

An Explanatory Idealist Theory of Grounding

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Abstract: How is grounding related to metaphysical explanation? The standard view is that the former somehow “backs”, “undergirds” or “underlies” the latter. This view fits into a general picture of explanation, according to which explanations in general hold in virtue of a certain elite group of “explanatory relations” or “determinative relations” that back them. This paper turns the standard view on its head: grounding doesn’t “back” metaphysical explanation but is in an important sense downstream from it. I call this view “grounding idealism”, since it structurally resembles an analogous view about causation that is known as “causal idealism” and has been endorsed by philosophers like Michael Scriven and Philip Kitcher. I formulate a specific version of grounding idealism, Metaphysical Explanation-First Idealism (MEFI), according to which the semantic value of ‘grounding’ is an abundant, gerrymandered relation settled by the metaphysical explanation facts. Then I offer some theoretical considerations that support MEFI over rival accounts of the relation between grounding and metaphysical explanation. Finally, I address the question of what role is left for grounding to play, if not that of “backing” metaphysical explanations.

1. Introduction

This paper is about the relation between metaphysical explanation and grounding. ‘Metaphysical explanation’ resists analysis in simpler terms, but we can convey its meaning reasonably well via examples: it’s the sort of explanation that is plausibly at issue in sentences like ‘The singleton set of Socrates exists because Socrates exists’, ‘John’s answer was rude in virtue of the fact that it consisted exclusively of obscenities’, and ‘The vase’s fragility is explained by its non-crystalline amorphous solid structure’. ‘Grounding’ is trickier, since it’s used ambiguously in the literature. Some (“unionists”, as they have come to be known after Raven, 2015) use it for metaphysical explanation itself.¹ Others (“separatists”, as Raven calls them) use it for the hypothesized worldly correlate of metaphysical explanation: roughly, the

¹ See Fine, 2001; Dasgupta, 2014; and Litland, 2017.

relation that is to metaphysical explanation what causation is usually taken to be to causal explanation.² It is in this latter sense that I will henceforth use the word ‘grounding’.

A fairly standard view about the relation between grounding and metaphysical explanation is that the former is in some sense prior to the latter: grounding, as it’s commonly put, “backs”, “undergirds” or “underlies” metaphysical explanations. The view fits into a general picture of explanation, according to which explanations hold in virtue of a certain elite group of “explanatory relations” or “determinative relations” that back them. Thus it’s not just metaphysical explanations that are backed by grounding, but scientific explanations (all or at least many of them) are similarly backed by causation, and perhaps yet other explanations are backed by other determinative relations. This approach to explanation is commonly known as ‘explanatory realism’.³ Although I have reservations about this terminology⁴, for this paper’s purposes we can stick with it.

² See Audi, 2012; Schaffer, 2016a and A. Wilson, 2019. Indeed, Wilson (2019) literally calls grounding ‘metaphysical causation’ (the expression is from Sider, 2011).

³ Proponents of explanatory realism include Ruben (1990: Ch. 7) and Kim (1994); for forceful statements in the context of metaphysical explanation, see Audi, 2012 and Schaffer, 2016a.

⁴ The word ‘realism’ implies that views that dispense with “backing” relations are somehow automatically antirealist. On various salient ways of understanding the word ‘realism’, this is just not true. For example, if being a realist about explanation means that what explains what is an objective matter that doesn’t change from subject to subject, then one can be a realist without believing in backing relations. For this reason, elsewhere I preferred to use the name ‘backing model’ instead of ‘explanatory realism’ (Kovacs, 2020a). Note that although proponents of the so-called “ontic conception” of explanation are typically explanatory realists, the ontic conception (understood as the view that explanations are “objective features of the world”, as Craver (2007: 27) puts it) doesn’t by itself entail that these features would need to include “backing relations” and is therefore weaker than explanatory realism in my sense. In recent work, Taylor (forthcoming) seeks to combine the backing model with a denial of explanatory realism. But Taylor adopts a very liberal notion of a backing

This approach can be contrasted with *explanatory idealism*. This is my terminology⁵, but it's inspired by Jaegwon Kim's (1981) more specific distinction between *causal* realism and idealism. On Kim's way of understanding the distinction, causal realists take causation to be a mind-independent relation "out there" in the world, whereas causal idealists conceive of it as something projected onto it by the mind. To keep things simple, in the present paper by 'explanatory idealism' I will simply mean the conjunction of (i) separatism and (ii) the negation of explanatory realism. In other words: the relations that realists describe as "explanatory" or "determinative" exist, but they don't play the role of "backing" or "underlying" explanations. Instead, explanations hold due to (for instance) logical, conceptual, epistemic or psychological relations (for example, A explains B because A somehow increases one's understanding of B). Now, given this characterization of explanatory idealism, there are at least two ways in which the realism/idealism distinction can be seen as a spectrum of views with two polar opposites at the end points. First, one can adopt realism or idealism for only a specific domain. For example, it's possible to be an explanatory idealist about scientific explanation but remain staunchly realist about metaphysical explanation.⁶ Second, one might think that only some but not all explanations within a certain domain require "backing" relations. While such intermediate views are independently interesting, in the present paper I will mainly be concerned with "pure" realist relation, according to which logical, epistemic and conceptual relations can also fit under this category. She isn't a supporter of the backing model in my sense.

⁵ Other philosophers used this expression before me, but not with the same meaning. For example, Khalifa (2013) uses it for the view that understanding that doesn't result from an explanation ought to be assessed relative to the understanding that would result from a good explanation. That's not what I mean by 'explanatory idealism'.

⁶ It seems to me that Bhogal (2020) is best read as defending such a combination of views.

and idealist views within a domain – i.e. views according to which explanations of a certain type always require backing relations, and views according to which they never do.⁷

The purpose of this paper is to defend explanatory idealism in the realm of metaphysical explanation, i.e., “grounding idealism” – a grounding analogue of causal idealism as described above.⁸ Minimally, grounding idealism is committed to the view that there is grounding but it doesn’t “back” metaphysical explanation. However, I will go beyond this minimal thesis and will also argue (analogously to some causal idealists, like Michael Scriven and Philipp Kitcher) that connections of ground can be (in a sense to be specified later) accounted for in terms of these explanations. That is, the standardly accepted order of explication between grounding and metaphysical explanation is reversed: we can account for grounding in terms of metaphysical explanation rather than the other way round. I will call this view Metaphysical Explanation-First Idealism (MEFI).

It should be clear already from this rough-and-ready characterization that if causal idealism is an unpopular view, then MEFI is more or less off the radar of most philosophers who write on the subject. To be sure, views with the express intent of characterizing metaphysical explanation without any reference to grounding or backing relations are not

⁷ Trogon (2018) may be described as an advocate of the intermediate view: on his grounding-mechanical model many metaphysical explanations run via “grounding mechanisms”, which in turn feature determinative relations. However, he doesn’t rule out the possibility of what he calls “bare grounding”, i.e. metaphysical explanations that aren’t instances of grounding mechanisms. Glazier (2017) might be another example, since he argues that some metaphysical explanations involve essence rather than grounding relations. However, I’m inclined to see the role of essential connectedness in these explanations as a kind of backing relation, which would classify Glazier as a pure realist.

⁸ As far as I know, the first one to use the word ‘idealism’ in a grounding-theoretic context is Raven (2009: 253–4).

unheard of.⁹ However, these views are typically put forward as versions of unionism: they aim to give an account of metaphysical explanation that altogether *dispenses* with the need to postulate grounding (understood as something separate from metaphysical explanation). The view I’m putting forward is different. It’s similar to unionist approaches in so far as it presupposes an account of metaphysical explanation that can be given without appeal to a “backing” relation. But in another way it’s similar to separatist views because it isn’t ground-*free*. It does posit a relation of grounding, albeit this relation, as I will explain in the next section, is “abundant”. The view I advocate presupposes a liberal metasemantics on which it’s easy for the word ‘grounding’ to have a semantic value; however, this semantic value’s primary significance isn’t metaphysical but cognitive, as it helps structure much metaphysical theorizing without tracking anything metaphysically fundamental or even highly natural. As Mike Raven aptly put it in personal correspondence, on my view grounding doesn’t “rule” (as Schaffer, 2016b: 144 has it) but merely “serves”.

