



Grounding Pluralism: Why and How

Kevin Richardson¹

Received: 5 February 2018 / Accepted: 19 November 2018 / Published online: 30 November 2018
© Springer Nature B.V. 2018

Abstract

Grounding pluralism is the view that there are multiple kinds of grounding. In this essay, I motivate and defend an explanation-theoretic view of grounding pluralism. Specifically, I argue that there are two kinds of grounding: why-grounding—which tells us why things are the case—and how-grounding—which tells us how things are the case.

1 Introduction

There are many ways to express metaphysical dependence. Here are a few.

- Tables are *reducible to* atoms arranged table-wise.
- It's true that people exist or unicorns exist *because* it's true that people exist.
- Mental facts *metaphysically depend on* physical facts.
- The ball is colored *in virtue of* being red.

It's become popular to think these claims correspond to a kind of dependence called *metaphysical grounding*.

As a linguistic fact, grounding is *said* in many ways. But is grounding itself One or Many? If you think grounding is One, you're a *monist*; you think there is a single kind of grounding.¹ If you think grounding is Many, you're a *pluralist*; you believe there are multiple kinds of grounding.²

Monism is the well-known orthodox view. Pluralism is the less-known heretical alternative. Pluralists are driven to heresy by the following consideration: a

¹ For monism, see Rosen (2010), Schaffer (2009), Audi (2012), Leuenberger (2014), Skiles (2015) and Raven (2013).

² For pluralism, see Wilson (2014), Koslicki (2015), Fine (2012), Cameron (2015), Bennett (2017), Griffith (2014) and Rettler (2017).

✉ Kevin Richardson
kevinrichardsonphd@gmail.com

¹ Department of Philosophy and Religious Studies, NC State University, 101 Lampe Drive, 340 Withers Hall, Campus Box 8103, Raleigh, NC 27695-8103, USA

monolithic grounding relation is too coarse-grained to be explanatory; the fact that P grounds Q doesn't, by itself, isolate a specific form of metaphysical dependence. For this reason, we need a more fine-grained account of grounding, one that acknowledges the varieties of grounding.

In this paper, I propose a novel theory of grounding pluralism. First, I motivate grounding pluralism by considering a puzzle where our intuitions about grounding pull in two opposite directions (Sect. 2). Second, I give an initial solution to the puzzle, one that posits two kinds of grounding: *why-grounding*—which tells us why things are the case—and *how-grounding*—which tells us how things are the case (Sect. 3). Third, I consider what the varieties of grounding have in common: metaphysical explanation (Sect. 4). Fourth, I characterize the two kinds of grounding (Sects. 5 and 6). Lastly, I explain how the two kinds of grounding relate to one another (Sect. 7).

2 Motivating Grounding Pluralism

Metaphysicians use grounding to make sense of metaphysical dependence claims. They adopt monism because they think these claims can be understood in terms of one basic kind of grounding. We will have reason to be pluralists, then, if we can show that at least two kinds of grounding are needed to make sense of grounding claims. In this section, I will present cases that push us in the direction of pluralism.

Consider Tye the metaphysician. Tye wants to give an account of the moral facts. (I say “facts” here, but you could speak of moral truths or properties. At the moment, I want to be relatively neutral about grounding and its relata.) On his view, moral facts are metaphysically dependent on the practical perspective of a community; he describes himself as a social constructivist about the moral domain.³

In light of this, it seems fair to describe Tye as thinking that the moral facts are partially grounded in social facts.⁴ Grounding makes sense of metaphysical dependence, and Tye is making a dependence claim about moral and social facts.

Here is how we represent his grounding claim. Let *Moral* and *Social* be the set or plurality of moral facts and social facts, respectively. Read $\phi < / < \psi$ as: ϕ is fully/partially grounded in ψ . We get the following:

SOCIAL-TO-MORAL: *Moral* < *Social*

For independent reasons, Tye thinks that who we are, socially, metaphysically depends on who we are, biologically. He thinks that our social perspective partially depends on our biological constitution. It seems like Tye thinks that the social facts are grounded in the biological facts. We can represent this view as follows:

BIOLOGICAL-TO-SOCIAL: *Social* < *Biological*

³ For a survey on constructivism in metaethics, see Street (2010).

⁴ You could interpret Tye as making claims of full ground, but the resulting scenario will be more controversial than necessary, for the current argument.

So Tye thinks (a) the biological facts ground the social facts, and (b) the social facts ground the moral facts. But does he think that the biological facts ground the social facts?

BIOLOGICAL-TO-MORAL: *Moral* < *Biological*

Suppose the answer is yes. This view doesn't seem to capture Tye's metaethical views. Tye is a *social* constructivist. The moral facts are a consequence of our social organization, not our biological constitution. Tye wants to pin responsibility for moral facts on the social, not biological, aspect of human life.

To reinforce this point, we can imagine another theorist, Megan, who also thinks that the biological facts ground the social facts and that the social facts ground the moral facts. Unlike Tye, however, Megan sees herself as a biological naturalist about morality.

For Megan, our biological natures determine the content of morality by determining certain social facts, but the social facts are just how they do it. The social facts are a way station, a minor stop on the journey to the moral facts. The biological facts are primary.

Intuitively, Tye and Megan have different views. One thinks the social determines the moral; the other thinks the biological determines the moral. If we think Tye is committed to the view that the biological facts ground the moral facts, we cannot make sense of the difference in explanatory commitment between Tye and Megan. (In that case, they would have all the same grounding claims in common.)

Should we say that Tye denies that the biological facts ground the moral facts? No. It's not as if Tye thinks that the social facts float free of the biological facts. Quite the opposite: the social depends on the biological.

