR does disagree, to an extreme extent, with firm common sense opinion and is therefore met with many incredulous stares.

<sup>&</sup>lt;sup>17</sup> See also Kim (2011, 295-296) for the discussion and comparison of MD and MR's analysis of the case at issue.

specification of merely possible individuals and, a fortiori, the lack of criteria of identity for possibilia. Since the question 'are there dragons?' is ambiguous (because it can be read either as 'are there actually some dragons? (O1)' or 'are there, unrestrictedly speaking, some dragons?' (O2)), the question 'how many possible fat men are in the doorway?' is ambiguous as well. Yagisawa (Yagisawa 2010, 83–84). identifies and further develops at least four different readings of the question, each of which asks for something quite different:

(Q1) How many actual fat men are in the actual doorway?

(Q2) How many possible fat men are in the actual doorway?

(Q3) How many actual fat men are in the (possible) doorway in a possible world w1, in a possible world w3, in a possible world w4...in a possible world wn?

(Q4) How many possible fat men are in the (possible) doorway in a possible world w1, in a possible world w3, in a possible world w4...in a possible world wn?

Assuming that Quine is interested in the actual doorway only, the answer to (Q1) is zero, since there are none. As far as he means merely possible fat men in the actual world or actual fat men in a merely possible doorway—(Q2) or (Q3)—the answer is zero as well, for Lewisian worlds are isolated, and consequently there are no actual fat men in worlds other than the actual world and no non-actual fat men in the actual world. Finally, the answer to (Q4) depends on a particular possible world because different possible worlds contain different numbers of fat men standing in the doorway.<sup>18</sup> Consequently, there are at least four different ways to understand Quine's query; depending on which reading we choose, we get quite different answers.

Moreover, MD as a kind of MR can use an analogous strategy. Recall that modal tensing provides us with a delicate structure of metaphysical space which takes spatial, temporal and modal tense seriously. Given the insufficient specificity of Quine's query, its disambiguation in terms of modal tensing provides us with the yes/no answers to every reading of the question:

(Q1\*) How many possible individuals who are<sub>a</sub> fat men are<sub>a</sub> in the doorway?

(Q2\*) How many possible individuals who are<sub>p</sub> fat men are<sub>a</sub> in the doorway?

(Q3\*) How many possible individuals who are<sub>a</sub> fat men are<sub>p</sub> in the doorway at w1?

(Q4\*) How many possible individuals who  $are_a$  fat men  $are_p$  in the doorway at w2? (Yagisawa 2010, 83-84).

As the above has shown, one way to downplay the ontology is to disambiguate two branches of the incredulous stare and evaluate particular disambiguations. When we do so, MR turns out to be as ontologically committed as ordinary people—provided, of course, that the question concerns 'what there "actually" is'. The question of 'what there unrestrictedly is' is different and receives unpopular answers. The modal realist thus has resources at her disposal when it comes to (at least) partially weakening the incredulous stare objection. What was needed for that move was a disambiguation of the notion of existence into 'actual existence' and 'unrestricted existence'. In fact, the relevant disambiguation was the result of a more finely grained definition of actual existence as a restricted quantification. If I am right, the modal realist's strategy resembles the anti-nihilist's. Again, both aim to capture Opinion, and they do so via

<sup>&</sup>lt;sup>18</sup> Here, I ignore the issues concerning the similarity relations between various doorways in different possible worlds. The thing is that if Quine considers the actual doorway, the only relevant worlds are those worlds that have a counterpart of the actual doorway as their parts. See, for example, Lewis (1968) and Lewis (1986a).

moves that operate inside the <Definitions, Metaphysical Base> pair. The same holds for MR. Analogously, MD has resources to downplay the ontology by introducing a specific kind of ideology. For, whenever MR appeals to the difference between the actual existence and existence simpliciter, MD appeals to the difference between actual tense and mere the mere possibility tense. Moreover, it also introduces the impossibility tense and the modal space-at-large tense which, if properly articulated, provide even more fine-grained analysis of modal discourse.<sup>19</sup>

