

REFLECTIONS ON THE INTELLECTUAL FOUNDATIONS FOR METAPHYSICAL GROUND

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Contents

Preface: ON THE GROUNDS FOR “GROUND”	2
1. INTRODUCING: “GROUND”?	3
2. SAID IN MANY WAYS, PT. 1: CONSTITUTIVE DETERMINATION AND THE MEANS OF METAPHOR	9
3. SAID IN MANY WAYS, PT. 2: TO BE (OR NOT TO BE) AN “EXPLANATION”	24
I. Explanation and the locus of disagreement	
a. Explanation and ontological excess	
b. The ways to “explain”	
II. Explanation meets metaphysical inquiry	
4. GROUND AND EXPLANATION: A VEXED AFFAIR	58
I. Test cases: “explanation” and “ground”	
a. Audi	
b. Dasgupta	
II. Constitutive explanation: ontic or representational?	
III. Constitutive explanation and metaphysical realism: towards a “grounding” relation	
a. The ‘metaphysicity’ of “ground”	
b. The relation of <i>metaphysical ground</i>	
CONCLUSIONS	99
References	101

Preface

ON THE GROUNDS FOR “GROUND”

“This essay is a plea for ideological toleration”, wrote Rosen (2010) on the idioms of metaphysical dependence, and especially ‘(metaphysical) ground’. This thesis is likewise a plea for ideological *clarity*. Much work on ground has connected it to “*metaphysical explanation*” – perhaps distinct from its causal cousin – and maintained that ground is somehow ineluctably wrapped up with it. Unfortunately, there is hardly consensus about what “explanation” is; the term ‘explanation’ is itself highly ambiguous, and is used by many philosophers in various guises, often without recognition and in theoretically risky ways.

It is my aim here to bring some lucidity to debates about ground vis-à-vis “explanation”. To do so, I will do a few things. I will begin by trying to home in on the phenomenon of interest in the literature on ground – which I refer to as *constitutive determination* – absent potentially distracting talk of “explanation”. Next, I will consider the varieties of “explanation” relevant to ground-theoretic discourse, imposing some basic conditions on constraints on things that may plausibly be so named. Given these considerations, I will then try to throw into relief some metaphysical and greater philosophical commitments of several of ground’s biggest supporters – including and centrally those regarding the nature of “explanation” – drawing connections between them when possible, and demonstrating their (dis)agreements too. Ultimately, I believe that certain significant beliefs about “ground” may illicitly trade in ambiguities of “explanation”, intentionally or not, leading to either erroneous theoretical posits, or the right ones for the wrong reasons. As such, I will offer what I take to be the most promising position for the realist who recognizes a seemingly unified phenomenon of constitutive determination – namely, that of a metaphysical dependence relation holding between entities or phenomena of arbitrary ontological category – and attempt to demonstrate where I think some philosophers who instead offer a more restricted relation, such as one holding *only* between *facts*, have been led astray. All told, without recognition of vital distinctions among the varieties of explanation, “explanation”-talk may be more harmful than helpful in theorizing about “ground”.

1

INTRODUCING: “GROUND”?

Ground is...the common factor in diverse in virtue of questions, the structuring relation in the project of explaining how some phenomena are “built” from more fundamental phenomena, and a key part of a venerable tradition concerned with metaphysical explanation. (Raven 2015:324)

Some things metaphysically depend on other things. This seems mostly uncontroversial. I metaphysically depend on my organs, and (arguably) on my parents. The coffee in my mug metaphysically depends on water, caffeine, and other chemical compounds. These components depend on molecules, which in turn depend on atoms, and so on.

In attempts to understand such dependencies, we may find ourselves drawn to locutions like:

1. The coffee’s existence *consists in* water and some other compounds being arranged thus-and-so.
2. The strawberry is colored *in virtue of* its being red.
3. The killing was wrong *due to the fact that* it produced too much suffering.
4. The violin’s being fragile *depends on* its being made of certain molecules, atoms, etc., which are governed by certain physical laws.
5. The koala is tired *because* its metabolic system is in state *T*.
6. The fact that the singleton set {Obama} exists *is generated by* the fact that Obama exists.
7. The fact that the batter hit a homerun *is accounted for by* the facts: i) that he hit the baseball over the fence; and ii) that the teams agreed to certain rules whereby baseballs hit over the fence are homeruns.

How are we to understand these statements? For one thing, they seem to be *related to* “explanation”, at least in some sense.^{1, 2} In this vein, we may want to say the consequent is or refers to, e.g., (a) *reason for* the antecedent.³ The *reason* the coffee exists is that some water and other compounds are arranged thus-and-so. The *reason* the killing was wrong was that it produced too much suffering. And so on. In this way, we can perhaps preliminarily understand these statements as being or providing answers to *why-questions*, e.g., “Why does the coffee exist?”, or “Why is the violin fragile?”.

If so, perhaps we’ve made headway. For we routinely provide answers to why-questions, as a matter of both philosophical and practical life, and so may take such familiarity as a sign of (at least potential) understanding. Why did the window smash? Because the rock hit it. Why are there people inside a floating hunk of metal orbiting Earth? Because others built and blasted a rocket to send those people to the floating hunk of metal. Why is the koala sleepy? Because it ate too much eucalyptus. Why am I writing this thesis? Because I chose the examined life (or so I tell myself).

Yet there is ostensibly something different going on in these latter statements, in comparison with the former. For in the latter, we seem to be *somehow* signifying *causes*. We could seemingly rephrase them to say, e.g., the rock *caused* the window to smash. Yet, recourse to causes or causation isn’t *prima facie* appropriate in statements 1-7.⁴ Did the strawberry’s being red *cause* its being colored, or the killing’s producing too much suffering *cause* it to be

¹ N.B.: I won’t yet dub the above nor anything else ‘*explanations*’. As we’ll see below, “explanation” is a vexed notion, especially in the present context. Please keep this in mind as we carry on. Later, I will be explicit about how we are to regiment use of the word ‘explanation’ and related terms.

² From here, I will use double quotation marks to enclose quotations of the work of other philosophers, as scare quotes to indicate ambiguity or uncertainty, and for imagined dialogue. Context should indicate well the intended usage; I will note otherwise if necessary. Single quotation marks will be used to refer to particular words, phrases, and example sentences in order to respect the use-mention distinction.

³ With *reasons* not (necessarily) understood in a reified sense.

⁴ Though, not everyone thinks that there is something (entirely) different going on. See, e.g., Schaffer (2016a) and A. Wilson (2017) on connections between causation and ground. And see, e.g., Bernstein (2016), and Koslicki (2016) for criticism.

wrong? It doesn't seem quite right to say so, even if both the causal and seemingly non-causal claims can be couched in the language of "because".

Note that, even though causal language may *appear in* claims like 1-7 – such as in saying that, e.g., the killing *produced* (or *caused*) too much suffering – it is *not* such causal language that is doing the core communicative work. Rather, any explicitly causal apparatus is contained within clauses flanking either side of connectives like "because", or "in virtue of", or "due to the fact that". And it is *these* terms that seem to be most operative, drawing important connections between the contents of the clauses they link. But, if 1-7 are not (at least primarily) *causal*, what else can we say about them instead?

Despite their varied formulations and subject-matters, 1-7 all seem to report some form of *determination*, which is perhaps a sign of uniformity. The strawberry's being red *determines* its being colored. The ball's going over the fence, together with the rules of baseball, *determines* the hit's being a homerun. Yet, the causal statements seemingly report determination too – e.g., the rock's hitting the window *determined* the window's smashing. Is there thus a distinctive (and perhaps unified) determination – different from, viz., *causation* – which figures in our statements of concern?

This question and others like it have been responsible for much activity in contemporary analytic metaphysics. Many have responded affirmatively, and in so doing have discussed, offered, and defended theoretical posits under various monikers, such as 'constitutive determination', 'metaphysical explanation', and perhaps most prevalent, 'metaphysical (or ontological) ground'. To give an account of *ground* is, supposedly, to give an account of a distinctively metaphysical sense of the '*in-virtue-of*' locution and its kin⁵ – i.e., an account of how some propositions are true *in virtue of* some others being true; or an account of how some

⁵ As indicated by, e.g., the title of Audi (2012b).

facts obtain *in virtue of* the obtaining of other facts; or, perhaps, even an account of (the existence of) some entities *in virtue of* (the existence of) some other entities.

So understood, *ground* is supposed to vindicate the truth or correctness of claims like 1-7.⁶ *Ground* that supposed to illuminate the hierarchical structure of the world.⁷ *Ground* is supposed to characterize the (*absolutely*) *fundamental*.⁸ *Ground* is supposed to shed light on important issues in metaphysics, ranging from truthmaking, to connections between mind and matter, and to the nature of space(time).⁹ And it is *ground* that is supposed to be the vital factor of or in *metaphysical explanation*.¹⁰ It suffices to say that ground may, for some, be the rockstar of contemporary metaphysics.

But what *is* ground? So far, I’ve avoided being particularly specific about it. The reasons for this are multiple. For one, not *everyone* agrees that “ground” – however understood – should be accepted in our metaphysical toolkit. *Grounding skeptics* come in various stripes.¹¹ Some think that ground is either esoteric (e.g., Hofweber 2009), or even incoherent (e.g., Daly 2012). Others grant the intelligibility of some notion of ground, but question its theoretical relevance and capabilities (e.g., Koslicki 2015; J. Wilson 2014; Sider 2012: Ch. 8).

Yet, there are *many* who believe that we stand to profit from acceptance and employment of ground, and who have thus worked to champion and elucidate it.¹²

⁶ Cf., e.g., Fine (2001, 2012a), Audi (2012a, 2012b), Dasgupta (2017), Schaffer (2016a).

⁷ Cf., e.g., Schaffer (2009a, 2010a), Raven (2015).

⁸ Cf. Fine (2001), and also Schaffer (2009a:353), Audi (2012b:710), (Dasgupta 2014b:563), Bliss & Trogon (2016: §6.2) for discussion.

⁹ On truthmaking, see Schaffer (2010c), Liggins (2012), and Tahko (2013). On the relevance of grounding to mind and space(time), see Schaffer (2009a), Dasgupta (2017). On more specific accounts of grounding and mind, see Dasgupta (2014b), Trogon (2015), Schaffer (2017b).

¹⁰ Cf., e.g., Fine (2001, 2012a), Audi (2012a, 2012b), Dasgupta (2017), Raven (2015, 2017), Schaffer (2016a, 2017a).

¹¹ Correia & Schnieder delineate at least four kinds of grounding skepticism (cf. 2012a:30).

¹² Cf., among others: Audi (2012a, 2012b), Berker (2017), Cameron (2016), Correia & Schnieder (2012a), Dasgupta (2014a, 2014b, 2017), Fine (2001, 2012a), Jago (2018), Raven (2012, 2013, 2015, 2017), Rosen (2010, 2017), Schaffer (2009a, 2012a, 2016a), Trogon (2013, 2017), A. Wilson (2017).

Unfortunately, however, much agreement ends here. The number of unique, sum-total positions offered on “ground” and other ostensibly-and-inextricably-related notions is somewhat dizzying, and one could be forgiven for supposing that talk of “ground” is *really* talk about a variety of distinct notions. As it stands, one may be right – in contemporary literature, the term ‘ground’ has been variously used to refer to, at least:

- “a distinctive kind of metaphysical explanation”;¹³
- “an explanatory relation”;¹⁴
- “constitutive determination”;¹⁵
- a non-causal relation between *facts*;¹⁶
- a non-causal relation between *entities* (of arbitrary ontological category);¹⁷ and,
- a sentential connective, i.e., as “a label for one sense of the English word ‘because’”.^{18, 19}

These differences in opinion, I believe, are largely the result of divergent views on, e.g., the nature and ontology of “explanation”. As we will see, ground is supposed to be inexorably connected to “metaphysical explanation” of some sort. If so, it may be no surprise that one’s views on ground will be somehow importantly influenced by one’s views on explanation.

With such matters in mind, I aim to provide structure to ground-theoretic discourse, especially with respect to “explanation”. To do so, I will proceed as follows. In Chapter 2, I

¹³ Fine (2012a:37); cf. also, e.g., Dasgupta (2014a, 2017).

¹⁴ Fine (2001:15); cf. also Raven (2015:327), Rosen (2010:117).

¹⁵ Fine (2012a:37).

¹⁶ Audi (2012b:687-8); cf. also, e.g., Raven (2012, 2017), Rosen (2010, 2017), and Trogdon (2013, 2017).

¹⁷ Cf. Schaffer (2009a, 2016a, 2017a).

¹⁸ Dasgupta (2017:75).

¹⁹ N.B.: At least *prima facie* not all of these things are equivalent and/or interdefinable, though some may be; e.g., a relation between facts may be understood as a particular case of a relation between entities.

discuss motivations for “ground” which center on *a* or *the* supposed phenomenon of interest – what I call ‘constitutive determination’ – while explicitly avoiding talk of “explanation”. In Chapter 3, I then turn to “explanation” in order to delineate and clarify the several distinct but related notions of it used by philosophers in the present context. Finally, in Chapter 4, I critically examine various conceptions of “ground” as it is related to “explanation” by several prominent grounding theorists, keeping in mind the notion of constitutive determination. I hope to clarify how, where, and why these theorists may differ, and consider the prospects for certain views of ground in so doing. Ultimately, I believe some prominent accounts of ground *qua* metaphysical dependence relation holding (only) among *facts* rest on dangerous ambiguities regarding “explanation”, which may steer one in the wrong direction. I hope to show how or why this may be so, and to offer what I think is the most plausible alternative in attempting to understand “ground”, or constitutive determination, as a metaphysical dependence relation – one which holds between entities or phenomena of arbitrary ontological category.²⁰

²⁰ N.B.: I employ ‘entity’, ‘phenomenon’, and their plural forms throughout in a way that should be read with ontological neutrality, so as not to prejudge significant ontological matters of interest.