But if Tye thinks the social facts depend on the biological facts, and he also thinks the moral facts depend on the social facts, then he seems committed to thinking that the moral facts depend on the biological facts.

The biological facts do not run out power after grounding the social facts; the influence of the biological carries through to the moral. The biological facts are relatively low-level (or fundamental), so we should expect them to be the prime movers, not the social facts.

On the one hand, it looks like Tye thinks the biological facts do not ground the social facts. On the other hand, it looks like Tye thinks the biological facts do ground the social facts. This is puzzling.

The source of puzzlement isn't fundamentally about moral constructivism. We could substitute legal, aesthetic, or other arguably conventional facts for the moral facts and come up with a similar puzzle. It's unclear that the biological facts ground such facts. At the same time, it's implausible that these facts are ungrounded.

The puzzle also doesn't stem from Tye, specifically, or the idea that he has inconsistent commitments. A similar puzzle emerges in the debate over whether grounding is transitive, where transitivity is the following principle.

TRANSITIVITY: If ϕ partially grounds ψ , and ψ partially grounds χ , then ϕ partially grounds χ .

TRANSITIVITY is a widely accepted thesis.⁵ Nonetheless, there are several putative counterexamples to this principle.⁶

Schaffer (2012) provides the most well-known of such examples. He asks us to imagine a sphere O with a maximally determinate shape S , where O has a small dent D in it. Then the following grounding claim seems plausible.

DENT-TO-SHAPE: [O has shape S] < [O has dent D]

Read this as: the fact that O has shape S is partially grounded in the fact that O has a dent D .

DENT-TO-SHAPE is plausible because the dent in the sphere is partially responsible for its shape. The following is also plausible.

SHAPE-TO-SPHERE: [O is nearly spherical] < [O has shape S]

SHAPE-TO-SPHERE is plausible because the shape of O contributes to its being nearly spherical.

If TRANSITIVITY holds, then so does the following.

DENT-TO-SPHERE: [O is nearly spherical] < [O has dent D]

Intuitively, DENT-TO-SPHERE is implausible. The near-sphericity of O doesn't need the dent; even stronger: the near-sphericity of O exists *in spite* of the dent, not because of it. The dent doesn't make a metaphysical contribution to the near-sphericity of O .

So it seems that DENT-TO-SHAPE and SHAPE-TO-SPHERE are true, but DENT-TO-SPHERE is false. If this is so, we have a counterexample to TRANSITIVITY.

However, some philosophers have resisted this conclusion. They note that the dent *does* contribute to the near-sphericity of O ; namely, it tells us the determinate way in which O is nearly-spherical. If O is grounded in the way it's nearly-spherical, and the dent is part of that way, it's plausible that the dent grounds the near-sphericity of O .

Philosophers give other putative counterexamples to transitivity in the literature. My case can be seen as an instance of this genre. Supposing SOCIAL-TO-MORAL and BIOLOGICAL-TO-SOCIAL are true, is BIOLOGICAL-TO-MORAL thereby true? If yes, transitivity is preserved. If not, transitivity fails. In every case, there is a sense in which p appears to ground, and at the same time not ground, q . This is puzzling.

My case differs from the usual examples in two ways.

First, the puzzle directly concerns the *intelligibility* of a set of grounding claims. Tye and Megan may be wrong about what grounds what, but their grounding claims seem intelligible. But if they are, what could they possibly have in mind?

Second, although transitivity is relevant to the Tye case, the rhetoric of "counterexample" tilts the discussion in a specific direction. By presenting these examples as counterexamples, we build in the assumption that we are referring to a single kind of grounding.

⁵ See Fine (2001), Rosen (2010), Schaffer (2009), Audi (2012) and deRosset (2013).

⁶ See Fine (2012), Schaffer (2012), Rodriguez-Pereyra (2015), Tahko (2013) and Schnieder (2006).

I want to consider another hypothesis. Maybe we do not enter the discussion with the same basic kind of grounding in mind. Maybe there are multiple kinds of grounding and we mistakenly think they are in competition with one another. Let us take the plurality of grounding as a working hypothesis.

Upon further investigation, you might conclude that there cannot be multiple kinds, or that one kind is more fundamental than the other. Still, the hypothesis is at least worth considering.

3 An Initial Proposal

One proposal is to posit two different kinds of grounding, where those kinds of grounding correspond to kinds of grounding explanation. Specifically, Litland (2013) proposes that there are cases where think (a) that grounds explain *why* something is the case, and (b) that grounds explain *how* something is the case. We get confused in cases where one kind of explanation occurs independently of the other.

Call *why-grounding* the grounding relation that supports why-explanation. Call *how-grounding* the relation that supports how-explanation. Let subscripts *w*, *h*, and *h+w* indicate why-grounding, how-grounding, and the coincidence of why- and how-grounding. With this in mind, we can now represent the different grounding claims in light of the different kinds of explanation.

Consider the dented sphere. The dent does not explain why the object is nearly-spherical, but we still cite the dent because it explains how the object is nearly-spherical. We could represent the case as follows.

- DENT-TO-SHAPE': $[O \text{ has shape } S] <_{h+w} [O \text{ has dent } D]$
- SHAPE-TO-SPHERE': $[O \text{ is nearly spherical}] <_{h+w} [O \text{ has shape } S]$
- DENT-TO-SPHERE': $[O \text{ is nearly spherical}] <_h [O \text{ has dent } D]$

For the sake of argument, we can assume that DENT-TO-SHAPE' and SHAPE-TO-SPHERE' are both why- and how-grounds. Nonetheless, *O*'s being nearly-spherical is only how-grounded by its having a dent.