In the rest of the paper I will give a more precise formulation of MEFI. In section 2, I will first give a kind of template that can be filled in according to one’s preferred view of metaphysical explanation. In section 3, I will offer several arguments for taking this template seriously. Strictly speaking these are arguments against an explanatory realist version of separatism and are consistent with MEFI as well as plain unionism. They turn into arguments for MEFI once we also adduce some reasons to posit grounding that don’t presuppose explanatory realism – a task I hope to accomplish in section 4. In that section, I will lay out my preferred implementation of the template by giving a more detailed account of the relation between grounding and metaphysical explanation. Finally, I will argue that

⁹ See, for example, Dasgupta, 2017; Kovacs, 2017 and 2020a; Miller & Norton, 2017, 2019; Thompson, 2018; and Baron & Norton, 2021.

given this particular version of MEFI, the notion of grounding is instrumentally valuable: it plays a useful role in our cognitive architecture, even if it doesn't have to be mentioned by a metaphysically perspicuous description of reality. I will conclude that MEFI-type views deserve more attention than they have received in the past and should be considered a serious competitor to both unionist and realist separatist views.

Before moving on, I want to make one more preliminary remark. As readers will notice, the arguments I will offer in favor of the MEFI template often have analogues for causal idealism. Some of these arguments have in fact been used in the past to defend causal idealism, while others are less familiar. But either way, one might be suspicious of any argument for MEFI that is an equally good reason to adopt causal idealism. I have two responses to this worry. First, I don't think that causal idealism is a preposterous position. I happen to believe that there are good reasons to adopt it, albeit these reasons are weaker than those in support of grounding idealism. Second, it's false that MEFI and causal idealism stand or fall together. This is because while the arguments for MEFI indeed have causal counterparts, often there are promising strategies to address the latter arguments that don't extend to the grounding-theoretic versions. I will discuss some of these arguments in due course. For now, suffice it to say that the case for MEFI is in better shape than the case for causal idealism.

2. Formulating grounding idealism

Causal idealism is sometimes described as the view that causation is somehow mind-dependent or agent-relative (Bernstein 2018). More specifically, Michael Scriven claims that causation is an "essentially pragmatic" concept (1975: 6) and thinks that it should be analyzed partly in terms of explanation, which is itself an epistemic-pragmatic and interest-

relative notion. Importantly, on Scriven's view the facts about what causes what may vary between different agents no less than (on his view) facts about what explains what do.

Other authors distance themselves from these relativistic implications. For example, Owens (1992: 60–2) identifies causation with causal explanation but doesn't presuppose Scriven's interest-relative conception of the relation. Kitcher (1989), in the context of defending a unificationist account of scientific explanation, contrasts his account with views that assume "that there is a causal structure of the world independent of our efforts to achieve a unified vision of it" (1989: 496), and holds instead that "there is no sense to the notion of causal relevance independent of that of explanatory relevance" (496). Other causal idealists also attempt to carve out a notion of causation that is mind-dependent but at the same time objective, at least in the sense of being constant across various agents and viewpoints. For example, Menzies and Price (1993) develop a view on which causation is a secondary quality, much like color. Their favored implementation of this view is a version of the probability-raising view of causation: for an event, A, to cause another event, B, is for A to be a good basis on which to predict the occurrence of B; and the extent to which A constitutes such a basis is proportional to the extent to which A raises the probability of B.¹⁰ On this view, causation is objective in the same sense the colors are: what causes what is not in the eye of the beholder, and it's perfectly possible to have false beliefs about causation. Nonetheless, causation has an important response-dependent component in so far as it's tied to what an agent should rationally predict will occur on the basis of the fact that something else (the supposed cause) occurs. In his later work, Price (2007) defends a relativistic (or as

¹⁰ Early versions of this view have been defended by Collingwood (1938) and perhaps also by Hume (see Beebe 2007). See also Williamson 2013 and Fernandes 2017.

he calls it, “perspectival”) view, according to which causal claims are to be evaluated relative to the perspectives of entire communities rather than individual agents.¹¹

It would seem natural to construe grounding idealism as an analogue of one of these views, and indeed, some of these options have already been tried out. For example, one could conceive of grounding as an agent-relative and essentially psychological notion (cf. Thompson 2018) or perhaps (similarly to Price and others) soften the agent-relative component by making grounding relative to entire communities rather than individual agents (Miller and Norton, 2017, 2019). However, perhaps somewhat disappointingly, I mention these views only to set them aside: I don’t believe that grounding is either agent-relative or response-dependent. I do hold, however, that the truth-value of ‘ground’-sentences is fixed by what metaphysically explains what. So my view of grounding bears some similarity to Scriven’s about causation: there is a relation of grounding, but it should be understood in terms of metaphysical explanation, rather than the other way round. In the rest of this section, I will spell out this idea in more detail and will also explain why I think it deserves the label ‘idealism’, despite not being an agent-relative or response-dependent view.

It’s useful to begin with Lewis’s (1983) familiar distinction between sparse (natural) and abundant (non-natural) properties and relations. *Abundant* properties and relations are simply the semantic values of our predicates. Thus in the abundant sense of ‘property’ and ‘relation’,

¹¹ See also Popa 2016 for a discussion of what notion of objectivity can be reconciled with causal idealism. Some versions of contrastivism about causation can also be seen as somewhat close to causal idealism. Hitchcock, for example, develops such an account with the explicit intent to “downplay this difference” and argues that “[c]ausal claims [...] can, when uttered in the appropriate context, serve as explanations” (1996: 399). Other views, while not really idealist, contain idealistic elements. Thus Lewis’s (1973) counterfactual account ultimately appeals to similarity relations between possible worlds, where those relations are in part determined by the context.

establishing that a certain property or relation exists is a nearly trivial matter: almost every n -place predicate F that occurs in a true sentence of the form $F(a_1 \dots a_n)$ expresses a property or relation.¹² Whether a predicate corresponds to a *sparse* property or relation, by contrast, is a much more involved matter that can only be settled by substantive investigation. The notion of a sparse property is neutral about the ontology of properties: perhaps sparse properties are universals (Armstrong, 1978); perhaps they are classes of their instances (Lewis 1986a) or of tropes (Campbell, 1990; Ehring, 2011). Either way, properties in the sparse sense “carve at the joints”: their sharing tracks objective similarities and their non-sharing tracks objective dissimilarities in nature; they support counterfactuals and figure in the laws of nature; they are shared by perfect duplicates; and so on.¹³

Given this background, once we assume that there are true ‘because’-sentences of the sort that are usually at issue in the grounding literature, it shouldn’t be controversial *that* there is a relation of grounding; the interesting question is whether it’s a sparse or merely an abundant relation (cf. deRosset, ms: Ch. 3; Kovacs, 2017: 2936–37).¹⁴ One important

¹² The qualifications ‘nearly’ and ‘almost’ are needed because some predicates, if they stood for a property, would give rise to paradoxes. For example there cannot be any property, abundant or otherwise, answering the predicate ‘is a non-self-instantiator’. See, e.g., Oliver 1996.

¹³ These commonly accepted roles are not without problems. For example, Schaffer (2004) argues that there are two clearly distinguishable notions of a sparse property, playing two different subsets of the theoretical roles commonly assigned to sparse properties. Dorr and Hawthorne (2013) are more pessimistic and argue that the naturalness roles often pull in opposite directions, imposing jointly unsatisfiable constraints on the targeted elite group of properties. In the present paper, I cannot address these challenges. Suffice it to say that on my view, grounding is an abundant relation on any reasonable way of precisifying the divide.

¹⁴ For this reason, unlike some contributors to the grounding/explanation literature who prefer to express connections of ground and metaphysical explanation with a sentential connective (Fine, 2001, 2012; Dasgupta,

component of MEFI is that grounding is merely an abundant relation: it has the same metaphysical status as the property of being grue or the relation of being either at least 5 years older or 2 inches shorter than. Moreover, as with many abundant relations, there is a plenitude of relations that only minimally differ from grounding in their extensions. To stick with the analogy I just mentioned, *being either at least 5 years older or 2 inches shorter* is extremely similar in its extension to *being either at least 4.999 years older or 2 inches shorter*, *being either at least 5 years older or 2.0001 inches shorter*, and so on. Likewise, in the vicinity of grounding there is a plethora of barely distinguishable relations: grounding* (has almost the same extension as grounding, except that P grounds PvP but doesn't ground* PvP), grounding** (P doesn't ground $\sim\sim$ P but does ground** it), and so on. As we will see, that grounding is an abundant relation is significant because it allows us to adopt a flexible metasemantics for 'grounding' on which for nearly any conception of grounding, there is a candidate semantic value for 'grounding' that makes the relevant conception true. For the time being I will remain neutral on which one of these candidates is the semantic value of 'grounding' and will rest content with giving the *template* of the kind of view I wish to defend. I will suggest a method for selecting the relation from the plenitude of ground-like relations in section 4.1.

