

Maurin on Grounding and Explanation

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In the classical and contemporary literature on grounding, explanatory language is routinely used to communicate what it is and to motivate substantive principles about how it behaves. For an example of the first use, one might say that what explains why a conference is taking place are certain intentional attitudes and activities of its participants that ground it, where the sense of ‘explains’ operative here is in some sense constitutive rather than causal (Dasgupta 2014: 1). For an example of the second use, one might argue that since a fact cannot explain itself, neither can a fact ground itself (Raven 2013: 193). But what is the exact relationship between grounding and explanation?

Two views have emerged about how to answer this question. Some stipulate that by ‘grounding’ they mean a distinctive form of determination, what we will call *determination_G*, where to determine is, roughly speaking, to *produce* or *bring about* (Audi 2012; Schaffer 2016; and Trogon 2013). In this case to say, for example, that the brittleness of the bowl is grounded by the covalent bonds of the bowl’s constituent atoms is to say that the bonding of the atoms produces or brings about the brittleness of the bowl. Others stipulate

that by ‘grounding’ they mean a distinctive form of explanation, what we will call *explanation_G* (Dasgupta 2017; Litland 2015; and Rosen 2010). In this case, to say that the brittleness of the bowl is grounded by the ionic bonds of the atoms is to say that the bowl is brittle *because* the bonding of the atoms is ionic.

As is customary, let us call the latter view *Unionism* (grounding is explanation_G) and the former view *Separatism* (grounding is determination_G). Compatible with Separatism is the idea that there are conditions under which grounding backs or underwrites explanations, and Unionism is compatible with the view that there are conditions under which grounding itself is backed or underwritten by other relations.

In “Grounding and Explanation: It’s Complicated” (2019), Anna-Sofia Maurin aims to show that, despite appearances, Unionism and Separatism in fact undermine the use that explanatory language has been put to in elucidating grounding, rather than undergird it. In what follows we will critically assess her interesting argument.

As Maurin notes, and as we indicated before, some structure their theorizing about grounding in part around the following two principles:

Explanation: we have reason to think that explanation has thus-and-so features.

Inference: if we have reason to think that explanation has thus-and-so features, we thereby have reason to believe that grounding has those features.

Let *Inheritance* be the conjunction of Explanation and Inference. For the purposes of our discussion, let us table three issues. First, there

is the matter of *which* features acknowledged by Explanation can be legitimately fed through Inference. Presumably not all of them, obviously so if one is a Separatist. Second, there is the matter of *which cases and for what agents* Inference applies. Presumably that question would require an appeal to broader epistemological considerations before it could be fully resolved.¹ Third, there are alternative approaches to theorizing about grounding that do not (or do not obviously) appeal to Inheritance. For instance, Audi's (2012) point of departure concerns features of *determination* (considered as a genus, with determination_G a species) rather than explanation—he claims, for instance, that since determination is non-monotonic, so too is grounding, given Separatism. For another instance, Kovacs (2018) argues that, given either Unionism or Separatism, grounding plays the theoretical roles normally assigned to it only if it has the features that we normally assign to it. Nonetheless, Maurin is surely correct about Inheritance's widespread appeal, so her case against it is of great interest even if some do without it.

In brief, Maurin's central contention is that our theorizing about grounding shouldn't be guided by Inheritance—regardless of whether one endorses Unionism or Separatism. Her argument in a nutshell is this:

1. Either Unionism or Separatism is true.
2. If Unionism is true, then explanation in the relevant sense (explanation_G) isn't epistemically constrained.
3. If explanation in the relevant sense isn't epistemically constrained, then Explanation is implausible.

¹ We do, however, later address related issues in considering different ways in which grounding and explanation might be epistemically constrained.

4. If Separatism is true, then, while explanation in the relevant sense is epistemically constrained, grounding in the relevant sense (determination_G) isn't.
5. If explanation in the relevant sense is epistemically constrained, while grounding in the relevant sense isn't, Inference is implausible.
6. Hence, Inheritance is implausible.

The argument only explicitly undermines the *second* of the two uses that explanatory language has been put to in elucidating grounding that we canvassed at the start. But the *first* use seems to be threatened as well. Consider Dasgupta's attempt to communicate what grounding is, mentioned above. Presumably, implicit appeal is made to Inheritance here as well: Explanation is appealed to when it is said that the relation that the conference's taking place stands to certain facts about its participants is a relation of explanation_G, and Inference is appealed to when one then infers that this is also a case of grounding. But if Maurin's argument is sound, using Inheritance to glean information about grounding's non-structural features seems no better off than using Inheritance to glean information about its structural features.