When we consider the Tye case, we have to represent two different sets of grounding claims. From Tye's perspective, things look like this.

- SOCIAL-TO-MORAL^T: $Moral <_{h+w} Social$
- BIOLOGICAL-TO-SOCIAL^T: $Social <_{h+w} Biological$
- BIOLOGICAL-TO-MORAL^T: $Moral <_h Biological$

By Tye's lights, the biological facts explain how and why the social facts obtain, and the social facts explain how and why the moral facts obtain. But the biological facts explain only how the moral facts obtain.

Megan makes a different set of claims.

- SOCIAL-TO-MORAL^M: $Moral <_h Social$
- BIOLOGICAL-TO-SOCIAL^M: $Social <_{h+w} Biological$
- BIOLOGICAL-TO-MORAL^M: $Moral <_{h+w} Biological$

For Megan, the social facts only explain how the moral facts obtain. The biological facts truly explain why the moral facts are what they are.

The general idea is that we can *resolve* (in the case of transitivity puzzles) or *make intelligible* (in the case of Tye and Megan) our apparently conflicting grounding intuitions. We do so by distinguishing between two different kinds of grounding explanation: how-explanation and why-explanation.

This proposal is promising, though it is incomplete as it stands. This is not a criticism of Litland, as he was interested specifically in the transitivity of grounding, not grounding pluralism. However, for the view to be adequate *qua* theory of grounding pluralism, several questions need to be answered.

First: what is grounding explanation? And why should we think there are two different kinds of *grounding* as opposed to merely thinking there are two different kinds of grounding *explanation*?

Second: are there further characterizations of the two kinds of grounding? Currently, we must rely solely on intuitions about how- and why-explanation. But what strikes one person as a how-explanation may strike another person as a why-explanation, or vice versa. It would be ideal to have a *definition*—a set of necessary and sufficient conditions—for the two notions.

Third: what is the relationship between the two kinds of grounding? And are there more? Once we open the door to multiple kinds of grounding, we have to get a grip on how many there are and their connections to one another.

In the following sections, I will answer these questions. In doing so, I will fill in the details of a novel theory of grounding pluralism.

4 Metaphysical Explanation

Most grounding theorists agree that grounding provides metaphysical explanations. If ϕ grounds ψ , ϕ metaphysically explains ψ .⁷ However, they disagree about two crucial things: (a) the nature of the connection between grounding and metaphysical explanation, and (b) the nature of metaphysical explanation.

Concerning the connection between grounding and metaphysical explanation: it is customary to distinguish between *separatists* and *unionists*.⁸

Unionists identify grounding with metaphysical explanation.⁹ On this view, grounding is constitutively tied to metaphysical explanation. Insofar as there are grounding relations, they are derivative upon their connection to metaphysical explanations.

Separatists believe that grounding is distinct from metaphysical explanation. Rather, grounding relations back, or support, metaphysical explanations.¹⁰

⁷ Fine (2001), Rosen (2010), Schaffer (2009) and Audi (2012).

⁸ Raven (2015).

⁹ Naomi (2016), Thompson (2018), Miller and Norton (2017), Litland (2013) and Dasgupta (2017).

¹⁰ For separatists, see: Audi (2012), Schaffer (2012, 2016), Trogdon (2013) and Maurin (2018). Kovacs (2017) isn't clearly a separatist but he is a critic of unionism.

The view sketched in the previous section assumes that the varieties of grounding correspond to varieties of metaphysical explanation. This is a natural conclusion to draw if you are a unionist. If there are different kinds of explanation, there must be different kinds of grounding.

However, if you are a separatist, it is controversial whether the varieties of metaphysical explanation should correspond to varieties of grounding. You may think the existence of different kinds of metaphysical explanation fail to have any implications for grounding relations themselves.¹¹

I will assume that unionism is correct, for two reasons. First, to give a concrete theory of grounding pluralism, I must make some substantive assumptions about grounding, and this is one of them. Second, it is impossible to provide a full-fledged defense of unionism and present a novel theory of grounding pluralism, at once.

The motivation behind unionism is that metaphysical explanations are the best guide to grounding. Not only are they the best guide to grounding, but the core features of grounding are only intelligible in light of its connection with metaphysical explanation.

Even if I assume unionism is true, I still have to say something about metaphysical explanation. There is no specific thing that philosophers mean by it. So any theory that relies on the notion—like the current one—must clarify its content.

To define metaphysical explanation, I start by considering the notion of an explanation *simpliciter*. Here is a simple view: an explanation to be an answer to a question.¹² Someone asks: why did the vase break? The short answer is: because Jack dropped it. The long answer is: the vase broke because Jack dropped it. This long answer is what I call *an explanation*.

An explanation is an explanatory truth, where an explanatory truth is a truth that serves as the correct answer to a question. These explanations may or may not be mind-independent or non-pragmatic. However, they must be *true* explanations. I will not speak of false/bad/good explanations. And although I will continue to speak of facts being grounded, I will assume that facts are true propositions.

Grounding explanations are answers to metaphysical questions. I take the notion of a metaphysical question as primitive. To give a circular characterization: metaphysical questions concern metaphysical making-the-case, metaphysical in-virtue-of, and metaphysical definition.

Different kinds of questions give rise to different kinds of explanations. Accordingly, different kinds of *metaphysical* questions give rise to different kinds of metaphysical explanations. At least some of these kinds of metaphysical explanations correspond to how- and why-grounding. (There may be—in fact, I think there are—other kinds of metaphysical explanation. But this paper is only concerned with these two.)