A second component of MEFI is that not only is there a plenitude of ground-like relations, but also none of them is metaphysically distinguished. That is, any relation that comes reasonably close to playing the theoretical roles of grounding is an abundant relation. Some theorists of naturalness believe that natural properties and relations are “reference

2014; Litland, 2015), I won't worry much about presupposing the relations of grounding and metaphysical explanation. In fact, just as the unionism vs. separatism controversy crosscuts the relational vs. connective debate (cf. Kovacs, 2020b: 344 n15), it's also orthogonal to the choice between realist and idealist views.

magnets”, i.e. intrinsically eligible to serve as semantic values.¹⁵ If this is true, then no ground-like relation is a reference magnet; none is intrinsically more eligible to be picked out by the word ‘grounding’ than the others. An intuitive and familiar way to bring this point home is to image an alien community of philosophers who organize much of their theorizing around grounding* rather than grounding. These philosophers don’t necessarily have any false beliefs. After all, it’s not as if they are committed to the falsity of any proposition about grounding that we would accept. Rather, they just never gave any thought to grounding; they are caught up in thinking about grounding* instead (to which, symmetrically, it is our community of philosophers that never gave much thought). Nonetheless, many grounding realists would be inclined to think that such an alien community gets something wrong: they carve up the world using a concept that is less joint-carving than and therefore inferior to the concept that plays similar cognitive roles for us.¹⁶ According to MEFI, this is not so. Grounding is no better and no worse than grounding*, grounding**, or any other item from the long list of ground-like relations. Of course, we find grounding more useful for our theorizing than these other alternatives. But according to MEFI this is just a fact about *us*. It’s similar to our preference to group people according to whether they are above or under 18 (as opposed to 17.9 or 18.1).

The third component of my view is that the semantic value of ‘grounding’ as used in our community of philosophers is determined by facts about metaphysical explanation. More precisely, MEFI says the following. The notion of grounding is explicitly invoked to “back” a kind of explanation. Nothing plays this backing role, but there is an abundant relation

¹⁵ See Sider, 2009. Whether Lewis himself was a magnetist is a matter of controversy; see Schwarz, 2014 and Janssen-Lauret & MacBride, 2020 for arguments against and for, respectively.

¹⁶ See Sider, 2011: Ch. 1 for a similar thought experiment with a different example.

whose extension is settled by the metaphysical explanations for which a suitable “backing” relation was being sought. Exactly *how* it’s settled is a question I will return to later on. For the time being I’m only concerned with articulating a template for would-be MEFI theorists. Once the template is clear, we can start filling in these details.

The non-negotiable core of MEFI consists of the three components listed above; the rest is bells and whistles. While as far as I know MEFI hasn’t previously been proposed, the general shape of the account is familiar enough. Analogous views have been defended about quantificational (Hirsch, 2002), modal (Sider, 2003; 2011: Ch. 12; Cameron, 2009) and even normative concepts (Eklund, 2017: Ch. 2; 2020). However, such analogies immediately raise a question. These accounts are not normally considered antirealist about their subject matter, let alone “idealist”. Sider’s view of modality is a case in point. He begins with a classic version of conventionalism, according to which our linguistic conventions determine which truths are necessary. He argues that this position is confused and proposes an alternative instead: although our conventions don’t determine modal facts, they do determine which candidate out of a large set of equally serviceable “modal-like” notions is expressed by the words ‘metaphysically necessary’. For example, our conventions don’t make it true that necessarily water is H₂O, but they alone are responsible for ‘necessary’ meaning something that is true of the proposition that water is H₂O; an alien community whose neighboring concept *necessary** doesn’t attach to this proposition wouldn’t be making any kind of mistake. This view isn’t “idealist”; it’s better seen as a deflationary realist position. Likewise, on the view I’ve been sketching grounding (abundant or not) is “out there” in the world independently of our psychological attitudes. One may be forgiven for thinking that this falls short of counting as an explanatory idealist position, as was advertised at the beginning of the paper.

I'm happy to plead guilty as charged: my position isn't more idealist about grounding than Sider's account of modality is idealist about modality. While I would prefer to avoid getting dragged into a terminological dispute, I want to say a few words about why I think my view deserves to be called 'idealist'. One reason is that I do think MEFI satisfies an important desideratum of that motivates idealist (in the stronger sense) / psychological / response-dependent views. These views normally assume that certain psychological states are constitutive of explanation, and so (in a very literal sense) grounding, or in the case of causal idealism causation, has an ineliminable psychological aspect. On MEFI, the link in question is conceptual rather than constitutive: explanation, let alone psychological properties like understanding, aren't themselves necessarily constitutive of grounding (although the MEFI template leaves this possibility open). Rather, it's part of the meaning of the *word* 'grounding' that grounds metaphysically explain what they ground. Or in short: metaphysical explanation is part of the nominal essence of grounding, but this doesn't mean that it's also a part of grounding's real essence. I maintain that while this doesn't make MEFI a psychological or response-dependent view (although it's consistent with such views), it satisfies enough of the intuitive motivation for such views to make MEFI deserving of the label 'idealism'. The second reason I insist on calling MEFI an idealist view is that it fits a historically informed way of cutting up logical space. On their most natural and useful interpretations, 'explanatory realism' and 'explanatory idealism' are jointly exhaustive and mutually exclusive positions. The view described above dispenses with the idea that metaphysical explanations are backed by grounding, which means that it's not a realist view. Moreover, although on my view the metaphysical explanation facts don't settle the grounding facts, they do settle *which facts count as the grounding facts*. To my mind this is idealist enough, but as long the view itself is clear, I don't care what we call it.

So far I have been intentionally painting MEFI with large brush strokes. The result is a template for would-be advocates of the view rather than a full-fledged account of grounding. The details of my preferred version of MEFI will have to wait until section 4, since some aspects of it will be easier to understand once we have seen the rationale for the template.

Before moving on, I will note an important constraint on any salient version of MEFI. As I mentioned, the metaphysical explanation facts determine which candidate relation is picked out by the word ‘grounding’. But of course, MEFI theorists must be ready to provide a story about how this determination goes that doesn’t appeal to grounding. There are a number of defensible candidates for this job. I already mentioned Miller and Norton’s psychologicistic account. MEFI doesn’t by itself imply that grounding is in any way a psychological notion, but those already attracted to such treatment are free to plug it into the template. Other ground-free views are often inspired by once-popular accounts of scientific explanation that their advocates take to be more promising when developed as a theory of metaphysical explanation. These include the Deductive-Nomological view, according to which metaphysical explananda are deductively entailed by a non-redundant set of explanantia at least one of which is a metaphysical law (Wilsch, 2015; 2016; cf. Hempel & Oppenheim, 1948), and the Unification View, according to which metaphysical explanation is a matter of deriving a large number of metaphysical explananda from a meager set of explanantia according to various criteria of informativeness and theoretical economy (Kovacs, 2017: sec. 5; 2020; Baron and Norton, 2021; cf. Friedman, 1974; Kitcher, 1981; 1989). Other (hitherto unnoticed) views may also be defensible. For example, the jury is still out on the prospects of a pragmatic account of metaphysical explanation that largely mimics

the features of the analogous view of scientific explanation (van Fraassen, 1980; Achinstein, 1983).¹⁷

In the next section, I will give four arguments for the MEFI template. These arguments will all operate at a fairly high level of abstraction, since they are neutral about the correct account of metaphysical explanation and about how exactly the metaphysical explanation facts determine which ground-like notion gets to be the semantic value of ‘grounding’. I will discuss these issues in section 4; let’s see the arguments first.