#### 9 Magical Ersatzism and the Dilemma

Let us now turn to MgE and the challenge from explanatory power.<sup>20</sup> The objection, again, appears explicitly in the fictitious dialogue and targets the negative character of the view: there's nothing positive that I (a magical ersatzist) could say that would be true (about the nature and representation of abstract simples). The objection is usually presented as a dilemma, beginning with the assumption that MgE is understood in terms of 'selection'. Selection is a relation between abstract elements (worlds) and concrete, maximal goings-on. The actual element selects the way things in fact are, and possible elements select the ways things might be (or might have been). The representation can thus be fleshed out by the following biconditional:

An element E represents that so-and-so, or it is the case that so-and-so according to E, iff necessarily, if E is selected, then so-and-so. This is how maximal elements, in particular, represent. The maximal elements are the ersatz worlds. End of theory. (Lewis 1986a, 175)

Lewis's worry concerns the very character of selection itself. Suppose that the relation of selection is internal. By definition, whether a particular world selects a concrete universe depends on both the intrinsic nature of the world and the intrinsic nature of the concrete universe. In other words, in order to grasp the intrinsic nature of the relation, it is necessary to grasp the properties of its relata. Since it is impossible to say something positively informative about the intrinsic nature of the elements, the ersatzist either relies on magic in selecting one of the countless selection relations between a world and the universe or does not elucidate modality in the first place.

Assume, on the other hand, that the selection relation is external. In this case, it does not depend on the intrinsic nature of its relata, yet it must still respect certain modal constraints. For example, if the concrete universe is such that Martin is a philosopher, then an element must render true a proposition that Martin is a philosopher. The same applies to any fact concerning the concrete universe. Generalising the idea:

 $<sup>\</sup>frac{19}{19}$  For more about the application of impossibility tense, see (Author).

<sup>&</sup>lt;sup>20</sup> An anonymous reviewer pointed out to me that MgE is not the only ME's candidate. I agree. For instance, Sententialism, Propositionalism, Property Ersatzism or Combinatorialism aim at such an analysis of modality which avoids rich ontological commitments by paying the cost for ideology. However, what I was interested in is a debate of a special kind, namely trading off ontology and ideology between competitive metaphysical theories. I am quite sure that it could be identified between MD and other sorts of ME as well since, as I have for it, the example represents one token of one type of metaphysical practice.

It seems to be one fact that somewhere within the concrete world, a donkey talks; and an entirely independent fact that the concrete world enters into a certain external relation with this element and not with that. What stops it from going the other way? (Lewis 1986a, 180)

In order to stop it from going the other way, the ersatzist must postulate infinitely many necessary connections between elements and possible goings-on (contra the denial of necessary connections). Since this relation is modal in nature, 'primitive modality is especially repugnant'. This is the dilemma in a nutshell.

# 10 Magical Ersatzism: Upplaying Explanatory Power vs. Downplaying Ideology

How can the magical ersatzist respond? There are options besides attacking the dilemma by showing that it proves too much,<sup>21</sup> begs the question against magical ersatzism<sup>22</sup> or simply fails to provide sufficient reason to reject magical ersatzism.<sup>23</sup> The first is a structuralist approach based partially on the analogy between modal talk and number talk. The crux of mathematical structuralism is the claim that what matters in mathematical discourse is not the internal nature of its objects but how mathematical objects—understood as, say, sets, points, numbers or functions—stand in relation to each other. Focusing on the natural number structure shared by all natural number systems, for instance, gives the structuralist freedom when it comes to choosing a natural number system. By the same token, focusing on the Euclidean space structure gives the structuralist freedom when it comes to choosing a particular Euclidean system, and the debate about function structure does not involve a particular function system.

Analogously, the magical ersatzist can define her possible worlds structurally, without saying a word about the elements of the structure. As Nolan suggests, suppose that E stands for a set of the ersatzist's worlds and S for selection relations. Without saying anything positive about E and S, we can still interpret modal discourse through <E, S>, whatever the elements of E and S are. Where different interpretations of <E, S> give us different results, the claim is truth-valueless, or simply false. And although no single word will have to be said about E and S, further constraints can narrow down the extent of the true claims about the desirable interpretation.

The second option available to the magical ersatzist is to introduce the notion of naturalness. This move is especially effective against Lewis's original objection since the notion of naturalness plays a substantial role in his own system. For him, some properties and relations are more natural and eligible than others. Since the properties and relations carve nature at its joints, allow for objective resemblance between things, are relevant to the causal powers of things, and help to analyse duplication, they deserve to be referents of our predicate expressions more than their less natural or unnatural counterparts.