¹¹ For critiques of the general view that grounding should correspond to metaphysical explanation, see Kovacs (2017) and Maurin (2018). For an account where there are different kinds of grounding explanation but only one kind of grounding, see Krämer and Roski (2017).

¹² Bromberger (1993).

I have clarified the relation between grounding and metaphysical explanation, as well as the nature of metaphysical explanation. This is important for the purposes of explicating my pluralist theory. Along the way, I have made the controversial assumption that grounding *just is* metaphysical explanation. For the separatists who worry that this paper promises nothing for them: hold on. In Sect. 7, I consider the role that non-epistemic dependence relations could play in my theory.

Before moving on to clarify the specific varieties of grounding, I should note that I have already implicitly given an account of what the varieties of grounding have in common. How-grounding and why-grounding are species of metaphysical explanation. The varieties of grounding, then, are individuated by the varieties of metaphysical explanation.

5 How-Grounding

How-grounding is grounding as how-explanation. To illuminate this notion, I will start by pumping your intuitions using examples and later I will provide a definition of the notion.

Here are a few representative examples of how-grounding.

DISJUNCTIONS: [People exist or unicorns exist] $<_h$ [People exist]

DETERMINATES: [The ball is colored] $<_h$ [The ball is red]

VOTING: [You voted] $<_h$ [You raised your hand]

In taking the aforementioned examples as representative, I am not saying that they are all definitely cases of how-grounding. Rather, the purpose of these examples is to give plausible instances of how-grounding *claims*. Even if you disagree with these dependence claims, they should at least be intelligible to you.

Each example is a case of how-explanation, but what is how-explanation? It is useful to think of a how-explanation as an answer to a how-question. How is it true that people or unicorns exist? By its being true that people exist. How is the ball colored? By being red. How did you vote? By raising your hand.

In each case, one asks, “How is it that ψ is the case?” Someone answers: “By ϕ ’s being the case.” Of course, there are many kinds of how-questions (and consequently, how-explanations). It’s implausible that every how-question is a question about grounding. We need to determine what kind of how-question corresponds to how-grounding.

The two most relevant types of how-explanations are causal and constitutive. Searle (2001, pp. 51–52) writes: “If I fire the gun by means of pulling the trigger, the relationship is causal. Pulling the trigger causes the gun to fire. If I vote by way of raising my arm, the relation is constitutive. In that context raising my arm constitutes voting...In that context the bodily movement constituted or counted as the action in question.”

Raising my arm does not merely cause me to vote; raising my arm *counts as* or *constitutes* voting. This is a case of how-grounding. Searle, a philosopher, makes this point, but this distinction has also been independently drawn by linguists.

Linguists have observed that some verbal predicates set abstract criteria that are satisfied by more specific conditions.¹³ Here is an example. Suppose Jones is hunting in a place where hunting is illegal. You could ask: how did Jones break the law? The answer: by hunting. It's not that John's hunting *caused* the law to be broken. Rather, Jones' hunting *counted* (or *qualified*) as a breaking of the law.

Hunting is a determinate way of counting as breaking the law, just as raising one's hand is a determinate way of counting as voting. In contrast, pulling the trigger of a gun isn't a way of counting as firing a gun, it's simply a way of firing a gun.

In linguistics, the constitutive how-question is generally discussed in the context of intentional action, but the current suggestion is that it can be extended to other cases. Disjunction is the obvious case. If p is the actual way that p or q is the case, then p explains how p or q is the case. So you can have constitutive how-explanations in the absence of intentional action.

I have contrasted constitutive how-explanation with causal how-explanation, but a more extensive typology might look like this.

- MANNER: How did he defuse the bomb? Very carefully.
- MEANS: How did she get to Atlanta? By plane.
- METHOD: How did Jones butter the toast? With a knife.
- CAUSAL: How did she break the vase? By dropping it.
- CONSTITUTIVE: How did he vote? By raising his hand.

Linguists disagree about the exact classification of the various how-claims, but they all agree that language users know how to make distinctions between various types of how-claims.¹⁴

We may not understand the basis for the various distinctions, but we certainly have a grasp of them. Consequently, we know how to pick out how-grounding claims—which are constitutive how-explanations—even though it's likely that we can't explain precisely how we pick them out.

However, it would be dangerous to rely too much on our intuitions about how-explanations. You might have different or weaker intuitions. We need an additional route to understanding how-grounding. Luckily, there is one.

We can define how-grounding by relying on the concept of a way for a proposition to be true.¹⁵ Notice that, for each how-claim in the previous examples, there is a corresponding way-claim. Using a plane is a way to get to Atlanta. Using a knife to butter toast is a way of buttering toast. Dropping a vase is a way of breaking it. There appears to be an important connection between *hows* and *ways*.

¹³ Kearns (2003), Sæbø (2008, 2015).

¹⁴ See Jaworski (2009) and Sæbø (2015) for discussion.

¹⁵ My language of *ways of being true* is not an endorsement of alethic pluralism—the view that there are multiple properties of truth. I only need the assumption that a proposition can be true in virtue of different entities.

If we interpret ways as truthmakers, there is a straightforward way to derive the notion of how-grounding. Here, I pull directly from the playbook of truthmaker semantics.¹⁶

If ways are truthmakers, then they can be events, facts, tropes, properties, or <insert your favored conception of truthmakers here>. Whatever they are, they explain the truth of propositions. The relevant kind of explanation involved is metaphysical explanation.

Ways stand in mereological relations with one another. If we fuse the ways that P and Q are true, we get a way that $(P \wedge Q)$ is true. In that case, the ways that P and Q are part of the way that $(P \wedge Q)$ is true.