Let us grant (1) in Maurin's argument. And clearly, the argument is logically valid. So in the remainder of this paper, we will critically assess Maurin's defense of (2)–(5).

Start with (2)—if Unionism is true, then explanation in the relevant sense (explanation_G) isn't epistemically constrained. The rationale of this premise seems to be this. Suppose that Unionism is true. If so, then explanation_G and grounding are one and the same. But that would seem to imply that explanation_G is not epistemically constrained. For if explanation_G were epistemically constrained, then grounding would be too—and that would appear to make it an

at least partially non-objective matter which facts are grounded by which, and this is ruled out by the “inflated” notion of grounding at issue in Maurin’s discussion. Here grounding is understood to be “an objective and mind-independently obtaining hyperintensional and non-monotonic strict partial ordering relation” (p. 1574).

In reply, note that there are at least two ways in which grounding may be said to be epistemically constrained. First, say that a relation, *R*, is *strongly* epistemically constrained just in case whether a certain *R*-relationship holds on a particular occasion is constrained by what actual subjects know or don’t know, their cognitive capacities, and so forth on that particular occasion. Maurin seems to have this type of epistemic constraint in mind when, for example, she writes that explanation “is a function of the needs, knowledge, and expectations of those to whom the explanation is offered” (p. 1580). In this case, some facts ground another fact only if particular subjects are epistemically related to this collection of facts in the appropriate way.

Second, say that relation, *R*, is *weakly* epistemically constrained just in case whether a certain *R*-relationship holds is constrained by general epistemic facts (roughly, epistemic facts that concern hypothetical, idealized agents). For example, you might think that some facts ground another fact only if questions about why the latter should obtain given that the former obtain lack substantive content for any individual fully informed about the natures of the entities these facts involve (Trogdon 2013). Or you might think that some facts ground another only if there are conditions under which the right sorts of subjects are in a position to understand in the right way why it is that the grounded fact obtains given that its grounds obtain. Maurin seems to have something closer to this type of epistemic constraint in mind when she speaks of how explanation must bear on “the understanding of its (potential) receiver,” implying that it need not be an actual one (p. 1580).

Suppose it is granted that grounding being epistemically constrained in the first, stronger way is incompatible with grounding being objective.² Nonetheless, grounding being epistemically constrained in the second, weaker way is compatible with its objectivity. So if grounding is weakly yet not strongly epistemically constrained, then it seems that the rationale for (2) is off the mark.

Maurin might respond to our criticism of (2) by claiming that it is not only a *necessary condition* on explanation in general—and thus explanation_G in particular—that certain epistemic constraints be met; it is also *part of the essential nature* of explanation itself that this be so. On some views, this would be enough for explanation_G to be less-than-fully objective (cf. Jenkins 2005). But if unionism is true, grounding just *is* explanation_G; thus it would appear to follow that grounding would be essentially constrained by epistemic factors, and thus less-than-fully objective too.

We have two replies to this type of response. The first appeals to the distinction between what is part of the nature of a plurality of things vs. what is part of the nature of any individual amongst this plurality. As an example, although it is plausible to think that it is essential to Socrates and Plato *taken together* that they be distinct, it is implausible to think that it is essential to either Socrates or Plato *alone* that they be distinct, given that it is implausible to think that there are any essential truths about the one that concern the other (cf. Fine 1994: 54).

With this distinction in tow, one might respond as follows. It is *not* part of the nature of explanation *alone* that, say, the right sorts

² Generally speaking, though, it is not. Let $[p]$ be the fact that Kelly knows that $2+2=4$, and let $[q]$ be the fact that Alex knows that $5+7=12$. Now, $[p]$ and $[q]$ together ground $[p \ \& \ q]$. Yet surely one can hold that this grounding relationship is fully objective, even if its holding requires the obtaining of certain facts about what particular subjects know.

of subjects must be in a position to understand in the right way why the explanandum obtains given that the explanans obtains. Rather, this is an essential truth about explanation and understanding *taken together*. We see no reason why one cannot make the second claim without making the first. But if so, that alone is no threat to explanation, and thus grounding, being fully objective. After all, it is also an essential truth about understanding taken together with whatever fully objective phenomenon one chooses—say, photosynthesis—that they are distinct. But the fact that understanding figures into an essential truth about understanding and photosynthesis is obviously no reason for believing that photosynthesis is less-than-fully objective. Similarly, we say, in the case at hand.