<sup>&</sup>lt;sup>21</sup> Cf. Van Inwagen (1986).

<sup>&</sup>lt;sup>22</sup> Cf. Denby (2006).

<sup>&</sup>lt;sup>23</sup> Nolan (forthcoming) provides a more detailed identification of Lewis's argument and its three dimensions: intelligibility, epistemology and metaphysics. He then offers responses to each version of the argument.

Granted, the debates on naturalness are metaphysically controversial. However, the magical ersatzist is in a position to defend her view against those who accept the notion, and if the modal realist accepts this piece of ideology, why can't the magical ersatzist too? The response might then run as follows. There are many and various relations between the concrete universe and its elements, but one relation is special in the sense that it actualises a concrete universe in a metaphysically special sense. This selection is natural, while other external relations are not. And, given that naturalness makes for eligibility of reference, the selection relation is referentially adequate, intelligible and explanatorily powerful.

Third, the magical ersatzist might add an extra piece of primitive ideology (without extending her ontology) and allow for a two-place 'makes true' predicate that behaves exactly like the objector described it, without the predicate's referring to any relation whatsoever.<sup>24</sup> In this situation, the magical ersatzist can agree with Lewis's description of the behaviour of internal and external relations. She can even agree that no such relation can play the selection role. Nonetheless, she can continue to insist that an element is selected and is only a concrete universe in a certain way.

As the three above options show, the magical ersatzist has resources available to her for informatively and meaningfully responding to the modal realist's dilemma. Of course, additional moves were called for, namely the endorsement of 'modal structuralism', 'modal naturalness' and 'modal predicativism', respectively. These are not drawbacks per se, however. In the first case, structuralism shed light on mathematical discourse. To deny it a priori in metaphysical discourse thus requires an independent argument not found in the modal realist's critique. In the second case, the notion of naturalness is indispensable to the modal realist's framework. To prohibit it in the magical ersatzist's account would, again, require an independent reason or beg the question. Finally, by introducing a two-place predicate that (a) does not correspond to any piece of ontology, (b) does not correspond to a relation, and (c) behaves like a relation, the ersatzist can accept the premises of the dilemma while denying its conclusion.

While ontologically safer and saner than MR and MD, MgE is forced to upplay its explanatory power via the addition or modification of the Definitions. To do this, however, is to trade off Metaphysical Base for Definitions in a way reminiscent of the structure of the mereological anti-realist's defence. Again, both want to secure Opinion, either through a richer Metaphysical Base and modified Definitions or through a richer list of primitive predicates and a less committed Metaphysical Base.

To sum up, the fictional dialogue between proponents of MR and MgE reveals several problems with the latter's view. The charge hinges on both the nature of the elements and the nature of representation. As with MR and MD, MgE's main objectives are to save Opinion, to keep its ontological commitments to a minimum and to either modify or extend its ideology. The scenario is thus structurally similar to MR's strategy. And this is, I would

<sup>&</sup>lt;sup>24</sup> Again, the ersatzist can point to Lewis's own use of this sort of predicate: '...is a part of...' or '...is a member of...'. See, for instance, Nolan (forthcoming).

argue, sufficient reason to think that MgE, MR and MD are not rivals when it comes to difference minimizing<sup>25</sup>.

# **11 Conclusion**

I began with a sketch of a theory of modality: MD. The theory has been accused of ontological and ideological extravagance. This accusation is based on the orthodox criterion of metaphysical parsimony, namely ontological and ideological parsimony. I have attempted to draw four conclusions: (1) reduction by identification as an example of ontological and ideological parsimony par excellence is problematic; (2) theories that compete on ontological and ideological grounds very often minimise differences, and such minimisation paves the way for epistemic underdetermination; (3) a particular debate between MR, MD and ME is difference minimizing; and (4) even if MD is ontologically and ideologically extravagant, this fact does not speak against the theory. Quite the opposite, it speaks in its favour.

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<sup>&</sup>lt;sup>25</sup> Note, that although it is primarily MD that I tried to rehabilitate from recent objection from ontological and ideological extravagance, MD, as a kind of MR, is one of many theories accused from lacking these theoretical virtues. But if I am right, methodology of metaphysics is far from being settled and should be rebuilt on different grounds.

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