Let the *subject matter* of a proposition be the fusion of the (possible or impossible) ways for that proposition to be true. The subject matter of a proposition is what the proposition is intuitively about. For example, the subject matter of the proposition <It is snowing outside> is the fusion of ways for it to be true that it is snowing outside.

Now we can define how-grounding in terms of the relationship between subject matters of propositions.

HOW-GROUND: ϕ (partially) how-grounds ψ iff the subject matter of ϕ is a proper part of the subject matter of ψ .

What how-grounds what is determined by whether some subject matters are parts of others. In the determinable–determinate case, the fusion of ways for the ball to be colored clearly includes the ball’s being red, so the fact that the ball is red how-grounds the fact it is colored. The sum of ways for one to vote includes you raising your hand, so the fact that you raised your hand how-grounds the fact that you voted.

I have relied mainly on an informal definition of subject matters and truthmaking, but Fine (2017b) gives a formal definition of these notions. He also proves that the resulting mereological relation is formally equivalent to a logical notion of grounding.

This is fortunate. How-grounding turns out to be a familiar notion. Partial how-grounding has the formal properties—most obviously, asymmetry, irreflexivity, and transitivity—asccribed to Fine’s relation of strict partial grounding. My version of grounding pluralism does not reinvent the wheel to make sense of grounding. Rather, it gives an explanation-theoretic gloss on existing machinery.

It is important to note that the definition of how-grounding fundamentally relies on the notion of metaphysical explanation. Subject matters are defined in terms of ways, and ways are metaphysical explanations of truths. Again, the varieties of grounding are united under a common notion—metaphysical explanation.

Let us take stock. I have characterized how-grounding in two ways: first, with respect to the properties of how-explanation; second, with respect to the notion of ways a proposition could be true. Further illumination will be gained by considering the comparing how-grounding and its sibling, why-grounding.

¹⁶ For truthmaker theories of content, see: Yablo (2014) and Fine (2017a, b). The account I sketch is a simplified version of Fine (2017a, b)’s account of truthmaker content.

6 Why-Grounding

Here are a few representative examples of why-grounding. (Again, the view is that they are reasonable, not necessarily true.)

LAWS: [It is a law that all F s are G s] $<_w$ [There is a necessitation relation between F -ness and G -ness]¹⁷

UTILITY: [It's right that Tye keeps his promises] $<_w$ [Keeping one's promises maximizes happiness]

FUNCTIONALISM: [P is a pain state] $<_w$ [P produces the perception that one's body is injured]

Just as how-explanations are answers to how-questions, why-explanations are answers to why-questions. Why is it a law that all F s are G s? Because there is a necessitation relation between the universals F and G . Why is it right that Tye keeps his promises? The fact that keeping his promises maximizes happiness. Why is P a pain state? Because it produces the perception that one's body is injured.

Though some of these claims sound reasonable, others may sound awkward. Specifically, it sounds odd to say, "Why is P a pain state?" It sounds better to ask, "What makes P a pain state?" But in the latter case, we drop the *why*, and so we cannot use *whys* as a guide to the relevant kind of grounding.

The root of the issue, I think, is that the relevant kind of why-explanation is contrastive.¹⁸ The question is: why is ψ rather than $\neg\psi$ the case? Or: why is ψ rather than χ the case?

To understand this concretely, let us walk through a few cases.

Dented Sphere. The existence of the dent, rather than its non-existence, does not explain why O is nearly-spherical, rather than not. But the existence of the dent, rather than its non-existence, does explain why O has the determinate shape that it has, rather than it having some other shape. And the existence of the determinate shape of O , rather than its non-existence, explains why O is nearly spherical, rather than not.

Tye. Tye believes that the social facts, as opposed to other facts, explains why the actual moral facts hold, rather than others. He also believes the biological facts, rather than other facts, explain why the moral facts hold. But he does not believe that the biological facts, rather than others, explain why the actual moral facts hold (rather than others).

Megan. Like Tye, Megan believes the biological facts, rather than others, explain why the actual moral facts hold. However, she doesn't believe the social facts, rather than other facts, explain why the moral facts hold. And unlike Tye, she does believe that the biological facts, rather than others, explain why the actual moral facts hold (rather than others).

There are two important features of these descriptions. First, why-explanation takes a contrast in two places: the grounds and the grounded. So ϕ rather ϕ^*

¹⁷ See Armstrong (1983) for this view.

¹⁸ See Schaffer (2012, 2016) for accounts of the contrastivity of grounding.

explains why ψ rather than ψ^* . Second, the nature of the contrasts vary. Sometimes the contrasts are simply negations. At other times, they seem to be an unspecified set of alternative facts.

But how do we understand the contrastivity of why-explanation, here? We encounter two big questions.

First, is why-grounding itself is contrastive, or is there merely a contrastive constraint on why-grounding? In the first case, why-grounding is a ternary or quaternary relation; instead of taking two relata, why-grounding takes three or four.¹⁹ In the second case, why-grounding is a binary relation that only holds if, for instance, ϕ rather than $\neg\phi$ explains why ψ rather than $\neg\psi$, is the case.

Since the contrasts change between the dent and Tye and Megan cases, it seems like why-grounding is inherently contrastive. In the dented sphere case, we contrast the dent with its absence. But in the Tye and Megan cases, we do not contrast the moral facts to their absence; we contrast the moral facts with other moral facts. A binary why-grounding relation would only allow for a single contrastive condition, but if why-grounding itself is contrastive, then it can take different contrasts.