2

SAID IN MANY WAYS, PT. 1:
CONSTITUTIVE DETERMINATION AND
THE MEANS OF METAPHOR

I myself have long been sympathetic to this idea of constitutive determination or “ontological ground”. (Fine 2012a:37)

Let’s return to statements 1-7. I’ve said there is something distinctive about the *determinations* reported in them, something that differentiates them from, viz., (reports of) *causal* determinations. Barring questions, for the moment, about what we mean by “determination”, *what* is distinctive about the determinations of interest here? Let’s assume we are dealing with a unified phenomenon, that claims featuring various connective and predicates as employed in examples 1-7 correspond to a single type of situation or phenomenon. If so, we can restate the claims as follows, in terms of what *appears* to be relational predicate of ‘ground’:

- 1'. The coffee’s existing *is grounded in* some water and some other compounds being arranged thus-and-so.
- 2'. The strawberry’s being colored *is grounded in* its being red.
- 3'. The killing’s being wrong *is grounded in* the fact that it produced too much suffering.
- 4'. The violin’s being fragile *is grounded in* its being made of certain molecules, atoms, etc., which are governed by certain physical laws.
- 5'. The koala’s being tired *is grounded in* its metabolic system being in state *T*.

- 6'. The fact that the singleton set $\{\text{Obama}\}$ exists *is grounded in* the fact that Obama exists.
- 7'. The fact that the batter hit a homerun *is grounded in* the facts: i) that he hit the baseball over the fence; and ii) that the teams agreed to certain rules whereby baseballs hit over the fence are homeruns.

In providing 1'-7' as examples, I don't mean to imply that such claims are *true*. Rather, I take it that these are plausible examples of (statements regarding) the phenomenon of interest with which we are concerned, however best understood.

One thing worth noticing is that the component clauses *seem* to be statements of *facts* – if, like Audi, one takes a fact to be “some things’ having some properties” (2012b:686).²¹ Fact-talk is made explicit only in 6' and 7'. This may *prima facie* differentiate 1-7/1'-7' from analogous causal claims, as may not seem right to say that *the fact that the rock hit the window* caused the window to smash. Rather, *the rock's hitting the window* – an *event* – seems more apt to serve as a cause, or perhaps even *the rock* – an *object* – itself.²²

Yet, this distinction has been questioned. While it might be the “standard view” that causal claims are concerned with *events*, it has been suggested that they are instead concerned with *facts*.²³ If so, should we really rest our case for the distinctness of 1-7 from causal claims on this basis? Perhaps not. For the sake of argument, we can grant that both causal and grounding claims can at least be *expressed* via fact-talk. However, in so doing, I don't intend to claim anything (yet) about ground and its connection with *facts* in a metaphysically robust sense. As we'll see, such connections are for some central, and for others controversial. This

²¹ Though, whether *existence* is a property, as perhaps implied by 1', is controversial; see Nelson (2016) for an overview. Audi denies as much.

²² At least, we seem to talk *as though* objects can be causes; e.g., “the car caused the accident”. Though, perhaps such language can be adequately paraphrased away.

²³ Or, even, *features, tropes, states of affairs, situations*, and *aspects*. See Schaffer (2016c: §1) for discussion. The “standard view” label is Schaffer's.

language may not have to be taken at ontological face-value; fact-talk here is to be employed merely for expository ends.

With this in mind, let's compare two causal and grounding claims:

5. The koala is tired *because* its metabolic system is in state *T*.

5a. The koala is tired *because* it ate a lot of eucalyptus.

Rephrasing both specifically in terms of 'ground' and 'cause':

5'. The koala's being tired *is grounded in* its metabolic system being in state *T*.

5a'. The koala's being tired *is caused by* its having eaten a lot of eucalyptus.

Call what "does" the grounding (i.e., the right-hand-side of 5') 'the ground' or 'the grounds', and what "gets grounded" (i.e., the left-hand-side of 5') 'the grounded'. We can likewise, for comparison, call what "does" the causing 'the cause' or 'the causes', and what gets caused, 'the caused' (aka., 'the effect').

Now, what may distinguish 5 from 5a, or 5' from 5a'? The *causal claim* 5a' seems to connect some fact – i.e., the koala's being tired – to some *prior* fact about what *happened* – i.e., the koala's having eaten much eucalyptus – such that the former fact obtained. Cause and effect are connected diachronically, and there is something about the cause's obtaining that *determine* the effect's obtaining, or that *makes* the effect obtain.²⁴ Here we may have what *happened*, and *why* it happened. And the cause is distinct from the effect. Metaphysically

²⁴ I don't here intend to take a stand on, or imply any (general) views about, the metaphysics or formal properties of causation; e.g., this should not be taken as a claim amounting to "causation is a diachronic relation between Xs" where X is some ontological category. Nor should it be taken as a claim that all causes precede their effects; i.e., I take no stance on retrocausation nor simultaneous causation here.

speaking, the koala’s eating eucalyptus is one thing, and its being tired another, however understood.

In the *grounding claim 5'*, we also seemingly relate facts. But in this case, we’ve related what *is* with *why* it is in a way that, unlike in the causal case, is temptingly similar to a claim of identity, yet may not quite be one. It’s tempting to say that for the koala to be tired “just is” for its metabolic system to be in state *T*. Even so, we may still want to differentiate between the koala’s metabolic system being in state *T*, and the koala’s being tired; these two states may be reasonably believed to differ, e.g., in their modal or other properties, depending on one’s views about the connections between the mental and physical.²⁵ If so, an identity claim won’t hold. Rather, we might think that 5' says, e.g., one fact or phenomenon *constitutes* another – the koala’s being tired *is constituted by* its metabolic system being in state *T*. Or, conversely, the koala’s metabolic system being in state *T* *constitutes* its being tired.²⁶

Appearances may deceive, however. Though it may look like we’ve made progress, one may nonetheless worry that we’ve merely substituted one obscure term for another. For what is it for some facts or phenomena to *constitute* some other(s)? Without further elucidation, one may not be satisfied with this distinction between what’s reported in the causal and grounding claims.

One thing that has seemingly been enticing to say about supposed cases of ground is something like: what is grounded “is nothing over and above” or “consists in nothing more than” its grounds.²⁷ I referenced a similar idiom myself, saying that for one thing to obtain “just is” for some other thing to obtain. But such phrases must be used and understood

²⁵ A non-reductive physicalist may hold that mental properties are distinct from physical properties, even if mental properties somehow depend on physical properties; see Baker (2009) for further discussion.

²⁶ For similar instances of “constitute” locutions, see, e.g., Dasgupta (2017:75), Raven (2015:323). For explicit denial of the propriety of constitution-talk in the context of ground, cf., Audi (2012a:105-6). Audi, however, does countenance ground as a form of “determination”.

²⁷ For similar instances of these locutions, see, e.g., Fine (2001:15; 2012a:39), Dasgupta (2014a:1).

with care.²⁸ Again, to say that, e.g., the koala’s being tired “is nothing over and above” its metabolic system being in state *T* needn’t be to say that some two facts are *identical*, or that the one somehow ontologically *reduces* to the other.²⁹ Rather, this and similar expressions seem intended to track a particular connection in modal space that grounds and grounded intimately share. It may seem that grounds *metaphysically necessitate* the grounded, at least as understood in the sense of (mere) modal covariation; i.e., whenever the grounds occur, so do the grounded. One may thus want to say that the grounded is “fixed by” its grounds, or that grounded facts “come for free” once their grounds are in place.^{30, 31}

This necessitation can be seen in the other examples above. For instance, if anything that is red is *thereby* colored, then it would seem that an object’s being red metaphysically necessitates its also being colored, the same holding for any other (particular, determinate) color. Or, perhaps, if any act which is wrong *thereby* produces too much suffering, then it would seem that an action’s being wrong metaphysically necessitates its producing too much suffering.³²

Yet, a purely modal reading of “metaphysical necessitation” may not be specific enough to pick out a distinctive phenomenon. Why? By way of example, if numbers exist necessarily, then the fact that koala is tired also metaphysically necessitates the fact that the number 4 exists (as it does any other necessary fact, for that matter, and trivially so). But, to put it bluntly, *who cares?* There doesn’t seem to be anything particularly interesting about this connection, and it seems decisively different from that between the koala’s metabolism and its

²⁸ Cf. again Fine (2012a:39).

²⁹ Audi, for one, denies a strict connection between ground and reduction; cf. (2012a:110). He compares his account of the relation between ground and reduction with that of, e.g., Rosen (2010).

³⁰ On grounds “fixing” the grounded, see, e.g., Dasgupta (2014b:557; 2017:76), Schaffer (2016a:61, fn. 10). On the grounded “being free”, see, e.g., Dasgupta (2014b:583), Schaffer (2009a:361).

³¹ I don’t intend to imply here that, whatever “ground” is or however it is best understood, that any conception of ground which doesn’t include metaphysical necessitation is wrong. As it happens, the necessity of ground has been questioned in the literature; cf., e.g., Skiles (2015). Such supposed necessitation is seemingly motivational, however.

³² As we’ll see, what’s communicated by “thereby” is part of what’s at issue.

tiredness. That is, even though whenever the koala is tired, the number 4 exists, it doesn't seem to be the case whatsoever that the fact that the number 4 exists "holds in virtue of" the fact that the koala is tired.³³ The koala's being tired doesn't properly "account for" the phenomenon that is the number 4, in the same way that, perhaps, the koala's metabolic system being in state T "accounts for" the koala's being tired.³⁴ They seem to be entirely separate phenomena, even if they covary in some way. Metaphysical necessitation isn't alone *sufficient* to mark out *ground* as distinct, even if it's required.

Another thing worth noting is that there seems to be a sense of *directionality* in cases of ground which may be lacking in cases of mere metaphysical necessitation. As Fine puts it,

... [there is] a *movement*, so to speak, from antecedent to consequent; and what is most distinctive about the in-virtue-of claims is this element of movement or determination. (2012a:38; emphasis added)

In our example, we might want to say there is a particular movement from the fact about the koala's metabolic system being in state T , to the fact about the koala being tired – as opposed to, i.e., an analogous movement in the opposite direction from the koala's being tired to its metabolic system being in state T (or as opposed to no movement at all). But, how are we to understand such "movement"?

We might be drawn to say that there is something *about* the grounds or grounded that "makes it the case" that the grounds obtain, that the grounds don't merely modally necessitate, but also "generate" or "produce" the grounded.³⁵ That is, there may be an important

³³ For similar instance of the "in virtue of" locution, see, e.g., Audi (2012b), Fine (2012a:37), Rosen (2010).

³⁴ For similar instances of the "account for" locution, see, e.g., Dasgupta (2014a:11), Fine (2001:15; 2012a:52).

³⁵ For similar instances of the "making" or "make it the case" locution, see, e.g., Fine (2012a:43), Rosen (2010:116). For more of the "generate" locution in the context of ground, see, e.g., Fine (2012a:48), Schaffer (2009a:351; 2017a:305). And for similar instances of the "produce" locution, see, e.g., Dasgupta (2014a:11), Schaffer (2016a:54).

metaphysical – as opposed to merely *nomic* – connection between grounds and grounded which goes beyond mere modal covariation. One way we might want to elaborate on this idea of production is by saying that the grounded phenomenon is somehow “built out of” the grounding phenomena.³⁶ It is in this way that the grounds can “account for” the grounded by “building” it. Consider a beer glass. One might say that the existence and properties of the glass are grounded in the existence and arrangement and properties of, e.g., some smaller particles – perhaps those of fundamental physics. In this sense, we may again say some phenomenon – the existence of the glass – is “built out of” or generated by some other phenomena – the existence and arrangement and properties of the particles.³⁷ And if *grounded* phenomena are *essentially* grounded, there would to be a lack of *autonomy* – perhaps both existential and qualitative – of whatever is grounded, which seems to be inextricably metaphysically tied to its grounds.³⁸ The grounded seems incorrigibly parasitic on its grounds.³⁹

Notably, this tight metaphysical connection seems absent in the purported causal cases considered above. While we may want to say that cause *somehow* determines effect, the manner of this determination appears different. For it seems as though, e.g., the koala’s being tired is not *metaphysically* necessitated by its eating a lot of eucalyptus *alone*, even if it is *nomicallly* necessitated (perhaps given a set of initial conditions or prior circumstances which obtained). There may be a mutual metaphysical *independence* between the two facts or phenomena in the causal cases, an independence absent in cases of ground.

³⁶ For similar instances of the “built out of” locution in the context of ground, see., e.g., Raven (2015:323; 2017:626). For a *denial* of the relevance of “building” to a conception of ground, see, e.g., Audi (2012b:709, espec. fn. 40).