3. Arguments for grounding idealism

In this section, I will offer four arguments for the MEFI template I put forth above. More cautiously, these will be arguments to the effect that we should accept *either* MEFI or unionism. The arguments support the MEFI template only if we find some reason to posit grounding other than its supposed role of backing explanations, which is of course, according to the explanatory idealist, a role it doesn’t play. I will provide such independent reasons in section 4. For now, I will simply assume that some relation is the semantic value

¹⁷ Thompson (2019) develops a view on which metaphysical explanations are answers to what-makes-it-the-case-that questions. This sounds similar to pragmatic views of scientific explanation, which often construe explanations as answers to why-questions. However, on Thompson’s account a full answer to a what-makes-it-the-case-that question requires the specification of a relation that “backs” the explanation in question (e.g. parthood, set membership or the determinate-determinable relation). So in the end, her view is not idealist (even in the weak sense in which MEFI is) but a non-standard version of explanatory realism. It’s worth noting that the idealist credentials of Wilsch’s DN model can also be questioned. Wilsch characterizes metaphysical explanation as lawful determination, but his account of metaphysical laws appeals to “construction operations”, which in turn are very similar to “backing” or “underlying” relations.

of ‘grounding’ and will argue that given this assumption, the metaphysical explanation facts fix what this semantic value is.

3.1. The Argument from Theoretical Economy

The first argument is fairly simple: what’s widely recognized as the “master argument” for grounding and metaphysical explanation is a reason to posit only one of these relations. Moreover, when we take a closer look at this argument, it’s more effective as an argument for metaphysical explanation. Therefore, the primary reason that has been used to justify grounding / metaphysical explanation doesn’t directly support positing grounding. This is a reason to not treat grounding as something with a theoretical life of its own. Let’s call this the “Argument from Theoretical Economy”.

Let’s state this argument more carefully. The standard argument offered for grounding/metaphysical explanation in the literature is what elsewhere I called the “Argument from Explanatoriness” (Kovacs, 2017): grounding/metaphysical explanation is indispensable because it plays an explanatory role that more familiar (for example modal) relations cannot play.¹⁸ For example, the claim that the existence of {Socrates} supervenes on or is entailed by the existence of Socrates doesn’t capture the way in which the former fact holds in virtue of the former; we can capture this idea only with the help of grounding-theoretic notions. Likewise for other textbook examples from the literature: we omit some crucial piece of information if we try to state the “in virtue of” connection between facts about wrongness and the failure to maximize utility, or about pain and C-fiber firing, without reference to grounding/metaphysical explanation.

¹⁸ See, e.g., Schaffer, 2009: 364–365, Rosen, 2010: 110–114, Fine, 2012a: 41 and deRosset 2013: 2 for versions of this argument.

Now, not everyone buys the Argument from Explanatoriness. I, for one, offered some reasons to resist it (Kovacs, 2017); so did J. Wilson (2014) and Koslicki (2015).¹⁹ But for a moment, let's put these objections to the side. Observe instead that even if the argument works, at best it gives us reason to posit *either* grounding or metaphysical explanation, but not both. The reason is simply that the argument isn't fine-grained enough to distinguish between the two relations. If grounding captures the relevant kind of asymmetry between the existence of Socrates and of {Socrates}, then so does metaphysical explanation (and vice versa); and likewise for the other cases. In other contexts, this could be seen as an advantage of the argument. After all, in the early years of the grounding literature the Argument from Explanatoriness was commonly put forth with little attention to the distinction between grounding and metaphysical explanation, and Separatists and Unionists appear to find it equally convincing. But once we accept (for instance) that the existence of Socrates grounds (or metaphysically explains) the existence of {Socrates}, it's no longer true that we *also* have to invoke metaphysical explanation (or grounding) to capture the asymmetry between them.

This observation doesn't yet tell us *which* (if either) relation we should posit on the basis of the Argument from Explanatoriness. But it seems to me that the better of the two candidates is metaphysical explanation. The argument is usually formulated by starting with some plausible claims that use the phrases 'in virtue of' or 'because' and then pointing out that the content of these claims cannot be faithfully expressed without ground-theoretic vocabulary. But 'in virtue of' and 'because' are first and foremost explanatory phrases that are neutral between causal, metaphysical and other forms of explanation. The argument owes its plausibility to the fact that the presence of some kind of explanatory connection

¹⁹ Koslicki and Wilson don't formulate the argument explicitly in terms of explanation; more often they speak of which notions are needed or suitable to capture certain cases of "dependence".

between (say) the existence of Socrates and the existence of {Socrates} is obvious enough to count as a pre-theoretical datum. By contrast, that there is an underlying metaphysical relation backing such an explanatory connection doesn't have this status of pre-theoretical obviousness. Thus, the Argument from Explanatoriness is more persuasive when understood as an argument for metaphysical explanation rather than grounding.

The foregoing argument requires a couple of comments. First, it's not a direct argument against grounding realism. Rather, it's an argument to the effect that what's widely perceived as the best reason to posit grounding is in fact a better reason to posit metaphysical explanation, and (once this much is granted) not a good reason to *also* posit grounding. It is therefore natural to wonder whether there's a more targeted argument specifically for grounding. Most arguments for grounding that I know of share the problem with the Argument from Explanatoriness that I just pointed out. For example, it's sometimes argued that grounding is necessary to formulate certain philosophically significant theses, such as physicalism or moral naturalism.²⁰ But even if we grant that some kind of 'in virtue of' claim is indispensable to the formulation of these theses, this doesn't immediately support the introduction of grounding but only of metaphysical explanation.

The most natural candidate for an argument specifically for grounding already presupposes the notion of metaphysical explanation. It goes as follows: (P1) there are metaphysical explanations; (P2) explanations require some kind of worldly relation that

²⁰ In my 2017 I call this the "Argument from Theoretical Utility" (2931–32) and argue that it's downstream from the Argument from Explanatoriness. Proponents of this argument have argued that grounding/metaphysical explanation play an indispensable role in a perspicuous characterization of intrinsicity (Witmer, Butchard & Trogon, 2005; Bader, 2013), legal positivism (Rosen, 2010; Chilovi, 2020), physicalism (Dasgupta 2014; Schaffer 2017b, Rabin forthcoming) and moral naturalism (Maguire, 2015).

“backs” them; (P3) in the case of metaphysical explanation, no relation other than grounding is well suited to play this backing role; (C) therefore, metaphysical explanations are undergirded by grounding. Call this the “Argument from Backing Relations”.²¹ Of course, explanatory idealists reject the second premise of this argument and in recent years have raised a number of objections to it, many of which strike me as forceful.²² The recent appearance of reasonably well developed accounts of metaphysical explanation that break with the Backing Model (see section 1) can also be counted as an indirect reason to doubt P2. However, I won’t discuss this issue in any detail here – not because I think the Argument from Backing Relations has been conclusively refuted but because I have nothing new to add to the debate here. Explanatory idealists are obviously on record for denying P2. So for present purposes I will simply assume that P2 is false. If the Argument from Backing Relations is the only targeted argument for grounding (i.e. the only argument that cuts finely enough to distinguish grounding from metaphysical explanation), then MEFI theorists only need to concern themselves with the general worry that explanatory realism might be true. While this worry is not to be belittled, it’s not specific to MEFI; anyone who rejects explanatory realism needs to address it.

A second question about the Argument from Theoretical Economy is whether it generalizes to causation. Is it the case that an argument to posit causation (unless, perhaps, it explicitly presupposes the Backing Model) can at best justify positing *either* causation or causal explanation, but not both? One might argue that it’s part of the meaning of ‘causal explanation’ that if there are causal explanations there is also causation, whereas it’s not part of the meaning of ‘metaphysical explanation’ that if there are metaphysical explanations,

²¹ For statements of this argument, see Audi, 2012: 687–688 and Schaffer, 2016a: 52–4.

²² See Kovacs, 2017, 2019, Taylor, 2018, forthcoming and Maurin, 2019.

there is grounding.²³ But this strikes me as a bit of a cheap shot, since with little difficulty we can pick out the explanations that are supposedly backed by causation without making reference to causation. For example we could call them ‘diachronic explanations’, meaning that the explanans temporally precedes the explanandum. And it’s certainly not an analytic truth that diachronic explanations are backed by causation.²⁴

However, there is also a more significant disanalogy between the Argument from Theoretical Economy and its causal counterpart: we do have at least some independent use for causation other than its putative role of backing explanations. One promising example of such a use concerns practical rationality: Cartwright (1979) has famously observed that causal concepts are useful in exercising agential control in so far as they help agents distinguish effective strategies from ineffective ones.²⁵ This point doesn’t neatly carry over to causal

²³ Thompson (2019: 101) also makes this point.