The second question is: can the contrastivity of why-grounding be analyzed or is it primitive? Schaffer (2012) and Wilson (2018) both take the contrastivity of (what I call) why-grounding to be primitive. This means that they offer no non-circular (or reductive) account of what it is for ϕ rather ϕ^* to why-ground ψ rather than ψ^* . In contrast, Krämer and Roski (2017) and Makin (2017) try to account for the intuitions of contrastivity—by appealing to difference-making and rigidity, respectively—without taking contrastivity as primitive. They reduce the contrastivity of why-grounding to more basic distinctions.

The answer to this question is more complicated. I think the contrastive language can be analyzed in the sense that we can give necessary and sufficient conditions for their content. Specifically, the following view seems right, to me.

WHY-GROUNDING: ϕ rather than ϕ^* (partially) why-grounds ψ rather than ψ^* iff the following conditions jointly obtain.

- MINIMAL: ϕ partially metaphysically explains ψ
- TOP: If $\neg\psi$ were the case, then ϕ would not partially metaphysically explain ψ^*
- BOTTOM: If $\neg\phi$ were the case, then ϕ^* would not partially metaphysically explain ψ

I will explain each sub-condition, then I will use the entire condition to explain a few cases.

MINIMAL tells us that ϕ must metaphysically explain ψ . Again, we are relying on an antecedent notion of metaphysical explanation. This same condition is present (if only implicitly) in our analysis of how-grounding.

¹⁹ Schaffer (2012, 2016) takes this approach.

TOP intuitively captures the idea that the grounds explains actual the grounded (ψ) as opposed to something else (ψ^*). In the dented sphere case, ψ^* corresponds to the possibility that O is not nearly-spherical. The presence of the dent explains, in the nearest possible world where O is not nearly-spherical, the fact that O is nearly-spherical. So TOP is violated, given those contrasts.

BOTTOM intuitively captures the idea that the actual grounds, as opposed to some other grounds, explain what is grounded. In the dented sphere case, ϕ^* corresponds to the absence of the dent. In a nearby possible world where there is no dent, the absence of the dent explains the nearly-sphericity of O . And if this so, then BOTTOM is violated.

When focusing exclusively on the dented sphere case and cases like them, the contrasts seem to concern the negation or absence of certain entities. But in the cases I describe (among other cases), different contrasts are needed.

For example, Tye is not contrasting the biological facts with their absence. He is contrasting the actual biological facts with other possible biological facts. Let B be the biological facts in his actual world and B^* be a set of nearby possible biological facts that are distinct from B . He might think the differences in the world resulting from B^* make no impact on the constitution of the moral facts. So Tye's thought may be: B rather than B^* does not explain why the actual moral facts, rather than others, hold. BOTTOM is violated.

Megan, on the other hand, may think there are important differences if we shift the grounds from B to B^* . B^* might metaphysically explain a different set of moral facts. And if this is true, it follows that the moral facts are sensitive to B . BOTTOM is satisfied.

The advantage of the current proposal is that it has the flexibility to account for a wide range of cases. Existing analyses are focused on dent-like cases, where the contrasts seem to point toward absences. However, in the cases I describe, the relevant contrasts are not always absences (or negative facts). Perhaps existing theories can be modified to accommodate the flexibility of contrasts, but I leave this as an exercise for the proponents of such theories.

Of course, the flexibility of my proposal comes at a cost: namely, it seems *too* flexible. Given the many possible contrasts, why do we choose the ones that we do? Out of the various contrasts Tye can make, why does he select the ones he does? How do we know Tye and Megan are considering the same contrastive claims? And so on.

I do not have an account of how contrasts are selected. This is in part because my analysis is not fully reductive. Given that it is not reductive, it relies on one's intuitions about what the relevant contrasts would be.

Nonetheless, the existence of contrasts can be motivated by the current conception of grounding. It is common to think that explanations (at least scientific or causal explanations) are contrastive. So if grounding is a kind of metaphysical explanation, it is no surprise that grounding is contrastive.

An account of how the contrasts are selected will ultimately be an account of how *theorists* select contrasts for their purposes. This is not to say that why-grounding itself is agent-relative. The claim is just that grounding claims that

have simple surface forms—like “The biological facts ground the moral facts”—may (a) be context-sensitive and (b) have complex logical forms.

To conclude my discussion of why-grounding, I should point out that what I call why-grounding is similar to the conception of grounding outlined by Schaffer (2016) and Wilson (2016). The main differences are (a) I take an unionist perspective on grounding, (b) I am a pluralist about grounding, and (c) I propose a specific way of interpreting the contrastivity. The fact that others adopt similar notions of grounding is a good result. My goal, here, is to show that philosophers have been unwittingly referring to different varieties of grounding, all along. The goal is not to produce two kinds of grounding from scratch.

I have explicated why-grounding in two ways. First, I have illuminated why-grounding with respect to its connection to contrastive why-explanation. Second, I provided a non-reductive analysis of why-grounding; on my analysis, contrastive why-explanation can be understood in terms of a series of counterfactuals.

7 Connections

Having motivated and described how- and why-grounding, the only thing that remains is to clarify how the two kinds of grounding are connected to one another. Is every how-ground a why-ground? Is every why-ground a how-ground? Are there conditions under which the two notions coincide?

In the initial proposal, there appeared to be overlap between cases of how- and why-grounding. Here is a reminder of one of the cases.

SOCIAL-TO-MORAL^T: $Moral <_{h+w} Social$
 BIOLOGICAL-TO-SOCIAL^T: $Social <_{h+w} Biological$
 BIOLOGICAL-TO-MORAL^T: $Moral <_h Biological$

Judging by this example, it would appear that some how-grounds are not why-ground (BIOLOGICAL-TO-MORAL^T), but every why-ground is a how-ground (BIOLOGICAL-TO-SOCIAL^T), SOCIAL-TO-MORAL^T). This idea is also consistent with the description of the other cases.