Our second response instead appeals to the thought that the broadly Aristotelian notion of essence at issue here is itself a notion of explanation: what is part of the nature of something in some sense helps to explain what it is to be that very thing (cf. Fine 2015). Suppose that thought is correct. Then even if it is conceded that explanation_G is essentially linked to certain epistemic factors, it does not follow that grounding is too, *even if* grounding just is explanation_G. The reason is that explanatory language is generally agreed to be the sort that generates opaque contexts, since whether an explanation statement is true is sensitive to the way in which it represents the explanans and explanandum (cf. Ruben 1990: 219). Yet the view under consideration is precisely that the expression “... is essentially linked to such-and-such epistemic factors” is sensitive to the sorts of factors that render explanatory contexts opaque in general. Hence, if the “...” position in this expression is opaque, one cannot validly infer that grounding is essentially linked to such-and-such epistemic factors even if explanation_G is and Unionism is true. To do so would be to invalidly apply Leibniz’s Law within an opaque context.

Let us now turn to (3)—if explanation in the relevant sense isn't epistemically constrained, then Explanation is implausible. (To say that Explanation in this context is implausible is to say that any interesting instance of Explanation, e.g. explanation is irreflexive, is unmotivated.) According to Maurin, explanation in the ordinary sense is epistemically constrained. Maurin writes, "...when we let the properties of explanation guide us in our characterization of grounding, our [judgements] arguably derive from intuitions formed based on our encounters with 'normal' explanation," where normal explanation is epistemically constrained (p. 1581). So the thought is that when we say that we have reason to think that explanation has thus-and-so features (i.e. when we say that Explanation is true), we're appealing to the ordinary sense of explanation, a notion that we have a good grip on. By contrast, any conception of explanation according to which it isn't epistemically constrained is obscure. Here Maurin agrees with Thompson, who claims that when we strip away the epistemic features of explanation, we "lose our grasp" of what explanation is (2016: 397).

In reply, it is true that, given Unionism, the objectivity of grounding ensures that explanation in the relevant sense isn't constrained by what particular subjects already know or don't know, their cognitive capacities, and so on. But, given our discussion above, explanation in the relevant sense being tied to general epistemic facts is compatible with explanation being objective.

Now, perhaps Maurin thinks that if there is nothing more to explanation in the relevant sense being epistemically constrained than it being tied to general epistemic facts like those described above, then the relevant notion of explanation, unlike the ordinary notion, is obscure. In that case we don't really know what features explanation in the relevant sense has—Explanation is implausible.

We're willing to grant for the sake of argument that the conception of explanation at issue here might not capture the ordinary notion of explanation. This is compatible, however, with this conception of explanation figuring in ordinary thinking. And, even if it doesn't, we don't find the notion obscure. Compare: while what is *conceivable* is arguably epistemically constrained, a conception of conceivability that understands this dimension of conceivability solely in terms of general epistemic facts (e.g. ideal rational reflection not detecting contradictions) isn't obscure (Chalmers 2002). The moral: once we get clear on what Unionism rules out with respect to the potential epistemic dimension of explanation and what it doesn't, for all we have been told Explanation is in good standing.

It's worth noting that in considering Strevens' (2008, ch. 3) discussion of the connection between explanation and understanding, Maurin briefly considers an approach to explanation that resembles in certain ways the view that explanation is weakly epistemically constrained (i.e. explanatory relationships are tied to general epistemic facts). Maurin goes on to claim that, given Separatism, explanation so understood is sufficiently different from grounding so as to undermine Inference. We will critically assess this claim below. But note that in the present context this claim is neither here nor there, as we are considering Unionism and the idea that grounding is identical to a form of weakly epistemically constrained explanation.

Let us next turn to (4)—if Separatism is true, then, while explanation in the relevant sense is epistemically constrained, grounding in the relevant sense (determination_G) isn't. We have already considered Maurin's rationale for the claim that grounding isn't epistemically constrained—it's having this feature is incompatible with the "inflated" conception of grounding according to which grounding is objective. And moreover, Maurin notes that, while it's possible for

the Separatist to say that explanation in the relevant sense isn't epistemically constrained, the package of views consisting of the inflated notion of grounding combined with an epistemically unconstrained notion of explanation is a "raw deal," and it is "...unclear why one would want to hold this view" (p. 1578).