²⁴ It has been argued that the diachronic/synchronic distinction doesn’t perfectly align with the causation/grounding distinction (Baron, Miller & Tallant, 2020, A. Wilson, 2020), but this is irrelevant to the present point. The main point is that we can classify explanations without reference to the kind of relation supposedly “backing” them, and under such a classification there won’t be any type of explanation such that trivially, if there are explanations of that type then there is also a certain type of “backing” relation. It’s something of a historical accident that causal explanations are frequently contrasted with metaphysical explanations; a contrast between causal and grounding explanations (where both appear to confer commitment to a backing relation) or between scientific and metaphysical explanation (where neither do) would be more perspicuous.

²⁵ More generally, “agency theories” of causation are based on this fundamental insight: that causal hypotheses help agents choose the course of action that is most likely to lead to a desired outcome. Price and Menzies’s secondary quality account of causation is a classic version of the agency theory, while Woodward’s influential manipulationist view can be seen as an attempt to rid the agency theory of its anthropomorphic aspects (Woodward, 2003: 103–4).

explanation and its kin because the notion of an effective strategy is essentially temporal, whereas explanatory concepts are not. Note that the point is not that all causes temporally precede their effect – whether this is actually so is a matter of controversy in which I don’t wish to take sides. I’m making the weaker and more specific point that planning, decision-making and action are all processes that unfold over time. For this reason, causation *qua* the concept around which effective strategies are organized isn’t easily replaced with the atemporal notion of causal explanation. So the concept of causation does seem to fill certain roles for which no type of explanation would be appropriate.²⁶ Thus, those who are sympathetic to MEFI but remain wary of causal idealism can still accept the Argument from Theoretical Economy for the former.

3.2. The Argument from Non-ground Explanantia

In the previous section I argued that the main argument for positing grounding, the Argument from Explanatoriness, was undercut by the fact that the same argument provided an even better reason to posit metaphysical explanation. My case for this conclusion would be even stronger if we started off with the assumption that the *only* metaphysical explanantia

²⁶ Thompson (2018: 38) makes a similar claim in arguing that while our intuitions about grounding are entirely downstream from our intuitions about metaphysical explanation, we can have causal knowledge independently of our intuitions about causal explanation. She bases this claim on the fact that there are salient analyses of causation, whereas grounding is usually taken to be primitive (and concedes that causal primitivists should indeed be more worried about skeptical arguments against grounding). I find this way of putting a wedge between causation and grounding dubious, not only because no reductive account of causation seems particularly promising today but also because the notions used by the few reductive analyses that have been given (e.g. counterfactual dependence, probability raising) are also subject to skeptical challenges.

of a fact are its grounds.²⁷ For the Argument from Theoretical Economy was meant to show merely that metaphysical explanation and grounding were indistinguishable with respect to one theoretical role (albeit arguably the most important one). But if every metaphysical explanans of a fact is also a ground of that fact, it becomes difficult to see *in principle* what extra work grounding could do that is not already done by metaphysical explanation.

This gives separatist realists a good reason to try to distinguish between grounds and non-ground explanantia in metaphysical explanations. But this immediately gives rise to our next problem. In causal explanations, there is a clear-cut distinction between those explanantia of an explanandum that are causes and those that aren't. (Henceforth I will assume that the latter are laws of nature, and that likewise, non-ground metaphysical explanantia are laws of metaphysics.²⁸) When I say that the distinction is “clear-cut”, I mean two things. First, the distinction is *absolute*: if something plays the role of a law in a causal explanation, it cannot serve the role of a cause in any other causal explanation. Second, the distinction is *sharp*: there are some characteristic and universal differences between laws of

²⁷ Rosen (2017: 283) describes this as the standard approach to grounding. I think it *was* the standard approach in the early years of the grounding literature, but not anymore (see the next note). Perhaps it's even more charitable to say that in the early years of the grounding literature, the question didn't receive much attention.

²⁸ Separatists who assign a special role for metaphysical laws include Kment (2014), Glazier (2015), and Schaffer (2017a, 2017b). There are also some unionists who assign a special role to metaphysical laws: see, e.g., Wilsch, 2015 and Rosen, 2017. That laws play a role in metaphysical explanations is compatible with a number of views about how they do it. Perhaps they are ancillary explanantia that explain an explanandum jointly with that explanandum's grounds. Or perhaps they are “second-level” explanantia: when A is a (full or partial) ground of B, this is in turn explained by a metaphysical law, L, but L doesn't itself occur among B's grounds (Wilson, 2018a: 725; cf. Skow, 2016: 74–81 for a similar account of the role of laws of nature in causal explanations).

nature and causes. By contrast, in the case of metaphysical explanation the distinction between grounds and laws of metaphysics is neither absolute (the same thing that functions as a law in some explanations can serve as a ground in others) nor sharp (there is no clear-cut criterion by which to determine whether an explanans is a law or a ground). This gives us some reason to think that there is no non-arbitrary distinction between grounds and non-ground metaphysical explanantia, which in turn suggests that the selection of grounds from a set of metaphysical explanantia is a conventional and somewhat arbitrary affair.

Here's the argument, more slowly. As a first step, notice that there are significant differences between the causes and the laws cited by a causal explanation, even if there's no consensus on what these differences exactly are. Perhaps causes can do things that laws cannot, such as transferring energy, transmitting a mark, or bearing spatiotemporal relations to the effect. Or perhaps the difference consists in laws' having a propositional form (the operator 'it is a law that' operates on propositions or perhaps facts) in contrast with causes, which are events. Or maybe the difference consists in the scope of causes versus that of laws: laws are general in nature, while causes are particular. Notice, however, that while it's controversial what the difference is between laws and causes, it's not controversial *that* there is a major difference. Moreover, on any way of drawing the line, the difference is absolute and sharp. If something is a law in a causal explanation, it cannot serve as a cause in any causal explanation. Laws of nature just aren't the right kinds of things to cause stuff.

The second step is to notice that the aforementioned observation doesn't hold of the status of metaphysical laws in metaphysical explanations. Spatiotemporal relations cannot make the difference, since these are entirely absent from cases of grounding in the abstract realm. Nor do grounds and metaphysical laws seem to belong to different ontological categories: both grounds and metaphysical explanantia are standardly taken to have

propositional form.^{29, 30} Moreover, laws aren't distinguished from grounds by being more general, either. If there are any formal or quasi-logical principles about grounding, as usually assumed, then at least some grounds have no restriction on how general they can be. This last point also shows that any metaphysical law whatsoever can serve as a ground in some explanations. For take any metaphysical law, *L*. It is widely assumed that any fact grounds any disjunction that has that fact as a disjunct. So for any arbitrary fact *A*, *L* grounds *L*∨*A*. Likewise for other widely accepted principles of the “impure logic of grounding” (Fine 2012): *L* also grounds the existentially quantified fact that some facts are laws, that *L* is true, jointly with *A* the conjunction *A*∧*F*, and so on. In all of these cases, *L* serves as a ground and not as a metaphysical law. This is a crucial difference between metaphysical laws and the laws of nature, since the latter *are* inapt to serve as causes.

²⁹ Grounds and laws also belong to different categories on the view that laws are to metaphysical explanations what inference rules are to valid arguments. On this sort of view, laws don't explain in the sense of serving as explanantia, just like inference rules don't occur as premises in a valid argument (Bader, 2017: 117; Litland, 2017; Schaffer, 2017b). However, I don't find such views plausible. As Rosen (2017) points out, the analogy between inference rules and metaphysical laws is unconvincing. On the face of it, metaphysical laws at least *seem to* have a propositional form; or so suggests the analogy with the laws of nature, which are nothing like inference rules. But even if we somehow convinced ourselves otherwise, it would be easy to find a fact corresponding to any metaphysical law of which we could still legitimately ask why *it* isn't among an explanandum's grounds. So, by banning laws from explanations we are merely pushing the bump around in the carpet.

³⁰ Schaffer (2016a) holds that precisely because grounding (unlike metaphysical explanation) is a worldly backing relation, it's more natural to construe it as category-neutral. However, to have a reliable way of distinguishing between grounds and metaphysical laws, a stronger claim is needed: that no entity that can stand in the metaphysical explanation relation can stand in the grounding relation. I find this claim implausible (nor does Schaffer seem to endorse it).