³⁷ There is also a less metaphorical and more literal sense in we may also want to say that the glass itself is *built out of* such particles, e.g., via the relation of *composition*, much as a building may be built out of stones. It seems vaguely safe to say that the metaphorical sense is parasitic on the literal one.

³⁸ N.B.: I here use “autonomy” in a different sense than does Dasgupta (2014b).

³⁹ Cf. Rosen (2017) for an account of grounded phenomena as essentially grounded.

Where does this leave us? Given the discussion above, one may have a better understanding of why some are skeptical of talk of ground as esoteric or hopelessly impenetrable. For these attempts to elucidate the notion have been *deeply* steeped in metaphor, with grounded phenomena being *fixed* or *accounted for* or *generated* or *produced* by their grounds; or, with the grounded being *built out of* or maybe even “arising from” their grounds.⁴⁰ And as we’ve explicitly attempted to differentiate ground from causal matters, one may be confused about how to understand these metaphors here, if not in the perhaps causal senses in which they may normally be employed. We might intuitively understand how a cause “produces” an effect – in the way that, e.g., electrical current in a wire “produces” light – while remaining rather baffled as to how grounds “produce” a grounded phenomenon. This may be due, in part, to the connotations of the phrases hired here, inducing associations with *motion* or *dynamicity* in a more physically tangible sense.

Difficulties may be amplified by the fact that many philosophers take ground to be metaphysically *primitive*.⁴¹ If so, one may worry that exposition ends here, leaving us merely with metaphors as guides. Either ground makes sense to you, or it doesn’t. Now, I do not have the space here to provide a detailed account of what it is for some concept to be sufficiently intelligible, nor to spend time defending the intelligibility of ground. I take it that at least adequate strides regarding the latter have been made by, e.g., Audi (2012a: espec. §§3.6-3.8; 2012b), Raven (2012), and Rosen (2010). As Schaffer remarks, even if talk of *generation* or *production* is “admittedly elusive” (2016a:54), it hopefully demonstrates that “it is *no mere coincidence*” that, e.g., Obama and {Obama} co-obtain (2017a:304).

⁴⁰ For similar instances of “arising” or “arise out of” locutions, see, e.g., Dasgupta (2016:381), Schaffer (2017b:20).

⁴¹ For claims to this effect, see, e.g., Audi (2012b:690, fn.9), Dasgupta (2014a:5) Fine (2012a:55), Rodriguez-Pereyra (2005:18), Rosen (2010:113), Schaffer (2009a:364).

Thus, I want to assume the following. Firstly, I take the above discussion to be at least non-trivially illuminating about the subject matter of concern. To the extent that we understand idioms of *generation*, *production*, *accounting for*, and the like generally, they may also provide *some* grip on the present phenomenon. Secondly, given that some notion outlined is at least partially intelligible, I want to suggest that the best way to understand it, and to regiment our talk about it, is in terms of “*constitutive determination*”. I take this phrase primarily from Fine, who uses it verbatim as a synonym for ‘(ontological) ground’, and who also refers to ground as “a constitutive form of determination” (2012a:37). Similar expressions regarding the constitutive nature of ground have also been used by Schaffer and Dasgupta.⁴²

The reasons for this terminology are several. Start with ‘determination’. For one thing, the term ‘determination’ seems to be relatively more neutral with respect other candidate terms for representing the present phenomenon – such as ‘generation’ and ‘production’ and the like – which may carry undesired baggage of diachronicity or dynamicity. If so, “determination” may be more neutral with respect to the ontological categories of the phenomena with which it is concerned. This may allow for fewer unwanted constraints when theorizing about “ground” is, and what sorts of things may ground or be grounded, if any.

Another reason to use the present idiom is that “determination” of some for or other is a phenomenon that friends of ground of various stripes seem to center on, even if not explicitly. Audi (2012b), Fine (2012a), Raven (2017), Rosen (2010) and Schaffer (2016a) explicitly refer to ground as a form of determination. And Dasgupta (2014a, 2014b, 2016) likewise uses ‘determination’ in the context of characterizing the phenomena involved in or with ground (even if his later work places less *explicit* emphasis on determination). Importantly, these will

⁴² Schaffer speaks of a “not-causal-but-constitutive generation of a dependent outcome” (2017a:305). Dasgupta (cf. espec. 2017) refers to constitutive *explanation* as opposed to *determination*, though the connection between explanation and determination will be discussed below.

be the theorists of focus in further discussion of ground below. And it seems to me that in disagreeing about “ground”, what they are often disagreeing about is the precise nature of the *determination* with which “ground” is concerned. Is the type of determination at hand itself properly metaphysical? If so, in what way? Or, is the determination rather to be understood in some sort of deflationary sense, perhaps merely arising as a product of our representations of the phenomena of interest? We will deal with such issues in course, keeping an eye toward whether constitutive determination is to be regarded as, viz., a properly *metaphysical* affair;

Now, onto the “constitutive” aspect. Notably, I chose not the term ‘constitution’, but rather ‘constitutive determination’. I think these terms signify importantly different phenomena if any, and also that the latter is more amenable for characterizing the views of ground theorists of present concern.⁴³ This can be seen by example.

Audi offers a theory of “ground” according to which ground is explicitly a robustly metaphysical, worldly *determination* relation, while simultaneously eschewing the idea that some notion of *constitution* can the work required of ground.⁴⁴ To demonstrate, he compares a case of material constitution – e.g., clay constituting a statue – to a case of some moral properties *holding in virtue of* natural properties, the latter taken to be a paradigm instance, if true, of *ground*. He remarks, however, that “natural properties do not constitute the wrongness [of an act] in anything like the way an appropriately shaped lump of clay might constitute a statue” – nor in any way at all, for that matter, as wrongness “isn’t *made up of* natural properties” (*ibid.*; also, 106, fn. 15). If Audi is right, and if it is actually the case that moral properties really hold, somehow, in virtue of natural properties, then we need another, non-constitutional account of the connection between natural and moral properties.

⁴³ I here understand *constitution* to be some analog or extension of *material constitution*, in which some phenomena, broadly speaking, constituting some others.

⁴⁴ On ground as determination, see (2012b: §II); on ground and constitution, see (2012a:105-6).

But, Audi’s remarks are compatible with the idea that, even if natural properties don’t *constitute* moral properties in the sense of “making them up”, the natural properties might nonetheless *constitutively determine* the moral properties. That is, instances of natural properties, in *constituting* whatever phenomena distinct from any moral properties they do – i.e., in simply *being* whatever they are, as they are – may nonetheless *determine* the moral properties of that phenomenon in so being. This could allow that, e.g., the wrongness of an action is something distinct from, and as equally real as, the natural properties in which it is grounded, while nonetheless determined in a distinctively metaphysical sense by the latter. This would be crucial for Audi, who takes grounds and grounded to be both distinct and equally real phenomena (2012a:101-2).

Additionally, in not framing the phenomenon of interest in terms of constitution, we may avoid the difficulties which doing so would engender.⁴⁵ For example, in the case of *material* constitution, there is a well-known debate about whether *constitution is identity*, one which is by no means settled.⁴⁶ And similar issues have arisen in the literature for analogous accounts of constitution regarding, e.g., events and properties.⁴⁷ Insofar as material objects, events, and properties, *inter alia*, are candidates for the “phenomena” of interest in cases of constitutive determination, in avoiding formulating ground in terms of constitution, we may thereby sidestep the latter’s barbs.

Moreover, whether or not Audi is right about moral properties, there seem to be other cases of interest which also resist formulation in terms of anything like an analogue of material constitution. For instance, it doesn’t seem that Obama *constitutes* his singleton-set {Obama} even if he does *determine* it. And if the focus on constitutive determination is right, I believe

⁴⁵ See Wasserman (2017) for an overview of material constitution and the disputes thereabouts.

⁴⁶ Cf., e.g., Baker (1997) for denial of the claim that constitution is identity, and Noonan (1993) for endorsement.

⁴⁷ Event constitution is discussed in, e.g., Davidson (1969), and property constitution in Shoemaker (2003).

that such treatment can be extended to the other idioms used earlier to introduce and distinguish ground, such as those of “generation” and “production” and the like. If, e.g., the existence of Obama “generates” the existence of {Obama}, then it seems plausible to maintain that Obama, in constituting whatever phenomenon he does (i.e., that of being a material object), *thereby determines* the existence of {Obama}.

Consider also the other popular phrases of the grounded being “nothing over and above” and “fixed by” its grounds. If, e.g., the existence of coffee is “nothing over and above” some water and other compounds being arranged thus-and-so, it seems plausible to maintain that the latter, in constituting whatever phenomena they do, as they do, determine the existence and properties of the coffee. If these are acceptable examples of our phenomenon, *constitutive determination* may unify at least some central idioms and metaphors often used to characterize ground and distinguish it as the supposedly unique (kind of) phenomenon it is.

From here, I will take it as a working assumption and hypothesis that debates about “ground” are to be understood – at least in (major) part – as debates about the nature of some kind of constitutive determination. These disputes will turn on what is required, perhaps of the world, for some things to constitutively determine others. Constitutive determination itself is to be understood as follows:

Constitutive Determination (CD):

Some phenomenon or phenomena Φ *constitutively determine* some other(s) Γ just in case, in merely being what and as they are, the Φ thereby determine the existence, obtaining, or properties the Γ .⁴⁸

⁴⁸ It’s unclear whether *constitutive determination* as stated is primitive. It may depend, for example on whether “thereby” is capable of further analysis; I say nothing on this matter here. I also don’t mean for the biconditional given to be taken as definitional of constitutive determination.

A few notes for clarification.

As yet, I take no stand on some particular aspects of the determination at issue, especially prior to forthcoming considerations regarding “explanation”. For one thing, I make no commitments as to things of what ontological categories stand in the *purported* determination relation, e.g., (material) objects, properties, facts, events, states of affairs, propositions, and so on – even if I sometimes superficially spoke in terms of *facts* for expository purposes. Relatedly, I make no commitments as to whether constitutive determination is even to be properly understood as a *relation* in a metaphysically robust sense, or if it’s better thought of in an alternative, perhaps deflationary way. It’s for such reasons that I’ve mostly spoken of “phenomena”, broadly construed. As we’ll see, there is a considerable degree of disagreement on this matter among philosophers of ground, and it is a core matter of present concern.

I also note the (inclusive) disjunction in (CD). It’s not initially clear that *all* instances of constitutive determination will or must involve, e.g., both the existence and properties of the phenomena of interest, and so I’ve avoided formulating it in terms of conjunction. One might want to say that at least in some cases, for example, properties are determined while existence is not. One might even maintain that constitutive determination *never* determines the existence of some phenomenon, depending on one’s views about existence. If one holds that *existence* is not a property, or that existence isn’t an “addition of being” beyond some entity or phenomenon properly said to exist, it might not be appropriate in *any* sense to say that the *existence* of some phenomenon is determined, constitutively or otherwise.⁴⁹ I also include *obtaining*, in addition to existence and properties, because one may perhaps hold that, e.g.,

⁴⁹ As holds Audi.

states of affairs are necessary existents, which may obtain or fail to obtain (and perhaps a *fact* is just an obtaining state of affairs).

Hopefully, this rendering is both broad enough to capture various more precise ways in which such determination may be conceived, but nonetheless specific enough to pick out a particular form of such determination. It is broad, in that ‘phenomenon’ is to be understood as plausibly further identified in terms of, e.g., objects or properties or facts, or perhaps even propositions, sentences, or speech acts, and so forth. It is also broad in that as stated, it allows that constitutive determination may be one-one, one-many, or many-one, or many-many.⁵⁰

However, it is also at least *somewhat* specific, in that it can supposedly be distinguished from *causal* determination. For some phenomena may *casually* determine some other(s) – at least in the usual sense – without *constitutively* determining them. For example, a rock’s hitting a window may casually determine the window’s smashing without constitutively determining in it, as, i.e., there’s nothing about the phenomenon of a rock’s hitting a window *in and of itself* – metaphysically speaking – that constitutes or otherwise necessitates the window’s smashing. Rather, certain other conditions must obtain, including the window’s having certain properties and physical laws taking certain forms, for the window to smash.

Let’s pause for a moment and assess what we’ve discussed. We began by differentiating *causal* and *grounding claims*. The former seem to link what *happens* with *why* it happens, citing some goings-on as in *some* sense “responsible for” other (metaphysically distinct) goings-on. Alternatively, the latter grounding claims purport to connect what *is* with *why* it is, in a different way – one in which some phenomena are somehow “generated by”, or “arise out of,” or “are a product of” some others, in some supposedly distinctive, and distinctively metaphysical-but-non-causal sense. In the grounding cases, there is a connection between

⁵⁰ Cf. Dasgupta (2014a).

grounds and grounded that includes but goes beyond mere modal covariation, which may be itself necessary but not sufficient for grounding. Some writers feel compelled to refer this connection as an “explanatory” connection, insofar as it makes *some* kind of sense to say that the existence, obtaining, or properties of the grounds “*explain*” the existence, obtaining, or properties of the grounded.⁵¹

Now, why the scare quotes for explanation-talk? There is *hardly* a consensus, at least among the ground-theorists of focus here, about what explanation *is*. Is it a speech act? A sentence or proposition? Something more robustly worldly? Could even a *material object* or a *property* be properly referred to as an explanation? Now is there consensus about what it may mean for some *thing* to “explain” another. Ask a different philosopher, and you may get different answers.