At this juncture, what was said above with regard to (2) applies to (4) as well. We have already seen that the inflated notion of grounding is compatible with grounding being only weakly epistemically constrained, i.e. only by general epistemic facts. And we have also already seen that we can maintain that explanation is weakly epistemically constrained without it being strongly constrained, i.e. by what particular subjects know or don't know, their cognitive capacities, and so on.

We would like, however, to focus here on a different idea. We think that there are viable approaches to explanation according to which explanation isn't epistemically constrained, even in the sense of being tied to general epistemic facts. One such approach combines a version of the so-called ontic view of explanation with a more complex view of *good* explanation: while epistemic matters aren't relevant to what makes something an explanation, they are relevant to what makes something a *good* explanation. More specifically, the view we have in mind is this: while explanations must satisfy certain ontic constraints—roughly, they need to represent the right stuff in the world—good explanations must satisfy certain ontic *and* epistemic constraints—roughly, they need to represent the right stuff in the world in the right way. Compatible with this proposal is the idea that one of these constraints is more fundamental than the other regarding what it takes to be good explanation—one might think,

for example, that the epistemic constraint is met only if the ontic constraint is met but not vice versa.³

Let us finally turn to (5)—if explanation in the relevant sense is epistemically constrained while grounding in the relevant sense isn't, Inference is implausible. (To say that Inference is implausible in this context is to say that the sort of inferences at issue with Inference, e.g. since explanation is irreflexive, so too is grounding, are unlicensed.) What is the rationale behind this claim? Maurin writes:

... as part of what it is to *be* an explanation is to be this mind-dependent and epistemic thing, why think that explanation having the properties it does, justifies our thinking that those are the properties had by worldly and mind-independent grounding? No good reason comes to mind. (pp. 1578–9, emphasis in original).

Maurin's rationale seems to be that if grounding is fully objective, yet explanation_G is not, then it is implausible to infer that grounding has certain features given that explanation_G has certain features.

We have two replies, the first of which is to reiterate again what we said before. If explanation_G is merely *weakly* epistemically constrained—and no reason has been provided for believing it to be otherwise—then explanation_G may well be fully objective. And if that is so, then there is no obvious reason why one cannot be justified in inferring that a fully objective relation of grounding has certain features given the fact that explanation_G does.

Our second reply is to challenge Maurin's contention that it is implausible to infer that a fully objective phenomenon has certain

³ See Illari (2013) for a defense of the claim that good mechanistic explanations in particular must satisfy both ontic and epistemic constraints, as well as discussion of the priority issue. And see Krämer & Roski (2017) for discussion of good explanation that appeal to grounding, which they understand as having an ontic constraint that concerns difference-making in particular.

features from the fact that some less-than-fully objective phenomenon does. Suppose that Naomi is having an experience as of a cube (however that is spelt out: something looks like a cube in Naomi's environment, Naomi is being appeared to cube-ly, etc.). The existence and nature of this experience (i.e. that Naomi is having this experience and what it's like for her to have it) is, of course, at least a partially mind-dependent matter. Yet it seems that having this experience gives Naomi at least some reason to believe something in her environment is cubical. (Which is compatible with that reason being *defeasible*, and with her belief being *false*.) Yet whether there is something cubical in Naomi's environment is presumably a fully mind-independent matter. Hence, assuming that a general skepticism about perceptual experience can be set aside, we see no immediate reason to accept Maurin's general prohibition against making inductive inferences from features of less-than-fully objective phenomena to features of fully objective phenomena.

Let's wrap up. Maurin has argued that regardless of what one thinks about the relationships between grounding and explanation, one can learn little if anything about the features of the former by appealing to the latter. We have replied by attempting to clarify the ways in which grounding and explanation are related to various other notions of perennial metaphysical interest, chief among them the notions of objectivity and essence. We tentatively side with the status quo on the theoretical usefulness of Inheritance.

We expect that Maurin's paper will play an important role in shaping future work in this area (we know that it will in our own case). The paper, like her other contributions to metaphysics, is insightful, written with verve and humor, and rewarding to engage with.

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