To my mind, the fact that any law of metaphysics can serve as a ground is suggestive of a far less deep division between laws of metaphysics and grounds than that between laws of nature and causes. Now, this conclusion doesn't strictly speaking *follow* from the claim that the grounding status (or lack thereof) of a metaphysical law is relative to the explanandum that it explains. For even if this is so, there could still be a principled difference between grounds and metaphysical laws that is clear-cut enough to be acceptable to grounding realists. It's just that I cannot think of such a criterion. Until one is found, we can draw either of two possible morals. One is that since the proper model for any distinction between metaphysical laws and grounds is the absolute distinction between causes and the laws of nature, in the absence of an absolute distinction we should simply conclude that there is no distinction to begin with. A second, less radical option is that although there is a distinction between grounds and laws in metaphysical explanations, it is merely conventional. In section 4, I will argue that this is the route that grounding idealists should take. In the meantime we can conclude, at least tentatively, that the selection of grounds from a set of explanantia in metaphysical explanations rests on considerably shakier foundations than the analogous selection of causes from a set of causal explanantia. Assuming that there is some relation or other that serves as the semantic value of 'grounding', this should be considered as a data point in favor of MEFI.

3.3. The Argument from A Priori Directional Harmony

The third argument goes as follows. It is somewhat controversial whether for any A and B, A's partially grounding B is either necessary or sufficient for A's partially metaphysically

explaining B.³¹ The following weaker claim, however, is uncontroversial: it is necessary and a priori that grounding and metaphysical explanation cannot point in the opposite direction. MEFI explains this otherwise puzzling phenomenon, which is a reason to prefer it to other views.

Here's the argument more slowly. It's widely accepted (if often left implicit) that if A is a partial ground of B then B is not a partial metaphysical explanans of A. In fact, it seems not only necessary but also a priori that grounds cannot be metaphysically explained by what they ground. Now, this claim needs to be qualified in a couple of ways. Some grounding theorists reject the asymmetry of grounding, and such theorists might contend that two facts could both ground and metaphysically explain each other.³² If this is indeed a possibility, then of course it could happen that A partially grounds B and B metaphysically explains A. I don't agree that such cases are possible³³, but never mind: they are not at issue here. My claim is restricted to cases of *directed* grounding in which grounding functions as the hierarchical ordering relation that it's usually taken to be. Even if grounding fails to be irreflexive, it remains a priori true that if A partially grounds B *but not vice versa*, then B cannot partially metaphysically explain A.

Here's a second qualification. 'Metaphysical explanation' is used in several ways, and some philosophers have been using it more broadly than me. Specifically, some use it for a

³¹ As we have seen in the previous section many grounding theorists think that there are non-ground explanantia, which casts doubt on the necessity claim. Moreover, some grounding theorists also think that a fact's grounding another fact isn't by itself sufficient for the former's metaphysically explaining the latter because certain epistemic or pragmatic conditions also need to be in place. See, e.g., Audi, 2012: 119–120, deRosset, 2013: 13, and Trogdon, 2018: 1295–6.

³² Against the irreflexivity of grounding see, e.g., Bliss, 2014, Correia, 2014 and Rodriguez-Pereyra, 2015.

³³ See Kovacs, 2018 for my defense of the irreflexivity of grounding.

genus of non-causal explanations that encompasses explanations that answer ‘why’-questions as well as explanations that answer ‘what is’-questions (i.e. questions about what the essence of something consists in).³⁴ Skiles has recently argued that the following is possible: A is part of the metaphysical explanation-‘why’ of B, while B is part of the metaphysical explanation-‘what’ of A. Since grounding backs metaphysical explanation-‘why’ while explanations-‘what’ are undergirded by essences, it’s possible for A to be a partial ground of B and B to be a partial metaphysical explanans of A. My answer is that this sort of case doesn’t threaten the principle I put forth when understood properly. When I write ‘metaphysical explanation’, from the get-go I have been meaning what Skiles means by a metaphysical explanation that answers a ‘why’-question. If the expression ‘metaphysical explanation’ glosses over two different kinds of explanations, perhaps those two kinds of explanation can run in opposite directions. But the thesis I’m interested in is that whatever is the specific type of explanation that grounding is supposed to back, it’s a priori that *that* type of explanation and grounding cannot run in opposite directions. Call this *A Priori Directional Harmony*.

A Priori Directional Harmony is noteworthy because it’s unique to grounding and metaphysical explanation. For example, it’s not a priori that effects cannot be part of a scientific explanation of their causes. Of course, for this point to be non-trivial, ‘scientific explanation’ needs to be understood in the right way: analogously to my use of ‘metaphysical explanation’, I mean by it the most specific type of explanation that is at issue between causes and their effects and which isn’t defined in terms of causation (as ‘causal explanation’ is, for example – see section 3.1). Understood that way, my claim is that it’s not a priori that an effect never bears the same type of partial explanation to its cause that causes typically bear to the effects. For example, Jenkins and Nolan (2008) offer several examples of

³⁴ See also Fine, 2015, Glazier, 2017, and Richardson, forthcoming for this distinction.

“backwards explanation”, and some of these feature causes that are explained by their effects (e.g. “the magnets are moving faster now because they are about to touch each other” – 2008: 104). Importantly, these counterexamples don’t need to be successful for my point to stand; it’s enough if they meet the much lower bar of being coherent. Lipton (2001: 50–5), a proponent of the causal theory of explanation, wonders *why* causes explain their effects rather than the other way round. He eventually bases his answer on a difference-making account of causation (causes make a difference to their effects rather than the other way round), but it doesn’t seem to be an a priori truth about causation that causes make a difference to their effects but effects don’t make a difference to their causes. (Just imagine a world in which causal forks are rare and multiple causes converging to the same effect are very common. Again, the world in question doesn’t even have to be possible. It’s enough for it to be conceivable.³⁵)

I submit that by contrast, it *is* a priori that grounds aren’t metaphysically explained by what they ground. The platitudes commonly used to introduce these notions also support this claim. Grounding, we are often told, is a hierarchical structuring relation that connects more fundamental bits of reality to less fundamental bits. But metaphysical explanation is commonly introduced with the very same words: less fundamental facts metaphysically explain the more fundamental ones. If we take these platitudes seriously, then in order for A

³⁵ Some, for example Owens (1992: 99–101), maintain that a time-reversed version of our world is one in which both the causal and the explanatory chains are running backwards. Recall, however, that he adopts a form of causal idealism: the direction of causation is derivative from that of causal explanation.

to partially ground B and B to metaphysically explain B, they would need to be more fundamental than each other, which is absurd.³⁶ No analogous problem arises for causation.

If A Priori Directional Harmony is indeed true, it stands in need of explanation. But it's hard to think of an explanation that also accounts for the a priori nature of the harmony. It's not enough to say, for example, that grounding backs metaphysical explanation and therefore the two cannot go in opposite directions. This might be true, but I see nothing a priori about the connection between backing and directional harmony. MEFI theorists, however, have a very simple explanation of the phenomenon. It is part of the meaning of 'grounding' that the explanandum of a metaphysical explanation doesn't bear the relation expressed by it to its explanantia. So, A Priori Directional Harmony stems not from some deep metaphysical connection between grounding and metaphysical explanation but simply from the linguistic conventions surrounding the expressions 'grounding' and 'metaphysical explanation'. Thus, MEFI can make good sense of a phenomenon that would otherwise seem puzzling (and, as I argued, arguably unique among supposedly explanatory relations): it accounts for the impossibility, and even incoherence, of grounds that are metaphysically explained by what they ground.

³⁶ Again, there are ways to use the word 'grounding' that would make it seem non-absurd. E.g. Bennett (2017) notes that 'grounding' can be used either as a catch-all term for any "building relation" or as a word for one particular building relation. She also argues that each building relation tracks a specific type of fundamentality. In that sense it could happen that A is more fundamental_{grounding} than B but (say) less fundamental_{functional realization} than B. But this is not the kind of case I have in mind, since (to use Bennett's terminology) all along I have had in mind the specific building relation of grounding and the corresponding ordering of relative fundamentality_{grounding} that it imposes.

3.4. *The Argument from Formal Properties*

As Maurin (2019) has recently observed, philosophers frequently draw inferences about the formal properties of grounding from the formal properties of metaphysical explanation. Typically, both relations are characterized as irreflexive, asymmetric, and transitive. Moreover, that grounding has these features is often justified on the basis that metaphysical explanation has them. It's fairly common practice even among separatists to reason that grounding is an explanatory relation and that *therefore* it has these formal properties.³⁷ This raises the natural question of what justifies the assumption that the formal properties of grounding mirror the formal properties of metaphysical explanation. For simplicity's sake, I will henceforth assume the orthodox view that both relations are strict partial orders, but nothing hangs on this assumption.