Yet, as we’ll see, “explanation” nonetheless seems to play a *central* motivating role for the positing of ground in the first place, and it’s said that from studying ground in the context of explanation that we are able to learn about the nature of ground.⁵² Given this strange confluence of (dis)agreement about “explanation” and its place in a theory of “ground”, it will be worth taking a closer look at the nature of explanation. Ultimately, however, I believe the connections between *explanation* and *constitutive determination* are vexed and more nuanced than some let on, and depend on several distinct but related ways in which explanations can be – and *are* – spoken of. It is to such considerations that I now turn.

⁵¹ Cf., e.g., Audi (2012b:291), Dasgupta (2014a:1), Fine (2001:15), Raven (2015:327), Rosen (2010:117).

⁵² Cf. Raven (2015:327) on the latter.

3

SAID IN MANY WAYS, PT. 2:

TO BE (OR NOT TO BE) AN “EXPLANATION”

The reason we must countenance grounding is that it is indispensable to certain important explanations. (Audi 2012a:104)

Indeed identifying the explanatorily relevant facts responsible for producing this or that aspect of the world is arguably the *raison d'être* of the notion of ground. (Dasgupta 2014a:11)

I think most grounding theorists agree that there is *some* important form of constitutive determination *begging* to be characterized, understood, and theorized about. And it is the nature of this determination, and with what it is concerned, that is a matter of contention. Some disputes seem staked on combinations of methodological concerns, the nature of metaphysical inquiry, and antecedent dispositions regarding the reasonableness of certain ontological and other commitments, *especially* those regarding “explanation”. Different beliefs regarding these matters may result in different beliefs about the nature of “ground”.

Given the ever-expanding literature on ground, my discussion will be restricted. In particular, I will focus on the views discussed or endorsed by six prominent pro-“grounding” commentators, as summarized:

Theorist	“Ground”	Ontology of Explanation	Ground = Explanation?
P. Audi	Relation between: <i>facts</i>	Proposition	No
Dasgupta	Constitutive explanation	Sentence(?) Proposition(?) Other?	Yes
Fine	Constitutive explanation	Sentence(?) Proposition(?) Relation between: <i>facts</i> (?)	Yes
Raven	Relation between: <i>facts</i>	Relation between: <i>facts</i>	Yes
Rosen	Relation between: <i>facts</i>	Relation between: <i>facts</i>	Yes
Schaffer	Relation between: <i>entities</i>	Relation between: facts(?) Sentence(?)	No

Table 1 – Views on ground and explanation of several contemporary metaphysicians

I don’t take myself to precisely represent the likely nuanced ideas of the philosophers mentioned above. Rather, I take the positions inventoried to be reasonable reconstructions of their views on ground and explanation, as offered in their published literature. Insofar as positions regarding certain matters were not explicit, I’ve had to make inferences based on the content and context of their writings.

How shall we proceed? In the remainder of this chapter, I look at ways that we in general, and metaphysicians in particular, talk about “explanation”, drawing what I believe are distinctions *and* connections between “explanations” of various kinds. Ultimately, I believe that a lack of recognition of these different forms of explanation – and the ways in which they are related – is theoretically dangerous, and that significant parts of core ground-theoretic activity trade in ambiguities about “explanation” and “explaining” that can and do lead astray.

Conflation of the various ontological categories of explanation – with differing features and properties – (may) lead to mistaken metaphysical posits in the end. Once we have the right explanatory distinctions in hand, however, we will see as much in Chapter 4.

I. Explanation and the locus of disagreement

Let's return to 1-7/1'-7'. I now say: depending on how they are understood, they are, or involve, or are involved in *explanations*. As yet, I've avoided saying as much because I didn't want explanation-talk to distract from discussion of constitutive determination. I confess that I earlier referred to these examples as “related to explanation”. However, I believe this is weaker, insofar as it can be read with wider scope than can ‘being, involving, or being involved in explanations’.

Regardless, the newer claim is explicit. And it is central. For even though ground theorists disagree significantly about what “explanation” is and involves, they *do* agree that, regardless of what explanation is exactly, 1-7/1'-7' or other claims like them *somehow* concern some (distinctive) kind of “metaphysical explanation”, often taken differ *somehow* from e.g., *causal* explanation.^{53, 54} The “metaphysical flavor” of these explanations is supposedly provided by at least concern with the “not-causal-but-constitutive generation of a dependent outcome” (Schaffer 2017a:303, 305) – i.e., with *constitutive determination*. And it is such metaphysical explanation which is supposed to require or at least justify the positing of “ground” in some form or other.⁵⁵

⁵³ For employment of ‘metaphysical explanation’, see, e.g., Audi (2012b:708-9), Dasgupta (2014a:13; 2016:390, 412), Fine (2012a:37), Rosen (2017: §I), Raven (2017:652) Schaffer (2012a:124; 2016a:88; 2017a:303).

⁵⁴ It should be noted that some theorists in fact *liken* metaphysical explanations to causal explanations in certain important ways; cf., e.g., Schaffer (2016a), and also A. Wilson (2017). For discussion and criticism, see, e.g., Bernstein (2016), Koslicki (2016), and J. Wilson (2016). This will not be the last we see of such comparison.

⁵⁵ Cf. the opening quotes of this chapter.

Yet, to adequately understand accounts of “ground” related to or formulated in terms of “metaphysical explanation”, we need to understand what metaphysicians mean when they speak of “explanation” *simpliciter*. This is crucial, as explanation is spoken of in many ways – and not just colloquially, but also with respect to ground and metaphysical dependence. Unfortunately, not all authors writing in the area are (equally) explicit about how they conceive of explanation; nor do they all use the terms ‘explanation’ and ‘explain’ to mean the same thing; nor do they even restrict themselves to a single sense of each term individually, whether or not they intend as much. And I believe such matters are responsible for significant disagreement over what “really” deserves the title of “ground”, and what this thing or phenomenon is like.

For example, it is often unclear how causal and metaphysical explanations are supposed to differ, assuming they do. It is often hard to discern, for instance, whether reference to “ground” as ‘a distinctive kind of metaphysical explanation’ is supposed to mean the same as, e.g., ‘explanation in some representational sense, but about distinctive metaphysical matters concerning constitutive determination’; or rather as something like ‘a distinctive and distinctively metaphysical *ontological category* of explanation’.⁵⁶ Hopefully, it will become clear that one’s conceptions of “explanation” may seriously impact how one theorizes about “ground”, and perhaps also vice versa. To see this, it will be worth getting a handle on “explanation” in its many guises.

Thus, I will focus here on delineating both the ontology of explanation, and on some *basic*, general conditions and constraints that anything properly called “explanation” must meet. There at least *seems* to be lack of consensus in these regards in the literature on ground, which I believe stems from absence of appropriate attention to the ontological varieties of

⁵⁶ Cf., e.g., Fine (2001:22; 2012a:37; 2015:296), Raven (2017:652) for examples of at least surface ambiguity.

explanation, and the ways in which they are connected and interact. We will first turn to the ontology of explanation, and later to their basic identity, existence, and/or success criteria, as the latter will depend on what kinds of things explanations *are* or can be to begin with.

a. Explanation and ontological excess⁵⁷

There are several dimensions over which talk of explanation varies, both colloquially and philosophically. We may hear talk about how explanations *succeed* or *fail*, or about whether a purported explanation is *actually* or merely *possibly* an explanation. And we may perhaps talk about how an explanation is good or bad, better or worse.

One important dimension is that of how explanations correspond to various question-words: there are explanations-*why*, explanations-*how*, explanations-*that*, explanations-*what*, and so on. One may explain *why* there are no cookies left in the jar, or *how* to fix a carburetor, for example. The natures of and connections between these different question-word explanations – and whether all of them actually deserve the name ‘explanation’ – are a matter we cannot appropriately discuss here. Notably, however, ground theoreticians seem mostly interested in explanations-*why*. One asks *why* {Obama} exists (viz., *because* Obama exists). Or, one wants to know *why* the strawberry is colored (viz., *because* it is red). Or, one wants to know *why* some action has the particular moral properties it does (e.g., perhaps *because* there are certain patterns of (instantiations of) natural properties). In each case, it seems, one requests an “explanation” of some sort as to *why* some phenomenon exists, obtains, or is thus-and-so. And the appropriate responses often seem to be ‘because some others do’, or ‘because some others are so-and-thus’. Thus, I will focus on just explanation-*why* hence.

⁵⁷ Inspiration for this section comes principally from Jenkins (2008), though our discussions ultimately diverge.

Let's now turn to the issue of what explanations *are* – i.e., to what ontological categories they belong – distinguishing between various ways in which the term ‘explanation’ is used to see how they align with the metaphysician’s purposes. There seem to be various categories we can recognize. For present purposes, I will focus on the following three, all of which are spoken about by ground theorists, intentionally or not:

- i) explanations *qua* acts by an agent;
- ii) explanations *qua* representational entities or phenomena; and
- iii) explanations *qua* “things-in-the-world”.

I believe these different senses of “explanation” are unified in that they can all *be, provide, or partake in the provision of answers to why-questions*. Of course, what is or may be such an “answer” will require further illumination, to be discussed below. Importantly, however, these sentiments are echoed, at least in part, by our grounding theorists.⁵⁸ As we continue, let’s keep in mind the following question: When the metaphysician asks *why* some entity or phenomenon exists, obtains, or is thus-and-so – when they ask for an “explanation” of such things – for what do they search?

Firstly, there are explanations *qua* acts. For example, a teacher – i.e., an agent – may *explain* to his students why apples fall to the earth. Our theorists utilize this sense of “explanation” on occasion. According to Fine, “one may explain *why*, or that in virtue of which, singleton Socrates exists by appeal to the existence of Socrates” (2015:296). And as Dasgupta puts it, to “*causally* explain [a conference], you might describe a sequence of events that led to the conference” (2016:381). Call explanation of this sort ‘*explanation_{act}*’, and the associated

⁵⁸ Cf. e.g., Audi (2012a:104), Dasgupta (2017:78), and Schaffer (2016:83).

verb ‘explain_{act}’. In this sense, “explaining” and “saying” and “describing” and “appealing” are things that agents do.

Next, there are explanations *qua* representational entities or phenomena; call these ‘explanations_{rep}’. We will focus here on sentences (including tokens or types thereof) and propositions – ‘explanations_{sent}’ and ‘explanations_{prop}’, respectively. It may be in sense of explanations_{rep} *qua* intentional entities or phenomena that explanations themselves may *be* answers to why-questions. Consider: “Why did the dinosaurs perish?” asked Lindsay; “I don’t know, but Professor Smith wrote the answer [i.e., a sentence expressing a proposition] on the blackboard”, replied James. Being “answers” to such questions, explanations_{rep} may be said to themselves “*explain_{rep}*” something by representing, expressing, or somehow communicating information or intentional content regarding *why* this something exists, or obtains, or is thus-and-so. Explanations_{rep} may thus *explain_{rep}* by “saying” or “describing”, in whatever way it is that representational entities phenomena may say and describe.⁵⁹ One may be drawn to understanding explanations_{rep} as (the only) “real” explanations, as is Audi, if one believes that an explanation “is something you can literally *know*” (2012a:120). And, perhaps given a typical account of knowledge, explanations would thus be *propositions* (cf. 2012a:104).

Even so, it’s likely that not just any sentence(s) will do; e.g., interrogatives and imperatives don’t seem capable of *being* answers to why-questions – in fact interrogatives may instead be why-questions themselves (cf. J. Friedman 2013). There seems to be no sense in which, e.g., the sentence ‘Go to your room!’ could *itself* be, or *by itself* provide, an answer to

⁵⁹ Cf. Dasgupta (2014a:3): “But a different explanation would *say* what goings-on make the event count as a conference in the first place”; emphasis added.

a why-question.⁶⁰ $\text{Explanations}_{\text{sent}}$ are, rather, more likely *declarative* in form, i.e., sentences which do or may express propositions or $\text{explanations}_{\text{prop}}$.

But even restriction to declaratives mightn't be enough. One might want to limit $\text{explanations}_{\text{rep}}$ to sentences or propositions with a certain internal structure. As Dasgupta notes, $\text{explanations}_{\text{rep}}$ “are typically expressed with the sentential operator ‘because’” (2014a:3); e.g., ‘The strawberry is colored *because* the strawberry is red’. In particular, where $P, R, S, \dots$ are sentences, we might restrict the domain of $\text{explanations}_{\text{sent}}$ to sentences of the form ‘ P because $R, S, \dots$ ’. Call P an ‘ $\text{explanandum}_{\text{sent}}$ ’ and each of $R, S, \dots$ an ‘ $\text{explanans}_{\text{sent}}$ ’.⁶¹

Thus, perhaps only declarative sentences which involve an appropriate link between component sentences – i.e., $\text{explanantia}_{\text{sent}}$ and $\text{explananda}_{\text{sent}}$ – afforded by a privileged class of sentential connectives like ‘because’ can *really* be $\text{explanations}_{\text{sent}}$. I merely note the possibility of adopting this understanding here, along with a correlate for $\text{explanations}_{\text{prop}}$.⁶² We will return to this matter in discussing how and why *any* “explanation” *simpliciter* may be or count as an “explanation” in the first place. But two things are worth noting before we continue. First, $\text{explanations}_{\text{rep}}$ are at least one form of explanation recognized as genuine by friends of ground, and importantly so.⁶³ Second, at least some of examples 1-7 (or others like them), understood as sentence tokens, sentence types, or propositions, are plausibly $\text{explanations}_{\text{rep}}$.