In light of my explication of these kinds of grounding, however, this simple picture cannot be correct. The reason is simple: how-grounding is not contrastive while why-grounding is. Tye’s grounding claims should be separated into two classes.

First, here are Tye’s how-grounding claims.

SOCIAL-TO-MORAL^{T/H}: $Moral <_h Social$
 BIOLOGICAL-TO-SOCIAL^{T/H}: $Social <_h Biological$
 BIOLOGICAL-TO-MORAL^{T/H}: $Moral <_h Biological$

It is trickier to represent Tye’s why-grounding claims, given the flexibility of what can be contrasted. Here is one reasonable interpretation. Read $\psi / \psi^* <_w \phi / \phi^*$ as: ϕ rather than ϕ^* partially why-grounds ψ rather than ψ^* .

SOCIAL-TO-MORAL^{T/W}: $Moral / Moral^* <_w Social / Social^*$
 BIOLOGICAL-TO-SOCIAL^{T/W}: $Social / Social^* <_w Biological / Biological^*$

Tye does not seem to endorse the following, however.

BIOLOGICAL-TO-MORAL^{T/W}: *Moral / Moral** <_w *Biological / Biological**

The resulting account requires that why-grounding not be transitive, given a natural notion of transitivity for contrastive grounding.

However, this assumption isn't necessary. You might, as Schaffer (2012) does, redescribe the cases in a way that preserves some notion of transitivity. I am not primarily in the business of preserving (or rejecting) transitivity. My point is that, transitive or not, the two kinds of grounding seem largely orthogonal to one another.

This is largely because why-grounding is a four-place relation while how-grounding is a binary relation. There is no obvious definition of one notion in terms of the other. And it is unclear what systematic entailments there could be between them.

The obvious commonality is that they are both instances of metaphysical explanation. The nature and scope of their interaction depends on facts about what grounds what. A pattern is not easily gleamed from the existence of the two kinds of grounding themselves.

That said, I do not claim that the two kinds of grounding are fundamentally distinct.²⁰ On the current view, how- and why-grounding are species of a common genus: metaphysical explanation.

We can understand a species in terms of its genus plus its differentia. The classic Aristotelian example goes like this: a human (species) is an animal (genus) that is rational (differentia). My varieties of grounding can be given a similar treatment. Why-grounding is metaphysical explanation plus why-explanation. How-grounding is metaphysical explanation plus how-explanation. Both varieties are partly defined in terms of metaphysical explanation.

So grounding is unified and plural. It is unified in the sense that there is a single genus. It is plural in the sense that there are two equally basic species of grounding. By "equally basic," I mean that neither species of grounding can be defined in terms of the other.

I have discussed how my two kinds of grounding relate to one another. But you might wonder (a) whether there are more kinds of grounding, and (b) whether some of those kinds of grounding are what Wilson (2014) calls *small-g* grounding relations.

First, I think there is at least one other type of grounding. I call it—you guessed it—*what-grounding*. What-grounding explanations are answers to what-it-is questions...This isn't the place to describe my view. I have only discussed two kinds of grounding because of space limitations, not because there are not more.

Second, if there are other varieties of grounding, I do not think they correspond to small-g grounding relations. Let *small-g pluralism* be the view that the grounding relations consist of a class that includes realization, mereological composition,

²⁰ Berker (2018), for example, would not regard my theory as sufficiently pluralist, since the two kinds of grounding can be defined from a common source.

truthmaking, the determinable–determinate relation, constitution, emergence, ontological dependence, and more.²¹

The small-g relations—at least most of them—are not themselves forms of metaphysical explanation. Rather, they are dependencies that support or back explanation. On my view, grounding corresponds to metaphysical explanation. It follows that most of the small-g relations cannot be grounding relations.

Or at least, not fundamentally. There is a derivative sense in which the small-g relations *can* be considered grounding relations: namely, in their capacity to back metaphysical explanations. For example, consider the fact that the ball's being red explains how the ball is colored. You may think this explanation is backed by that *red* is a determinate of *color*. In this way, the determinable–determinate distinction may back a metaphysical how-explanation.

Nothing in my account rules out this type of view. My account does not imply all dependence relations are essentially explanatory; it only implies that, whatever relations that there are, they are not grounding relations except in a derivative sense. They are grounding relations in virtue of supporting grounding explanations.

To summarize: I have given an account of two kinds of grounding—how-grounding and why-grounding—and shown how they make sense of different kinds of explanations we might have in mind when we use grounding-talk. More can be said about the two kinds of grounding, the monist/pluralist debate, and the differences between my view and other possible pluralisms. My goal has to motivate and clarify a distinctively explanation-theoretic version of grounding pluralism.

Acknowledgements Thanks to Stephen Yablo, Brad Skow, Jack Spencer, Sally Haslanger, Kate Vredenburg, Matthias Jenny, Jon Litland, the anonymous reviewers, and audiences at MIT and the 2017 Central APA for their feedback on various versions of this paper.