While my question is inspired by Maurin's argument, my ambitions are more modest than hers. Maurin argues that since metaphysical explanation (being a notion of explanation) is a partly psychological and/or agent-relative notion while grounding isn't, we cannot simply read the formal properties of grounding off the formal properties of metaphysical explanation. Skiles and Trogon (2019) push back against this argument: they question Maurin's substantive assumptions about metaphysical explanation, and they also point out that two relations may be very different in some important respects and yet serve as reliable guides to some other features of each other (their formal properties possibly being a case in point). I think Skiles and Trogon are right about this. Accordingly, my point is weaker than

³⁷ To be sure, each of those formal principles has been denied by at least some philosophers (against irreflexivity, see the previous section; against transitivity, see Schaffer 2012). But such revisionary views don't deny the alignment between the formal properties of grounding and those of metaphysical explanation; they seem to be revisionary about both in the same way.

Maurin's: I'm not claiming that the formal properties of metaphysical explanation cannot serve as a good basis on which to infer the formal properties of grounding. Still, I think it's fair to ask what justifies this inference. While Skiles and Trogon are correct that Maurin didn't conclusively show that the inference in question is unjustified, they don't offer a positive answer to this question.

What would such an answer look like? A natural proposal on the grounding realist's behalf is that grounding backs metaphysical explanation, and this is why the two relations have the same formal properties. There are two problems with this answer. One is that it doesn't seem fully explanatory. Separatists who speak of 'backing' rarely say what they mean by it, but in my view, the best sense we can make of this talk is that 'backing' is simply a special case of explanation: if A grounds and explains B and grounding backs metaphysical explanation, then A's grounding B explains A's explaining B.³⁸ But just because A's bearing a relation R_1 to B explains why A bears some other relation R_2 to B, it simply doesn't follow that R_2 inherits R_1 's formal properties. Some of the most obvious counterexamples come from the grounding literature itself. A's grounding (or metaphysically explaining) B is often thought to explain why A metaphysically entails B. Yet metaphysical entailment is a monotonic relation while grounding isn't, which means that metaphysical entailment doesn't inherit the formal properties of grounding. So, the mere fact (if it's a fact) that grounding backs metaphysical explanation doesn't by itself explain why the two relations should have the same formal properties.

³⁸ See Rodriguez-Pereyra, 2005: 28, Schnieder, 2010: 326–8, and Kovacs, 2017: 2934 and 2020b: 346–50 for this interpretation of 'backing'-talk. An alternative view, with which my main point would go through just as well, is that backing is a special case of *grounding* (Wirling 2020).

Can we do any better? According to MEFI, we can. There are a multitude of ground-like relations. Some of these have the same formal properties as metaphysical explanation; many others don't. When we form the belief that grounding has the same formal properties as metaphysical explanation, we implicitly restrict our attention to those ground-like relations that do have the same formal properties and ignore all those others that don't. So in this framework, correctly inferring the formal properties of grounding from those of metaphysical explanation is an easy epistemic achievement. It merely reflects our preference to structure our inquiries around a ground-like notion whose formal features match the formal features of metaphysical explanation. But there could have been an alien community of philosophers who (for example) take metaphysical explanation to be non-transitive but structure their inquiries around a ground-like notion, grounding*, such that A grounds* B only if A bears the transitive closure of metaphysical explanation to B. My claim is that there is no interesting sense in which this alien community does a worse job carving up reality than we do, even though their notion of grounding* doesn't line up with metaphysical explanation with respect to its formal properties. That grounding itself does is a fact that says more about our explanatory preferences than about the fundamental metaphysical structure of the world.³⁹

³⁹ One consequence of this diagnosis is that some debates about the formal properties of grounding are merely verbal. Though I expect many to disagree, I think this is a good result that is in some cases also supported by considerations that have nothing to do with the idealism/realism debate. The issue of transitivity is a case in point. Even if A grounds B, B grounds C and A doesn't bear to B the relation that a denier of transitivity (like Schaffer, 2012) means by 'grounding', we can simply define up a new notion ("t-grounding") as the transitive closure of grounding and observe that A still t-grounds B. I fail to see that anything of philosophical interest turns on the question of whether 'grounding' expresses t-grounding or a more restricted non-transitive relation.

As with the earlier arguments, it's natural to wonder whether this reasoning extends to causation and causal explanation. But unlike in the case of grounding, it's not to be taken for granted that these relations have the same formal properties. Moreover, arguably we have means to discover the formal properties of causation that go beyond simply consulting our intuitions about causal explanation. Thus Hitchcock (2001), for instance, argues that causation is not a transitive relation on the basis of structural-equation models. While these models don't give us a reductive account of causation and constructing them requires us to make some starting assumptions about what causes what, they also don't entirely derive from our intuitions about causal explanation. By contrast (despite recent attempts to apply the structural-equation models to grounding, as in Schaffer 2016a and Wilson 2018a), it's hard to see what kind of independent insight we could have into the formal properties of grounding that doesn't rely on our intuitions about the formal properties of metaphysical explanation.

4. The nature and use of grounding

Up to now, my discussion has proceeded at a fairly high level of abstraction. This is because the considerations adduced thus far weren't specific to any particular version of MEFI; they were only meant to support what I called the MEFI template. In this section, I will do two things. First, I will briefly present my preferred version of MEFI: I will state in more detail *how* the metaphysical explanation facts settle which abundant ground-like relation counts as grounding. Second, I will offer an account of the cognitive value of grounding. The significance of this second project is that it helps complete the argument of section 3. In section 3 I cited several reasons to prefer MEFI to grounding realism. But these arguments already assume that there is a relation of grounding distinct from metaphysical explanation,

so by themselves they at best establish the disjunction of unionism and MEFI. To complete the argument I need to say what we gain by having a notion of grounding in the first place, despite the fact that it doesn't play the kind of "backing" role for which it's usually invoked.

4.1. Filling in the template

According to any version of MEFI there are a plenitude of ground-like relations, and it's a contingent fact about us metaphysically inclined inquirers which one gets to be the semantic value of 'grounding'. To choose a specific way of filling in the template is to specify which particular abundant relation this semantic value is and how the metaphysical explanation facts help us select it.

The MEFI template as I presented it thus far is under-described: I merely said that the metaphysical explanation facts determined which ground-like notion was the semantic value of 'grounding', but I didn't say how. Now I can say something more informative. My proposal is that philosophers who distinguish between grounding and metaphysical explanation are guided by an intuition of "locality", or even better, "constituency", when selecting which metaphysical explanantia count as grounds. It's easiest to grasp the criterion I have in mind by starting with an analogous distinction in the realm of scientific explanation. Causes are *local* explanantia in causal explanations because they are spatiotemporally connected to their effects in a way that the laws of nature aren't. For one, laws are generalizations and don't concern any particular concrete entity. For another, a law bears no special connection to any of its instances – it applies to all of them equally. Causes, by contrast, are not like this. They are particular rather than general, and they are spatiotemporally connected to their effects.

Now, stating the locality requirement in spatiotemporal terms would be problematic in the case of metaphysical explanation because as I mentioned in section 3.2, the relata of grounding don't necessarily involve concrete objects at all. But we can still make sense of a broader notion of locality in the context of metaphysical explanation. The idea is that when $A_1 \dots A_n$ ground B , each A_i stands in some kind of constitutive connection to B : for example B is a Boolean construct with A_i as a constituent; or some of the properties or individuals that A_i involves stand in mereological or set-theoretic relations with some of the properties and individuals of an entity involved in B ; etc. Non-ground explanantia (i.e. metaphysical laws) are, by contrast, further removed from the explanandum. For example the law that any object that instantiates a determinate property also instantiates the determinable it is a determinate of "knows nothing" of any particular instance's color. So assuming that (1) the fact that Fred the frog has a particular shade of green and (2) that any object that instantiates a determinate property also instantiates the determinable it is a determinate of jointly explain the fact that Fred is green, only (1) is a ground of this fact, whereas (2) is a non-ground explanans. Importantly, however, there is nothing about the notion of a law that requires laws to be non-local in *every* explanation where they occur. To stay with the same example, the fact that any object that instantiates a determinate property also instantiates a corresponding determinable partially explains the conjunctive fact that Jim is hungry *and* any object that instantiates a determinate property also instantiates a corresponding determinable. Since the law is a conjunct of this fact, it is local in the relevant sense *relative to this fact*.