So far, we’ve discussed two types of explanation: acts and representations. They are likely intimately connected. Perhaps, for example, one can (only) $\text{explain}_{\text{act}}$ something by

⁶⁰ Though, perhaps this imperative sentence could be embedded in a larger sentence which itself can be, or can be deemed, e.g., an $\text{explanation}_{\text{sent}}$. Consider, e.g., “I went to my room because Mom said the following to me: “Go to your room!””. I don’t know the whole story, but this child may very well have been...*grounded*.

⁶¹ With appropriate extensions implied for the plurals, i.e., $\text{explananda}_{\text{sent}}$ and $\text{explanantia}_{\text{sent}}$; e.g., $R, S, \dots$ are the $\text{explanantia}_{\text{sent}}$.

⁶² Insofar as propositions are structured entities.

⁶³ Cf., e.g., Audi (2012a:120), Dasgupta (2014a:3), Raven (2015:324), Schaffer (2016a:85).

expressing some $\text{explanation}_{\text{rep}}$. But even with these two notions in hand, there is likely more to be said about “explanations” and their ontology. For one thing, at least in the present context, metaphysicians don’t seem *primarily* interested in $\text{explanations}_{\text{act}}$, i.e., explanations *qua* events located in spacetime, even if they sometimes do talk of such things. That is, when the metaphysician requests an “explanation” for why, e.g., {Obama} exists, they may not be so much concerned with having someone $\text{explain}_{\text{act}}$ to them why this is so – at least, not in the first instance.

And $\text{explanations}_{\text{rep}}$ may not be the locus of core concern for some metaphysicians either. For example, when one asks for the “explanation” of WWII’s ending, one might not be asking which sentence of the form ‘WWII ended because ...’ is true or correct – at least not *primarily*. Rather, what one may want to know is what *aspect of the world* itself “explains” or “accounts for” the ending of WWII – as we’ve seen the locution used above – or, what it is that “made” WWII end. Similarly, when the metaphysician demands an “explanation” for why {Obama} exists, they may want to know what thing-in-the-world itself “explains” or “accounts for” the fact that {Obama} exists, or what “makes it the case” that {Obama} exists. This metaphysician wants to know what “generates” or “produces” or somehow “brings about” or “sustains” {Obama}, or what “brought about” the end of WWII. And it’s not clear in what way an $\text{explanation}_{\text{rep}}$ or $\text{explanation}_{\text{act}}$ can do the “accounting for” this metaphysician desires. At least in most circumstances of interest, a sentence or proposition is not anything like a *cause*, nor some non-causal determiner or “source of being”, for an entity or phenomenon of interest. No sentence nor proposition nor explanatory act “generates” {Obama} – the set – nor itself is “responsible for” the end of WWII – the event.

More specifically, neither ‘Obama exists’ nor ‘{Obama} exists because Obama exists’ – understood as sentences or propositions – *makes it the case* that singleton-set {Obama}

exists. In maintaining that they do, one might have things backward. Presumably, it is instead Obama – the person – or perhaps Obama’s existing – the fact – which, at least in part, *makes it the case* that {Obama} exists. And if so, it is perhaps also *Obama*, or *Obama’s existing*, that itself “accounts for” – again, at least in part – the truth, correctness, or otherwise aptness or success of explanations_{rep} regarding the existence of {Obama}.⁶⁴

In this way, explanations_{rep} may *somehow* report the cause or non-causal “source”, or “generator”, or “determiner” of some entity or phenomenon without *being* that very source. Thus, e.g., ‘The strawberry is colored because the strawberry is red’ may merely *report*, namely, the (at least partial) metaphysical basis of the strawberry’s being colored, without itself *being* that very basis. Something similar may hold for, e.g., ‘The window shattered because it was struck by a rock’, which reports the *cause* of the window’s shattering without *being* that very cause. So understood, it seems that what the metaphysician may crave, in the present sense of ‘explanation’, is an *ontological posit*, some thing or entity or phenomenon which *itself* “accounts for” or “is responsible for” the existence, obtaining, or properties of an entity or phenomenon of interest.

In discussing this third sense of “explanation”, we have reverted to the metaphors introduced in Chapter 2. The term ‘explain’ here seems substitutable for ‘account for’, at least insofar as both are employed in locutions like ‘The strawberry’s being red *accounts for* (*explains*) the strawberry’s being colored’. Both ‘explain’ and ‘account for’ seem to have a range of relevant readings, including those cashed out in terms of *causing*, *making*, and perhaps *non-causally determining*. Thus, for some entity or phenomenon to “explain” some other, in

⁶⁴ Or, so could one understand truth-making; cf. especially Smith & Simon (2007:88): “The core truthmaker commitment is... the demand for ontological explanation...for ontological posits that would serve to explain (account in a non-epistemic way for the truth of) propositions”.

the present sense, may be for the former to – at least in part – *cause* or *non-causally determine* the latter to exist, or to obtain, or to be thus-and-so.

For example, the lit match *caused* the fire, and so *explains* the fire. The strawberry’s being red *non-causally determines* its being colored, and so *explains* its being colored.⁶⁵ And the non-causal determination at play here *seems* to be – if discussion in Chapter 2 is on the right track – that of *constitutive determination*. So, taking our explanatory language at face-value, both causing and non-causal-but-constitutive determining are two ways that one phenomenon may “account for”, or “be responsible for”, or “bring about”, and so “*explain*” some other. Given this, perhaps if *causation* is a (robustly metaphysical) *relation* between entities or phenomena, then so too may be constitutive determination.

However, matters might not be so simple. As yet, I say nothing more, nor make any commitments. But it’s worth noting this surface similarity, as this comparison and these matters will recur below. Nonetheless, we can keep the following thesis in mind: If one thing *constitutively determines* another, then the former “explains” the latter by somehow non-causally “accounting for”, or “generating”, or “sustaining” it; and the way the former does so is merely by being the phenomenon it is, as it is. If this is right, we are still left with the question of what kinds of entities or phenomena constitutively determine others; but we will have at least come closer to identifying the phenomenon of interest in discussions of “ground”.

Following Craver (2014), let’s refer to the present account as the *ontic* conception of explanation:

Conceived ontically...the term explanation refers to...the set of factors that produce, underlie, or are otherwise responsible for a phenomenon. Ontic explanations are not texts; they are full-bodied things. They are not true or false. They are not more or less abstract. They are not more or less complete. They consist in all and only the relevant

⁶⁵ These are merely plausible-sounding examples; the ostensible relata may be contentious.

features of the mechanisms in question. There is no question of ontic explanations being “right” or “wrong,” or “good” or “bad.” They just are.⁶⁶ (2014:40)

This vision of “explanation” is also explicated by Salmon, who maintains that “actual” explanations are non-representational, non-psychological, and non-relativized to epistemic concerns (cf. 1989:133). Ontic explanations are *not* sentences or propositions tracking “full-bodied things”; rather, they simply *are* such “full-bodied things”.⁶⁷

Call an explanation *qua* “full-bodied thing” an ‘ $\text{explanation}_{\text{ontic}}$ ’, and the associated verb ‘ $\text{explain}_{\text{ontic}}$ ’. *Prima facie*, $\text{explanations}_{\text{ontic}}$ are “things” as diverse as objects, properties, relations, events, and facts, if not others – at least, we may be quick to say as much. Consider, for example: “What explains the broken window?”, asked Carlo. “*This*”, said Evelyn, picking up the *stone* on the floor near the scene of disaster. Or, maybe, “What explains (the existence of) {Obama}?” queried Carol; “(The existence of) Obama, obviously”, answered Michelle. For now, I take such usages at face value; we will eventually consider what kinds of entities may be “explanations” in the ontic sense, especially vis-à-vis “ground”.

Notably, both Craver and Salmon write on *scientific* explanation, and so their focus on $\text{explanations}_{\text{ontic}}$ *qua* the suggestive “full-bodied things” may stem from concerns with matters of *causation*. However, if we want to accept “explanations” *simpliciter* of various kinds other than *causal* – e.g., mathematical, modal-counterfactual, nomic, or logical explanations, or perhaps *metaphysical* explanations, i.e., those concerning *constitutive determination* – we may want to extend the possible ontology of $\text{explanations}_{\text{ontic}}$ to include things beyond, e.g., concrete material objects or their properties. Additionally, we may not want to prejudge a

⁶⁶ N.B.: The use-mention confusion in the first sentence of this quote is original in the text. I read the sentence as “...the term ‘explanation’ refers to...”.

⁶⁷ However, I don’t want to write off the possibility of a representation itself being an $\text{explanation}_{\text{ontic}}$ in the “fully objective” sense espoused by Salmon, insofar as a representation or “text” could somehow “generate” some other entity or phenomenon; though such a representation wouldn’t be an “explanation” for the same reasons that an $\text{explanation}_{\text{rep}}$ is an “explanation”.

global metaphysics – whether it be, e.g., ultimately material, mental, or otherwise – and so may not want to restrict ourselves to *material* objects. Let us therefore say that explanation_{ontic} are just “the set of factors that produce, underlie, or are otherwise responsible for a phenomenon”, whatever kinds of things those factors may be.

Let’s pause for notes and summary. I’ve here recognized three general ontological categories of “explanations”: acts, representations, and “things” broadly construed. “Explaining” is something agents, representations, and entities or phenomena may “do”, but in a different sense in each case.

I don’t claim that these are the only categories of explanation, but they are all at least superficially recognized by theorists of ground. Audi says that “One important way to explain something is to answer the question of why it occurs or obtains”, at least apparently a case of explaining_{act} (2012b:690-1).⁶⁸ Dasgupta writes that a “causal explanation [of a conference] might describe events during the preceding year that led up to the conference” (2014a:3). *Describing*, in this sense, seems to be something a *representation* does; if so, Dasgupta speaks of explanation_{rep}.⁶⁹ And Rosen – who takes *facts* to be “structured entities built up from objects, properties, relations and other worldly items” – often speaks of facts explaining others, in a way most plausibly read *ontically*, especially considering that he also believes “explanation is a relation among facts” (2017:299, fn. 2).⁷⁰ Thoughts like the last – that *facts* explain_{ontic} others – will be crucial in discussion to come.

⁶⁸ For other mention of explanation_{act}, see, e.g., Audi (2012b:696), Dasgupta (2014a:9; 2016:381-2; 2017:75), Fine (2001:22; 2012a:41), Raven (2015:326), Rosen (2010:117; 2017:279), Schaffer (2016a:58; 2017a:310, 317).

⁶⁹ For other mention of explanation_{rep}, see, e.g., Audi (2012a:104, 120), Dasgupta (2016:381, 2017:80), Fine (2012a:37; 2016:18), Raven (2015:324), Rosen (2010:130) Schaffer (2017a:316).

⁷⁰ For other mention of explanation_{ontic}, see, e.g., Audi (2012a:105; 2012b:696), Dasgupta (2014a:1-4, 9; 2014b:572; 2016:381-2), Fine (2001:4, 15, 22; 2010:105; 2012a:39, 40, 52), Raven (2012:689, 2015:324-6), Rosen (2017:282), Schaffer (2017a:311; 2017b:19).

Notably, *all* of our theorists of interest make at least surface recourse to *all* three forms of “explanation” in their discussion of “ground”. I believe this is quite significant. As intimated by the quotations which open this chapter, “explanation” is supposed to play a basic role in motivating at least *something* labelled ‘ground’. Knowing which sense(s) of “explanation” a philosopher has in mind may help us to understand their dialectic more clearly. And as we’ll see, our philosophers may be interested in different kinds of “explanation” in different ways, or even the same kind(s) for different reasons. That this is so, I believe, may lead to different theoretical posits being offered under the name ‘ground’.

Yet, simultaneously and unfortunately, some philosophers don’t recognize – explicitly or otherwise – the distinctions between these kinds of “explanation”. This is not necessarily a problem, as sometimes context clearly dictates which sense is (unobjectionably) operative. However, this lack of distinction may lead to a theoretically perilous conflation of the different forms of explanation. Properties or features plausibly held to apply to *one* kind are sometimes seemingly attributed to another without argument, based on what I think is a mistaken underlying belief that ‘explanation’ is univocal – i.e., that, in talking about “explanation”, we are talking about just *one* thing, when this is very likely not so. In particular, there may be a precarious fusing of *ontic* and *representational* explanation throughout grounding literature.

Even those who are explicit in picking out something precise as the referent of ‘explanation’ – like Audi with *representational* explanations *qua* propositions – sometimes lapse, perhaps unknowingly, into the language of “explanation” of other forms. Again, this itself is not necessarily a problem. It becomes one, however, when the plausibility of certain claims rests on an inappropriate or illicit elision of these forms. And I’m afraid that such confusions are responsible for certain substantial philosophical claims regarding ground and explanation that are ultimately mistaken – at least for the reasons they’re offered. The basis on which

“ground” *qua* robustly metaphysical dependence relation is taken hold *only* between *facts* may fall prey to such errors.