References

- Armstrong, D. M. (1983). *What is a law of nature?*. Cambridge: Cambridge University Press.
- Audi, P. (2012). Grounding: Toward a theory of the in-virtue-of relation. *Journal of Philosophy*, 109(12), 685–711.
- Bennett, K. (2017). *Making things up*. Oxford: Oxford University Press.
- Berker, S. (2018). The unity of grounding. *Mind*, 127(507), 729–777.
- Bromberger, S. (1993). *On what we know we don't know: Explanation, theory, linguistics, and how questions shape them*. Chicago: University of Chicago Press.
- Cameron, M. A. (2015). Is ground said-in-many-ways? *Studia Philosophica Estonica*, 7(2), 29–55.
- Dasgupta, S. (2017). Constitutive explanation. *Philosophical Issues*, 27(1), 74–97.
- deRosset, L. (2013). Grounding explanations. *Philosophers' Imprint*, 13(7), 1–26.
- Fine, K. (2001). The question of realism. *Philosophers' Imprint*, 1(2), 1–30.
- Fine, K. (2012). Guide to ground. In F. Correia & B. Schnieder (Eds.), *Metaphysical grounding* (pp. 37–80). Cambridge: Cambridge University Press.
- Fine, K. (2017a). A theory of truthmaker content I: Conjunction, disjunction and negation. *Journal of Philosophical Logic*, 46(6), 625–674.
- Fine, K. (2017b). A theory of truthmaker content II: Subject-matter, common content, remainder and ground. *Journal of Philosophical Logic*, 46(6), 675–702.
- Griffith, A. M. (2014). Truthmaking and grounding. *Inquiry*, 57(2), 196–215.

²¹ For this view, see Rettler (2017), Griffith (2014, 2018) and Bennett (2017).

- Griffith, A. M. (2018). Social construction: Big-G grounding, small-G realization. *Philosophical Studies*, 175(1), 241–260.
- Jaworski, W. (2009). The logic of how-questions. *Synthese*, 166(1), 133–155.
- Kearns, K. (2003). Durative achievements and individual-level predicates on events. *Linguistics and Philosophy*, 26(5), 595–635.
- Koslicki, K. (2015). The coarse-grainedness of grounding. *Oxford Studies in Metaphysics*, 2015, 306–344.
- Kovacs, D. M. (2017). Grounding and the argument from explanatoriness. *Philosophical Studies*, 174(12), 2927–2952.
- Krämer, S., & Roski, S. (2017). Difference-making grounds. *Philosophical Studies*, 174(5), 1191–1215.
- Leuenberger, S. (2014). Grounding and necessity. *Inquiry*, 57(2), 151–174.
- Litland, J. E. (2013). On some counterexamples to the transitivity of grounding. *Essays in Philosophy*, 14(1), 3.
- Makin, M. (2017). Rigid/non-rigid grounding and transitivity. *Inquiry: An Interdisciplinary Journal of Philosophy*. <https://doi.org/10.1080/0020174X.2017.1385523>.
- Maurin, A.-S. (2018). Grounding and metaphysical explanation: It's complicated. *Philosophical Studies*. <https://doi.org/10.1007/s11098-018-1080-0>.
- Miller, K., & Norton, J. (2017). Grounding: It's all in the head. *Philosophical Studies*, 174(12), 3059–3081.
- Naomi, T. (2016). Grounding and metaphysical explanation. *Proceedings of the Aristotelian Society*, 116(3), 395–402.
- Raven, M. J. (2013). Is ground a strict partial order? *American Philosophical Quarterly*, 50(2), 191–199.
- Raven, M. J. (2015). Ground. *Philosophy Compass*, 10(5), 322–333.
- Rettler, B. (2017). Grounds and “grounds”. *Canadian Journal of Philosophy*, 47, 1–25.
- Rodriguez-Pereyra, G. (2015). Grounding is not a strict order. *Journal of the American Philosophical Association*, 1(3), 517–534.
- Rosen, G. (2010). Metaphysical dependence: Grounding and reduction. In B. Hale & A. Hoffmann (Eds.), *Modality: Metaphysics, logic, and epistemology* (pp. 109–36). Oxford: Oxford University Press.
- Sæbø, K. J. (2008). The structure of criterion predicates. *Event Structures in Linguistic Form and Interpretation*, 5, 127.
- Sæbø, K. J. (2015). How questions and the manner—method distinction. *Synthese*, 193, 1–26.
- Schaffer, J. (2009). On what grounds what. In D. Manley, D. J. Chalmers, & R. Wasserman (Eds.), *Metametaphysics: New essays on the foundations of ontology* (pp. 347–383). Oxford: Oxford University Press.
- Schaffer, J. (2012). Grounding, transitivity, and contrastivity. In F. Correia & B. Schnieder (Eds.), *Grounding and explanation*. Cambridge: Cambridge University Press.
- Schaffer, J. (2016). Grounding in the image of causation. *Philosophical Studies*, 173(1), 49–100.
- Schnieder, B. (2006). Truth-making without truth-makers. *Synthese*, 152(1), 21–46.
- Searle, J. R. (2001). *Rationality in action*. Cambridge: MIT Press.
- Skiles, A. (2015). Against grounding necessitarianism. *Erkenntnis*, 80(4), 717–751.
- Street, S. (2010). What is constructivism in ethics and metaethics? *Philosophy Compass*, 5(5), 363–384.
- Tahko, T. E. (2013). Truth-grounding and transitivity. *Thought: A Journal of Philosophy*, 2(4), 332–340.
- Thompson, N. (2018). Irrealism about grounding. *Royal Institute of Philosophy Supplement*, 82, 23–44.
- Trogon, K. (2013). An introduction to grounding. In M. Hoeltje, B. Schnieder, & A. Steinberg (Eds.), *Varieties of dependence* (pp. 97–122). Munich: Philosophia Verlag.
- Wilson, A. (2016). Grounding entails counterpossible non-triviality. *Philosophy and Phenomenological Research*, 92(3), 1–12.
- Wilson, A. (2018). Metaphysical causation. *Noûs*, 52(4), 723–751.
- Wilson, J. (2014). No work for a theory of grounding. *Inquiry*, 57, 535–579.
- Yablo, S. (2014). *Aboutness*. Princeton: Princeton University Press.