Note that the general notion of a constitutive connection is somewhat imprecise. It's reasonably clear what's common to a conjunctive fact and a fact about the existence of some singleton set: we can conceive of both conjunction and set formation as involving a sort of

composition. It's also reasonably clear what's common to a conjunctive and a disjunctive fact: they are both the results of Boolean operations on atomic facts. But it's much less clear what's common to set formation and disjunction; disjunctive facts don't contain their disjuncts as constituents in the way conjunctive facts do. The same goes for facts about determinable properties: these properties aren't compounds of their determinates; if anything, they are individuated in terms of subsets rather than supersets of the causal powers of those determinates.⁴⁰ So, the general notion of a constitutive connection, in terms of which I recommended that we distinguish grounds from non-ground explanantia, isn't perfectly clear. This would be a serious vice if my goal were to give a realist account of the distinction. However, that's not what I'm trying to do here. I aim to provide an admittedly vague heuristic of what determines our intuitions when we classify certain explanantia as grounds or as laws of metaphysics. In that role, the somewhat imprecise nature of the criterion is simply a consequence of the arbitrariness that according to grounding idealists generally characterizes our use of the word 'ground'.

I cannot offer much by way of independent argument for the hypothesis that philosophers tend to distinguish grounds from non-ground explanantia in line with the constituency intuition. I think this criterion captures pretty well the use of most separatists, though I'm sure some will protest and might even propose counterexamples. However, I don't think counterexamples have much bite in this context. As long as the criterion accurately describes the linguistic behavior of most separatists, it serves its main purpose. Moreover, MEFI theorists should expect the criterion in question to be somewhat vague. The whole point of MEFI is that grounding isn't a sparse relation but one whose boundaries

⁴⁰ Wilson, 1999; Shoemaker, 2007.

are demarcated by our parochial interests and cognitive needs. As such, it is just to be expected to cut along somewhat arbitrary lines.

4.2. The cognitive value of grounding

In section 3 I gave four arguments against positing grounding as an independent relation with its own theoretical life over and above metaphysical explanation. However, these arguments don't directly support MEFI. In fact, some of them (for example the Argument from Theoretical Economy) might be more straightforwardly seen as motivating Unionism: if a notion of grounding that is distinct from metaphysical explanation isn't indispensable for any theoretical role, we might as well get rid of it. To turn these arguments into arguments for MEFI, we need some reason to keep grounding.

Similarly to unionists, MEFI theorists consider grounding redundant for the sorts of theoretical roles that are usually cited in the grounding/explanation literature. Its supposed explanatory role, as well as its role of connecting less fundamental and more fundamental layers of reality, are already played by metaphysical explanation itself, and its role of backing metaphysical explanation doesn't have to be played by anything, since explanatory realism is false. However, they could add, grounding nonetheless plays a valuable cognitive role in our thinking about the structure of reality. How? Here, the story I will offer will be specific to the particular way of drawing the line between grounds and non-ground metaphysical explanantia that I offered in section 4.1. As I said, grounds are those metaphysical explanantia that are in some important sense "local" relative to the explanandum via links of constitutive involvement in the entities that occur in the explanandum. Moreover, it is often useful to structure inquiry around this special subset of metaphysical explananda. I mention two examples below to demonstrate this claim.

First, consider a recent debate between “grounding monists” and “grounding pluralists”. Roughly, grounding monists believe that there is a unified relation of grounding; by contrast, grounding pluralists think that grounding is something like a disjunction of specific determination (or, as J. Wilson (2014) calls them, “small-g” grounding) relations, such as constitution, functional realization, and the determinate-determinable relation. Over the last few years there has been considerable pushback against Wilson’s view⁴¹, but it’s been overlooked that unionists have an apparently decisive objection to it. According to Unionism, grounding just is metaphysical explanation. But if grounding is metaphysical explanation and the small-g grounding relations are types of grounding, then they ought to be types of metaphysical explanation as well. Yet they evidently aren’t: to say that a “small-g” grounding relation (e.g. the determinate-determinable relation or functional realization) is itself a type of metaphysical explanation is like saying that deterministic causation is a type of causal *explanation*. It would be a kind of category mistake to identify metaphysical explanation with a disjunction of relations that aren’t themselves species of the explanation relation (but at best types of explanation-*backing* relations).

One might feel that something is amiss here: even if the small-g grounding relations aren’t strictly speaking types of explanation, this shouldn’t by itself settle the debate between pluralists and monists. Even those who are persuaded by the arguments of section 3 and agree that the theoretical roles normally invoked to justify grounding in fact justify only metaphysical explanation can agree that there should be a way to make sense of the debate between monists and pluralists that doesn’t render the latter’s view trivially false. This is where MEFI can be of help. Grounding isn’t metaphysical explanation; rather, it’s the relation that in any metaphysical explanation holds between an explanandum and those of its

⁴¹ See, e.g., Cameron, 2016; Schaffer, 2016b; Raven, 2017; and Berker, 2019.

explanantia that are local relative to that explanandum. In many cases, for example those involving metaphysical laws, some of the explanantia aren't local; in others, all may be local. Either way, since grounding thus understood is downstream from but still not identical to metaphysical explanation, no confusion is involved in the hypothesis that grounding is a disjunction of specific determinative relations (which must therefore be local, too, in the aforementioned sense). Thus, grounding idealists are better positioned to make sense of the monism-pluralism debate than unionists.

Here's a second way in which having a notion of grounding separate from metaphysical explanations can be useful. In many contexts, our explanatory interests are limited to local explanantia. Take, for example, debates about how certain philosophically significant theses, such as physicalism or moral naturalism, should be formulated. One might have a view on which any complete metaphysical explanation of the mental facts involves reference to non-local explanantia, for example metaphysical laws. Nevertheless, these laws may be of little interest when the question is whether there is mentality at the fundamental level. Suppose that pain in humans is realized by the firing of C-fibers. On one possible view, the fact that S is in pain is explained by the fact that S's C-fibers are firing; on another, it's explained by the fact that S's C-fibers are firing *and* the metaphysical law that for any x, if x's C-fibers are firing then x is in pain. The two views differ with respect to what explains S's pain, although they don't differ with respect to what grounds it. But intuitively, for philosophers of mind this is a difference without a distinction, since metaphysical laws are irrelevant to the body-mind problem. Similar remarks apply to moral naturalism and other "level-connecting" theses: debates over their formulation are focused on what types of fact give rise, and via which metaphysical relations, to the moral facts; the status of non-local explanantia (i.e. laws) is not what's at issue.

As these examples show, grounding can play a useful role even if it doesn't play the role of "backing" metaphysical explanations that is usually attributed to it. But it should be emphasized that this role is intimately tied to our parochial interests and cognitive architecture. It's not that we need grounding to describe any metaphysical structure that we cannot already describe in terms of metaphysical explanation, or that delineating the space of possible positions about various level-connecting theses in ground-free terms would be less joint-carving. Rather, given that we are already deeply invested in certain intellectual projects (e.g. the physicalist research program and moral naturalism), the concept of grounding is useful for engaging in these projects.

5. Conclusion

In this paper, I defended a version of grounding idealism: Metaphysical Explanation-First Idealism. The minimal core of the view (the MEFI template) is that grounding is just one of a plenitude of abundant ground-like relations, and which of these relations is picked out by the word 'grounding' is settled by the metaphysical explanation facts. I also suggested a particular way to fill in the template: our judgments about grounding track a locality intuition that is roughly analogous to the spatiotemporal locality intuition we have about causes and effects. MEFI is less of a departure from the explanatory realist orthodoxy than more radical forms of grounding idealism (according to which grounding itself is mind-dependent and perhaps even agent-relative) and may therefore be more palatable to those with realist predilections. It also has a number of theoretical advantages: it's more economical than explanatory realist views that assign grounding a "backing" role; it explains why it's necessary and a priori that grounds aren't metaphysically explained by what they ground, as well as why grounding and metaphysical explanation have the same formal properties; moreover, it's

supported by the observation that the distinction between grounds and non-ground metaphysical explanantia (i.e. metaphysical laws) is much less sharp and principled than the analogous distinction between causes and natural laws. Furthermore, as I indicated throughout the paper, while some of the familiar considerations in favor of causal idealism also have analogues that support MEFI, one who accepts the latter view doesn't automatically become committed to the former. While the arguments adduced above are unlikely to persuade everyone to prefer MEFI to the standard separatist view that grounding backs metaphysical explanation, a detailed formulation and defense of the view has benefits even for those who remain skeptical. For even realist separatists can better appreciate their own view when they can compare it to a viable alternative. If nothing else, I hope to have succeeded at giving such an alternative with MEFI.⁴²

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