To see this, we must first take a more detailed look at the different forms of “explanations” we’ve acknowledged, and especially the connections between them, concentrating in particular on $\text{explanations}_{\text{rep}}$ and $\text{explanations}_{\text{ontic}}$, which seem to be of primary concern in debates on ground. This will be the focus of the next section, after which we’ll apply these ideas to ground-theoretic discourse in Chapter 4. It will be crucial for present purposes to see how different categories of explanation may interact, especially if we impose at least *some* structure on either. I stress that I aim to delineate some basic conditions and constraints that anything properly called ‘explanation’ must meet, without fully filling in the details.

b. The ways to “explain”

At this point, I think it’s worth noting explicitly that “explanation” *simpliciter* is *essentially relational*, where “relational” is read broadly, and not just as referencing *worldly* relations. Explanations of any form are always explanations *of* something, somehow. Representational explanations are “relational” insofar as they are *intentional*. To $\text{explain}_{\text{rep}}$ some entity or phenomenon, $\text{explanations}_{\text{rep}}$ must *somehow* be about or *appropriately* signify this very thing, like the extinction of the dinosaurs. Ontic explanations are relational insofar as they are *somehow* and *relevantly* connected to that which they “account for” or $\text{explain}_{\text{ontic}}$; e.g., maybe the asteroid’s hitting Earth *caused* the extinction of the dinosaurs, and so the former *event* $\text{explains}_{\text{ontic}}$ the latter. Anyone who claimed some entity or phenomenon were an

explanation, but denied it was an explanation *of* anything, would seemingly be open to rebuke; consider, e.g., “The fact that there’s a koala at the zoo is an explanation, but not of anything”.

In fact, it seems an entity or phenomenon may only be an $\text{explanation}_{\text{ontic}}$ of some other(s) insofar as it is *somehow* connected to the latter *in the first place*. And this connection must be of an appropriate sort. That is, if X $\text{explains}_{\text{ontic}}$ Y , then there must be *some* connection between X and Y by which X must somehow, and at least in part, “account for” – perhaps, e.g., causally or non-causally determine or “generate” – the existence, obtaining, or properties of Y .⁷¹ Call this connection between phenomena themselves the ‘ $\text{explanatory}_{\text{ontic}}$ connection’.

Perhaps as at least a useful heuristic, we can think of the $\text{explanatory}_{\text{ontic}}$ connection as a “consequence relation”.⁷² And if want to admit of various kinds of “explanation” – e.g., causal, nomic, modal, logical, mathematical, *metaphysical*, etc. – we can perhaps think of the $\text{explanatory}_{\text{ontic}}$ connection as being differentiated as a “consequence relation” of these kinds.⁷³ As noted, we shall call any entity or phenomenon which *ontically* explains an ‘ $\text{explanation}_{\text{ontic}}$ ’. Add that any entity or phenomenon which is ontically explained is an ‘ $\text{explanandum}_{\text{ontic}}$ ’. With these distinctions in hand, a basic structure of $\text{explaining}_{\text{ontic}}$ may be as follows:

⁷¹ Strictly speaking, we should differentiate between *full* and *partial* $\text{explaining}_{\text{ontic}}$. When I use ‘ $\text{explains}_{\text{ontic}}$ ’ without qualification, I mean the same as ‘at least partially $\text{explains}_{\text{ontic}}$ ’, unless noted otherwise. I say no more about whether their connection at this point.

⁷² Cf. Jenkins (2008). Whether we treat such “consequence” as more than a heuristic may depend on other theoretical commitments.

⁷³ N.B.: I am trying to be permissive here and realize that these kinds may not all be entirely distinct. For someone who rejects a genuine, robustly metaphysical relation of causation, perhaps “causal” explanation and (physically) nomic explanation are equivalent.

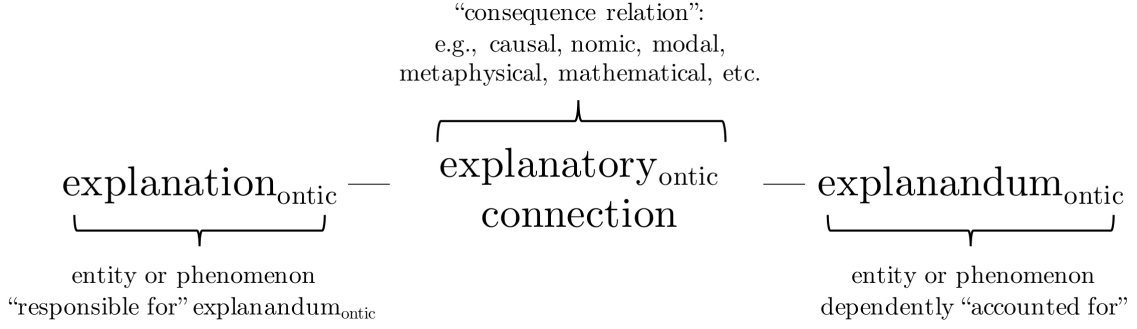


Figure 1 – Structural schema for ontic explanation.⁷⁴

Consider a simple example: Turing’s ingestion of cyanide explains_{ontic} his death. Here, the explanation_{ontic} – i.e., the explaining phenomenon – is the *event* of Turing’s ingestion of cyanide; the explanandum_{ontic} – i.e., the explained phenomenon – is the *event* of Turing’s death; and the explanatory_{ontic} connection is one of, e.g., “causal consequence”.⁷⁵

Now, it’s important to note that this structural schema is supposed to be that of the phenomena of interest themselves – i.e., of ontic explanations and explananda, and the explanatory_{ontic} connection between them – and not *necessarily* of explanations_{rep} regarding these phenomena. We shouldn’t assume from the start that, e.g., all sentences which may genuinely be explanations_{rep} – i.e., which may genuinely explain_{rep} certain phenomena – must have a form or grammar that mirrors *exactly* the phenomena with which they are concerned, as in a sort of logical atomism. In fact, I think this point is absolutely *crucial* for considerations to come.

For one thing, there are *prima facie* many different ways to *representationally* explain a single phenomenon. For example, we may be apt to formulate explanations_{rep} of Turing’s death in (at least some of) the following ways:

⁷⁴ Appropriate extensions for plural on either side are possible.

⁷⁵ N.B.: Again, I’m not claiming that events actually *are* the relata of causation; this example may be illustrative nonetheless.

- (a) Turing died because he ingested cyanide.
- (b) Turing died in virtue of the fact that he ingested cyanide.
- (c) The fact that Turing died holds because he ingested cyanide.
- (d) The fact that Turing died holds in virtue of the fact that he ingested cyanide.
- (e) It is true that Turing died because he ingested cyanide.
- (f) It is true that Turing died because it is true that he ingested cyanide.
- (g) It is true that Turing died in virtue of the fact that Turing ingested cyanide.
- (h) The truth of the proposition that Turing died is accounted for by the fact that Turing ingested cyanide.
- (i) The truth of the proposition that Turing ingested cyanide accounts for the truth of the proposition that Turing died.
- (j) That Turing ingested cyanide “explains” the fact that Turing died.
- (k) The fact that Turing ingested cyanide “explains” the fact that Turing died.
- (l) The truth of the proposition that Turing ingested cyanide “explains” the truth of the proposition that Turing died.
- (m) The fact that Turing ingested cyanide “explains” the truth of the proposition that Turing died.
- (n) The truth of the proposition that Turing ingested cyanide “explains” the fact that Turing died.⁷⁶

At least superficially, these examples make recourse to different resources, including such things as facts, truth, and propositions (i.e., the referents of *that*-clauses); and explanatory connections signified by ‘because’, ‘account for’, ‘in virtue of’, and ‘explains’. Yet even so, we may be tempted to think that they are all viable (if not equally so) explanations_{rep} of just one thing – e.g., Turing’s death (the event). But how can this be? Must we take our apparent ontological commitments at face value? Must that which these representations explain_{rep} sit

⁷⁶ I’ve purposely left “explains” ambiguous here.

on their surfaces? I think the answers to such questions are complicated, and will take some piecing together.

Remember: In being an “explanation” *simpliciter*, an $\text{explanation}_{\text{rep}}$ is *of* something, i.e., some $\text{explanandum}_{\text{ontic}}$. Given this: What must, e.g., a declarative sentence be like or “do” such that it may be properly said to $\text{explain}_{\text{rep}}$ some $\text{explanandum}_{\text{ontic}}$ – i.e., to $\text{explain}_{\text{rep}}$ *why* some entity or phenomenon exist, obtains, or is thus-and-so? Answering this question takes us into the realm of how $\text{explanations}_{\text{rep}}$ work, of what kind of structure they must have, or what information or intentional content in particular they must communicate, or on what they depend for their truth or correctness. We are thus faced with a task of offering a *model* of representational explanations.

And providing any such model may be tricky, as to be any more detailed may also be to incur substantial metaphysical or other philosophical commitments. For instance, insofar as $\text{explanations}_{\text{rep}}$ *qua* sentences or propositions are somehow *declarative* or *assertoric*, they are *prima facie* subject to at least some basic conditions for truth or correctness to which other *non-explanatory* sentences and propositions are also subject. One may therefore find one’s theories of truth, reference, meaning, and other logico-linguistic matters wrapped up in the determination of such conditions, along with one’s general inclinations regarding metaphysics and ontology.

Yet, can we say *anything* more? I think so. I want to suggest that, at least minimally, any representation may only be a representational *explanation* of some $\text{explanandum}_{\text{ontic}}$ insofar as the former *somehow* – directly or otherwise – represents or reports the $\text{explanandum}_{\text{ontic}}$ *as standing in the relevant explanatory}_{\text{ontic}}* connection to its $\text{explanation(s)}_{\text{ontic}}$. In other words, any $\text{explanation}_{\text{rep}}$ of some thing or phenomenon must *somehow* represent the latter *as being the (right sort of) consequence of* some $\text{explanation(s)}_{\text{ontic}}$, i.e., the things or phenomena that

(non-)causally “account for” or “generate” or otherwise determine the explanandum_{ontic}, the thing-to-be-explained.

One cause for concern in this regard is that there may be many ways to achieve this, to *somehow* represent or signify this explanatory connection or “consequence relation”. And such differences may cause for confusion, especially with respect to a purported underlying phenomenon of interest. As mentioned above, one paradigm way to represent the explanatory_{ontic} connection may be via the sentential connective ‘because’, as in example (a): ‘Turing died *because* he ingested cyanide’. We can also see this in, e.g., ‘The strawberry is colored *because* it is red’. In each example, the antecedent of the connective is, through employment of ‘because’, represented as *somehow* following from the consequent.

But this may not be the only way to express the relevant explanatory_{ontic} connection. And it may not even be the most perspicuous – at least insofar as we’re not concerned primarily or ultimately with representations, but rather with some phenomena they somehow report. For starters, note that in neither of the two examples immediately above does ‘because’ *alone* specify which explanatory_{ontic} connection (supposedly) obtains between (ontic) explainer and explained, between phenomena themselves; they seemingly employ ‘because’ to alternatively and somehow denote, e.g., *causing* and *non-causal-but-constitutive determining*. Note also that, given the particular sentence-joining structure of representations employing a *sentential* connective like ‘because’, it’s not clear that anything *in particular* is invoked as either explanation_{ontic} or explanandum_{ontic}. For example, insofar as we may plausibly take (a) to be an explanation_{rep} of the *event* that was Turing’s death, (a) neither refers to nor represents *directly* this entity or phenomenon, unlike, e.g., ‘Turing’s ingestion of cyanide *caused* his death’. This latter sentence employs not a sentential connective, but a *relational predicate*, one which superficially or ostensibly *directly* represents the phenomena of interest themselves

– i.e., the events that were Turing’s ingestion of cyanide, and Turing’s death – as standing in an explanatory_{ontic} connection or consequence relation, here that of *causation*.

What does this tell us? In the case of explanations_{rep} employing sentential connectives, the connected sentences themselves are not nominalizations, they aren’t terms *directly* referring to or representing some entity- or phenomenon-in-the-world which *really is* an explanation_{ontic} or explanandum_{ontic}. As such, a sentential explanation of ‘because’-connective form at best *indirectly* represents or signifies the “true” explanandum_{ontic} as *somehow* some sort of consequence of its explanation_{ontic}. But the *kind* of connection this is – e.g., metaphysical, nomic, logical, modal etc. – and the *ontological categories* of the phenomena so connected – e.g., objects, properties, events, facts etc. – are left underspecified by the connective-employing explanation_{sent} alone. One must know more about the underlying phenomenon to properly understand such explanations. Thus, it seems that explanations_{rep} of sentential-connective form allow for different underlying metaphysical pictures to be filled in and underwrite their truth or correctness.

Alternatively, when we turn to the relational-predicate approach, we at least *seem* to deal with *ontic* explanation and ontic matters straightforwardly, to *directly* represent the phenomena which may be primarily or ultimately of interest. But the problem here, I believe, is that there is no guarantee that we are doing so. I believe that some seemingly ontologically committing explanatory locutions – namely, those phrased in terms of an apparent relational predicate between apparently genuine ontic explanations and explananda – may merely be loose talk only elliptically representing the “real” phenomena of interest, if at all.

Why? I think it would be rash to believe that all apparently appropriate explanatory language must *exactly* mirror the structure(s) of the (ontic) phenomena themselves. Of course, it *may* do so. If someone asks, “Why did Turing die?”, one may suitably respond with ‘Turing’s

ingestion of cyanide caused his death’ – i.e., one may respond by referencing *directly* a particular instance of some relevant explanatory_{ontic} connection. But one may also apparently respond with ‘Turing died because he ingested cyanide’. This second response doesn’t reference the particular instance of the explanatory_{ontic} connection directly – e.g., it doesn’t “name” the connection – but nonetheless would seem to depend *somehow* on this instance for its truth or correctness, would seem to *somehow* report the relevant connection of causal consequence between the two events. And I believe that the same may hold true for at least *some* explanations_{rep} expressed in terms of otherwise apparently ontologically committing relational predicates, such as those throughout (b)-(n).

In particular, I think there are two main ways of reading these “explanatory” sentences. Firstly, even though *none* of (a)-(n) directly reference *events*, I believe all may still be plausibly read as explanations_{rep} of the event of Turing’s death. They may all be read as explanations_{rep} of just *one thing*, somehow elliptically or indirectly representing or signifying this very phenomenon *as* the (causal) consequence of another event – i.e., Turing’s ingestion of cyanide – differing in their surface grammar merely as a result of contingent peculiarities of our language. In this way, for example, the truth or correctness of (d) – i.e., ‘The fact that Turing died holds in virtue of the fact that he ingested cyanide’ – may be dependent or parasitic on the *actual* instance of the causal explanatory_{ontic} connection holding between Turing’s ingestion of cyanide and his death – two *events* – where any talk of “facts” may be dismissed as mere linguistic convenience, not representing something metaphysically robust.

Alternatively, these sentences *could* be read ontologically at face-value, and so apparently be explanations_{rep} of a smattering of different phenomena; e.g., (c) and (d) may thus be understood as explanations_{rep} of the explanandum_{ontic} that is the *fact* that Turing died, while (h) and (i) might be interpreted as explanations_{rep} of *truth* of the *proposition* that Turing

died. And, interestingly, the initially ambiguous “explains” of (j)-(n) should seemingly be read *ontically*. If so, we would here seem to have *facts*, *propositions*, and *truth* properties “accounting for” or “generating” some other thing(s).

But, which way of reading (a)-(n) *qua* (purported) explanations_{rep} is right? It depends, I think. And a narrow focus on our explanatory language may ultimately distract.

I think we may, but needn’t necessarily, take our natural-sounding explanatory language at ontological face-value. For what one believes is the “right” theory of explanations_{rep} – in the sense of what structure they must have, and what they depend on for their truth or correctness, in order to genuinely explain_{rep} some entity or phenomenon – does not seem to be an entirely isolated affair. Rather, what one believes in this regard may depend on, at least in part, one’s antecedent and more broadly metaphysical and philosophical commitments – e.g., one’s views on meaning and reference; whether one countenances, e.g., objects or facts, or objects *and* facts; and if so, maybe whether one ontological category is metaphysically prior to the other, if any. That is, are there *primarily* objects, which bear properties and stand in relations and somehow come together to form facts?⁷⁷ Or are there first and foremost facts, of which objects and their properties are derivative ontological abstractions? What one thinks about these matters will likely influence what one takes to be the right theory of the structure and correctness of explanations_{rep}.

Of course, this isn’t to say our actual explanatory language itself should play *no* role in determining the conditions for their truth or correctness, or in determining our metaphysical views and ontological commitments. Rather, our inquiries into explanation_{rep} may not be to *merely* serve a preexisting metaphysics, but *also* to shape and inform one – perhaps, e.g., via some process of reflective equilibrium, whereby beliefs about metaphysics influence beliefs

⁷⁷ As believes, e.g., Rosen (cf. 2017:299, fn. 2).

about explanation, and vice versa, on repeat. However, I believe the main point stands: we needn't take our explanatory language at face-value if we have good reason to believe some of it is merely a proxy for other, more "proper" ways of speaking. In particular, what one concludes here will likely depend on what sort of explanatory_{ontic} connections one thinks there are, and between what they obtain. And, as to be discussed, these matters may have *more* to do with broader metaphysical and theoretical considerations – e.g., whether or not we can pick out a unified phenomenon in some purported explanatory_{ontic} connection, and whether belief in it is epistemically justified – than with considerations of the grammar of our typical explanatory language alone.

Consider again Turing's death. Assume one believes in both events and facts, in some metaphysically robust way(s), and also a causal relation. Then, compare example (k) from above, and its rephrasing in terms of *events*:

(k-fact) The fact that Turing ingested cyanide "explains" the fact that Turing died.

(k-event) Turing's ingestion of cyanide "explains" Turing's death.

Now, which statement is or contains the most metaphysically perspicuous expression of the phenomenon of interest? What, if anything, "accounts for" or "explains_(ontic)" *in the first instance*? How one answers such questions may depend on antecedent metaphysical beliefs. For example, one may countenance both events *and* facts, yet believe that (k-fact) is merely a derivative if nonetheless genuine explanation_{rep}, perhaps if they believe *facts* themselves don't *really* ontically "account for" others. Perhaps an *apparent* explanatory_{ontic} connection between facts is ultimately mediated by one between events. Perhaps, for example, there are only facts about events insofar as the events occur in the first place. If so, maybe there is at best some

derivative explanatory_{ontic} connection between such facts, insofar as there is at least a *primary* connection between the events which partake in the facts; e.g.:

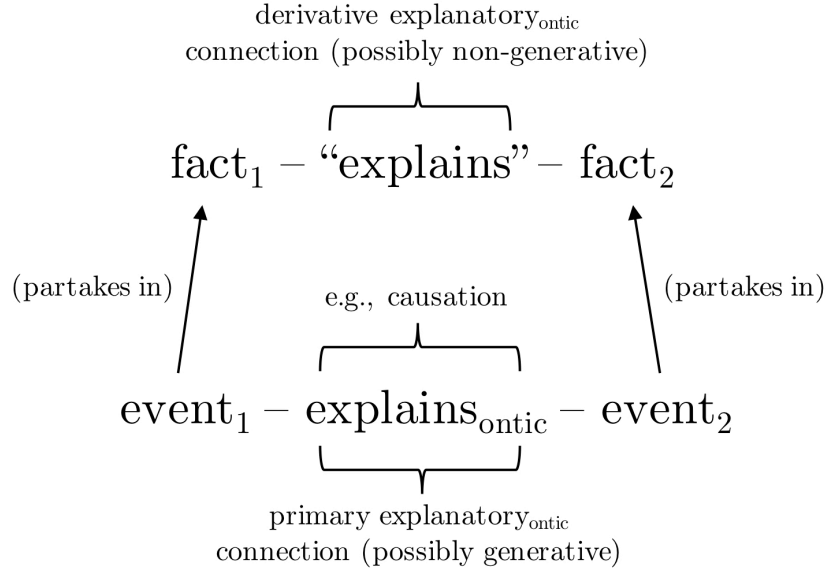


Figure 2 – Possible connections between events, facts, and
their explanatory_{ontic} connection vis-à-vis causation.

Nevertheless, (k-fact) may still be true or correct or at least assertable as an explanation_{rep} of *Turing’s death* insofar as it is properly understood to ultimately *depend* for its truth or correctness on the primary instance of a causal explanatory_{ontic} connection between *events* to which it does not directly refer.

Of course, this example may not be right, nor the only way to understand present matters. For example, if one really believes that *facts* are the fundamental ontological category, and that *facts* somehow “interact” with other facts such that the former genuinely ontically “account for” and so explain_{ontic} the latter, then perhaps the most perspicuous readings of our explanatory languages *really are* those like (k).

The general point, however, is that in merely countenancing purported explanations_{rep} like (a)-(n) as true or correct, one needn’t thereby endorse the existence of, e.g., facts,

propositions, or a metaphysically robust notion of truth. In particular, even if one is drawn to locutions like those of (j)-(n), employing “explains” ontically, one needn’t believe that the terms flanking either side of “explains_(ontic)” must refer to actual things which *really* stand in an explanatory_{ontic} connection. Certainly, one must give an alternative story regarding how or why such supposed explanations_{rep} are still somehow correct or assertable. Perhaps, as I’ve suggested, one can say: Though the examples (a)-(n) may somehow be appropriate responses to, e.g., ‘Why did Turing die?’, most or all are merely elliptical, convenient locutions which don’t directly refer to the phenomenon of interest – namely, that of Turing’s ingestion of cyanide *causing* his death – but which nonetheless *depend* on this phenomenon for their truth or correctness, when adequately understood.

If so, then one needn’t countenance such any relation that is suggested superficially by the grammar of “natural”-sounding explanatory language. In particular – and as will be critical to our discussion in Chapter 4 – just because one accepts that sentences like (k) – i.e., ‘The fact that Turing ingested cyanide “explains” the fact that Turing died’ – one needn’t by this very act countenance *facts* nor some *metaphysical relation* that holds between them. Now, one may certainly endorse the existence and/or specific accounts of things like facts, propositions, and truth too. And, one may certainly believe that these are the sorts of things that *really are* involved in ontic explanatory contexts. Perhaps, one may hold that the *truth* of one proposition really does “account for” or “generate” or non-causally determine the truth of another. But it is possible to deny as much, and provide an alternative picture of the correctness of certain purported explanations_{rep}, given their understanding of the phenomena ultimately of interest – i.e., the explanation_{ontic} and explanandum_{ontic}, and the explanatory_{ontic} connection between them, whatever it may be.

Thus, if we want to countenance, e.g., sentences similar in form to (a)-(n) as all possibly being $\text{explanations}_{\text{rep}}$ of a single phenomenon, then we may have the following as a *very* general schema for $\text{explanations}_{\text{sent}}$:

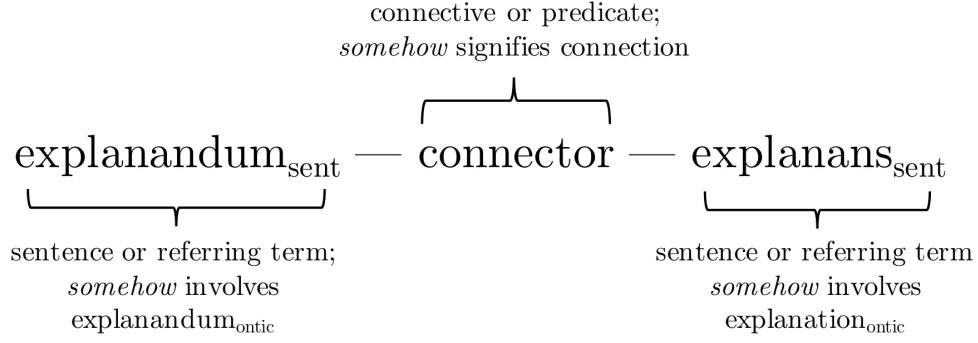


Figure 3 – Structural schema for $\text{explanations}_{\text{sent}}$.⁷⁸

I say that this schema is *very* general because even limiting ourselves to $\text{explanations}_{\text{rep}}$ *qua* sentences, it doesn't specify what form(s) the $\text{explanans}_{\text{sent}}$, $\text{explanandum}_{\text{sent}}$, and connection must have. If, e.g., (a)-(n) have appropriate structure to be $\text{explanations}_{\text{sent}}$, then the connector would seem to be capable of being at least a relational predicate or sentential connective. If so, the flanking clauses can be, e.g., nouns or sentences. It is also general because it doesn't specify whether the $\text{explanation}_{\text{rep}}$ must *directly* represent some underlying phenomenon of interest, if any. For all that's been said, indirect readings are possible, as discussed above.

⁷⁸ Where appropriate extensions are available for plural explananda and explanantia if necessary or desired.

II. Explanation meets metaphysical inquiry

The above seems plausible, though I take nothing to be conclusive. However, if these considerations of ontic and representational explanation are right, then I believe the following holds too:

Minimal Constraint on Explanation (MCE):

Any true, correct, or otherwise apt explanation_{rep} of some entity or phenomenon – i.e., an explanandum_{ontic} – depends *somehow* for its truth, correctness, or aptness on:

- (a) the explanandum_{ontic};
- (b) the entities or phenomena which “account for” or explain_{ontic} it – i.e., its explanation(s)_{ontic}; and
- (c) *some* explanatory_{ontic} connection between them.⁷⁹

Just *what* these explanatory_{ontic} connections or “consequence relations” amount to is a matter of great contention – for “explanation” in general. It’s important to note, however, what (MCE) alone *doesn’t* require. Firstly, it doesn’t require that the explanatory_{ontic} connection be a *primitive, worldly dependence relation*. Lewis, for example, held that all explanation was causal explanation (cf. 1987). But for Lewis, causation wasn’t to be understood as a primitive relation.⁸⁰ Rather, Lewisian causation is analyzed, under of his doctrine of Humean supervenience (cf. 1994), in terms of counterfactuals, which are analyzed in terms of laws, and themselves are generalizations of categorical facts. If Lewis is right, then perhaps explanations_{rep} needn’t depend on some *primitive* worldly relation for their truth.

⁷⁹ N.B.: On the intended reading, acceptance of (MCE) is not to be taken to entail endorsement to any *particular* theories of, e.g., truth, reference, or meaning. It does not entail, for example, a correspondence theory of truth. However, I take it that there will be at least *some* constraints on such theories too, depending on, e.g., how “depends” is to be filled in.

⁸⁰ At least, not like that of, e.g., Tooley (1987).

Secondly, (MCE) alone doesn't require the explanatory_{ontic} connection to be robustly *metaphysical* or *worldly*. Consider a deductive-nomological (DN) theory of explanation_{rep}, where an "explanation" is an *argument* – perhaps a set of sentences – somehow involving at least one "natural law" in a premise that, along with other premises regarding true initial conditions, deductively yields a true sentence regarding the thing-to-be-explained, the explanandum_{ontic}. On some DN models of causal explanation, there needn't be a robustly metaphysical causal relation holding between explanation_{ontic} and explanandum_{ontic}. Kim interprets Hempel, for one, as maintaining that the correctness of a DN explanation of some *event* in terms of some other(s) does *not* depend on "whether any special relationship obtains between the two events, the event to be explained and the event being invoked as its explanation" (2010:171). Rather, "the explanatory relation between [events]...collapses into a logical relation between their descriptions" (*ibid.*). Thus, as long as the premises are true, and involve a natural law, and together deductively yield (a true sentence regarding) the explanandum_{ontic}, perhaps *nothing* else must be the case. In particular, there needn't be reference to, and so needn't *be*, a robustly metaphysical relation of *causation* holding between the events of interest.

For all I've said, perhaps "having descriptions which stand in an appropriate logical relation" could be the explanatory_{ontic} connection underwriting explanations_{rep}, as there is still *some* sort of connection of "accounting for" or "generation" in the vicinity – but it's logico-epistemic rather than metaphysical. If so, such causal explanations_{rep} might *actually* be explanations of something other than we expected – i.e., not really of *causes* and *effects* as perhaps popularly understood. But how could this be so?

Let's step back a second, and ask: How does one determine what explanatory_{ontic} connections there are, what kinds of such connections an explanation_{rep} must *somehow* signify?

Again, it's here that I fear a narrow focus on modelling "explanation" can lead us astray. For what one believes in this regard seems to be parasitic or at least somehow dependent on one's larger metaphysical worldviews. Let's see by example.

For one thing, it has been a critique of, e.g., the DN theory of causal explanation that it doesn't accurately represent the (metaphysics of the) world.⁸¹ The truth or correctness of a causal DN explanation may depend, in part on explanations_{ontic} and explananda_{ontic} – e.g., perhaps on events – but it seemingly needn't depend on any *relation* which obtains between these things – i.e., a *causal relation*. It's for perhaps this reason that one may suggest the DN model is missing something – namely, that it inappropriately flouts concern for some thing's *causing* some (other) thing. Insofar as representational explanations are understood to be *answers to why-questions*, one may object that a response doesn't *really* counts as an answer if it doesn't represent *why* some event or circumstance obtained – namely, that it was *caused by* some other one.

Of course, some may find no problem with the DN model's lack of recourse to causation, especially those who find independent reason to doubt the existence of any such relation to begin with. Details aside, Hume was famously skeptical of a genuinely metaphysical relation of causation, but not *primarily* because he thought, e.g., there was an alternative "truth-maker" for causal explanations_{sent}. Rather, Hume doubted there were any necessary connections *in nature*.⁸² Russell too was skeptical of causation, arguing that science had no need for this relation, supposedly undermining reason for belief in it.⁸³ More recently, Norton has taken issue with causation from consideration of the history of science, arguing that long-standing

⁸¹ Cf., e.g., Kim (2010).

⁸² On Hume on causation and necessity, see, e.g., Morris & Brown (2017).

⁸³ Cf.: "In the motions of mutually gravitating bodies, there is nothing that can be called a cause, and nothing that can be called an effect; there is merely a formula" (1912:14)

failure to devise a notion of causality robust enough to withstand introduction of new scientific theories has “left the notion of causation so plastic that virtually any new science can be made to conform to it”, such that the notion “fails to restrict possibility and is physically empty” (2003:2).

Now, if such skeptical concerns regarding *the relation of causation* can be plausibly maintained, it’s plausible that what we often refer to as “causal” explanations needn’t depend on such a relation for their truth or correctness. For if these concerns are borne out, there *just is* no relation of causation to depend on. And if so, then perhaps a sort of non-metaphysically-relational, deductive-nomological model of explanations_{rep} becomes palatable. Perhaps all we should expect from such explanations is that they provide a sort of “nomic expectability” of the thing-to-be-explained, such that “given the particular circumstance and the laws in question the occurrence of the phenomenon was to be expected” (Hempel 1965:337). Perhaps, then, the best explanatory_{ontic} connection between, e.g., events *qua* explanations_{ontic} and explananda_{ontic} to be found is some sort of nomic, logico-epistemic consequence or connectedness.

But *these* considerations don’t concern – at least *primarily* – determining some correct model of causal explanations_{rep}. Rather, they rely on the plausibility of broader metaphysical and philosophical views. Norton doubts there is any unified phenomenon of causation. Hume was skeptical of certain kinds of necessity. Russell was concerned with the epistemic warrant we have for a belief in a causal relation. Additionally, we haven’t even considered that one might have alternative views regarding the *relata* of the causal relation, assuming there is one. As noted, the “standard view” is that the *relata* are events. However, there may be considerations that pull in other directions. Ehrling, for one, starts from the idea that causation *qua* metaphysical relation is intrinsic, transitive, and relates phenomena which are

spatiotemporally related, and argues both that events are ruled out as relata, and that “the best candidate for causal relata must be based around tropes or particularized properties” (2009:387).

With such concerns in mind, I believe that what one concludes about the truth-or-correctness-conditions for $\text{explanation}_{\text{rep}}$ will depend, at least considerably, on one’s antecedent and broader metaphysical and philosophical commitments. What counts as, and partakes in, a “real” answer to a why-question will plausibly depend on what the world is like, perhaps *ultimately* speaking. Thus, in developing theories of explanation – or in determining how, exactly, (MCE) must be met – we therefore must ask ourselves (at least) two separate but related questions:

- i) Under what general metaphysical framework or worldview are we operating?
- ii) Given this framework, on what does the truth or correctness of $\text{explanations}_{\text{rep}}$ depend?

Of course, as noted, it’s not likely that one’s antecedent metaphysics should *entirely* dictate one’s views on $\text{explanations}_{\text{rep}}$; one’s beliefs about meaning, reference, and language generally may have (enormous) impact. However, I believe it is quite plausible that what one thinks is required for the truth or correctness of $\text{explanations}_{\text{rep}}$ will depend on what one thinks the world is like.

And I stress once more: in any case of a true or correct $\text{explanation}_{\text{rep}}$, there must be *some* connection which holds between the entity-or-phenomenon-to-be-explained, and those entities or phenomena somehow invoked to $\text{explain}_{(\text{ontic})}$ or “account for” it. Just *what* this connection is and between *what* it holds, however, may be determined by broader philosophical

considerations, and needn't be read immediately off from surface grammar of explanatory language.

Crucially, I think considerations analogous to those just canvassed regarding causation and causal explanation_{rep} must be made when considering, viz., *constitutive determination* and explanations_{rep} regarding such determination. In particular, it is the connection seemingly signified by at least one sense of 'explain_{ontic}', whereby some phenomena *non-causally-but-constitutively determine* some other(s), which I believe is often and crucially at issue in the debates on ground.

For example, given the explanatory apparatus developed here, we can rephrase our initial purported examples 1-7 regarding constitutive determination as follows:

- 1". The fact that the coffee exists is "explained" by the fact that water and some other compounds are arranged thus-and-so.
- 2". The fact that strawberry is colored is "explained" by the fact that it is red.
- 3". The fact that the killing was wrong is "explained" by the fact that it produced too much suffering.
- 4". The fact that the violin is fragile is "explained" by the fact that it's made of certain molecules, atoms, etc., which are governed by certain physical laws.
- 5". The fact that the koala is tired is "explained" by the fact that its metabolic system is in state *T*.
- 6". The fact that the singleton set {Obama} exists is "explained" by the fact that Obama exists.
- 7". The fact that the batter hit a homerun is "explained" by the facts: i) that he hit the baseball over the fence; and ii) that the teams agreed to certain rules whereby baseballs hit over the fence are homeruns.

I've purposely rearticulated these examples in terms of "facts" – as in (k) above – as many in the grounding debate seem drawn to such locutions.^{84, 85} And if read at ontological face-value, then 1"-7" would *seem* to be explanations_{rep} which report instances of facts *qua* entities of some sort *ontically explaining* other facts – i.e., of some facts standing in an explanatory_{ontic} connection that is a metaphysical relation of constitutive determination.

Assume for the moment that these are genuine, true or correct explanations_{rep}. The matter we are then faced with, I believe, is one of how or why they are true – in particular, of whether we must or even *should* read these sentences at face-value, as reporting genuine instances of explaining_{ontic} among facts (or truth-properties or propositions). What do explanations_{rep} regarding constitutive determination ultimately represent or report? On what do they depend for their truth or correctness? To these matters, let us now turn.

⁸⁴ Cf., e.g., Audi (2012a:105, 2012b:693), Dasgupta (2014b:558), Fine (2012:40), Raven (2017:652), Rosen (2010:114).

⁸⁵ One also sees talk in terms of propositions and truth in this regard, as demonstrated in others of examples (a)-(n) regarding Turing's death; cf. e.g., Fine (2001:15-6; 2012a:46), Dasgupta (2017). I take the points to come to be made regarding fact-talk to also apply to proposition- and truth-talk.

4

GROUND AND EXPLANATION: A VEXED AFFAIR

Theorists of ground give at least much lip service to the role of “explanation” in motivating “ground”, and also to the place of “explanation” within a proper theory of “ground”. Audi says that the “reason we must countenance grounding is that it is indispensable to certain important explanations” (2012a:104). Dasgupta believes ground is needed for “identifying the explanatorily relevant facts responsible for producing this or that aspect of the world” – in fact, this is its *raison d’être* (2014a:11). Raven insists that ground plays “a key part of a venerable tradition concerned with metaphysical explanation” (2015:324). And as Fine quite dramatically states,

What is it to explain the appearance of a world with minds in terms of a mindless world or the appearance of a world with value in terms of a purely naturalistic world? My own view is that what is required is that we somehow *ground* all of the facts which appear to presuppose the reality of the mental or of value in terms of facts which do not presuppose their reality. Nothing less and nothing else will do. (2012a:41)⁸⁶

Such seeming consensus regarding the significance of explanation to the very *positing* of ground would be encouraging were all to agree about the nature of “explanation” as well. Unfortunately, this is not so, and (dis)agreements about explanation are mirrored in (dis)agreements about ground. With such concerns in mind, and utilizing the distinctions regarding “explanation” made in the previous chapter, I want to take a closer look at the theories of “ground” offered by our philosophers of interest.

⁸⁶ One may wonder how appropriate it is to say that *we* must somehow ground facts.

I think we may have good reason to believe 1''-7'' and other purported explanations_{rep} like them may be correct without taking them at ontological face-value. Even though some have homed in on a conception of “ground” as metaphysical dependence relation of constitutive determination holding between *facts*, I think some major reasons for doing so are misguided – even if on some views, it may be appropriate to claim that constitutive determination is such relation. I think these errors stem from a conflation of, and confusion between, ontic and representational explanation. I think that many recognize a unified phenomenon of dependence in constitutive determination, which seems to admit of a metaphysical basis, but don’t look beyond natural-sounding explanatory language to the phenomenon itself. And while it’s tough to say with certainty, I think this results in substantial part from a narrow focus on “explanation” stemming from recognition the strict metaphysical necessity with which instances of constitutive determination are supposedly imbued, which itself may be due to a lack of appropriate acknowledgement of divergent theoretical goals among philosophers interested in “ground”.

Consequently, I believe much talk of “explanation” in the context of ground lends more confusion than clarity. One thing I want to push back on is the idea that there is some *sui generis* “explanatory entity” at play in cases of constitutive determination, “a *bona fide*, distinctively metaphysical kind of explanation” which, by its very nature, is fundamentally and crucially unlike any other, perhaps more familiar, notion of “explanation” (Raven 2015:325).

Ultimately, I want to suggest that a distinction between representational and ontic explanations must be sustained, and that when we examine constitutive determination closely, we may have reason to believe that, if there is a genuine metaphysical dependence relation in the neighborhood, it is one that holds between entities of arbitrary category (as Schaffer holds; cf., e.g., 2009a). Focusing on the intuitive phenomenon of interest, we may center on a relation

by which some entities or phenomena are non-causally-but-constitutively “generated” or “produced” or “sustained” by others, or where some phenomena “metaphysically arise” out of others. I believe this understanding makes “ground” *qua* metaphysical relation most suitable for treatment of certain metaphysical debates, such as those about the connections between body and mind, the structure of objects, the relations between objects and their properties, and so on. It also lends a more intuitive account of ground-based fundamentality. Interestingly, such ideas are often hinted at by those who ultimately focus mostly or only on *facts*, perhaps led afield by the language of explanations_{rep}. Ultimately, exactly which (kinds of) entities or phenomena one believes may stand in this *grounding relation* will likely depend on one’s overall metaphysics.

I. Test cases: “explanation” and “ground”

That “ground” is thought to be *somehow* and *importantly* related to (metaphysical) “explanation” is nearly undeniable. But how and why? Let’s contrast accounts of “ground” of two theorists – Audi and Dasgupta – in order to orient our discussion around our distinctions regarding the ontology and structure of “explanation”.

a. Audi

According to Audi, “explanations...answer why-questions” (2012a:104). Moreover, Audi believes that explanations are things one can *know*, and so are best construed as propositions. Thus, for Audi, “explanations” are explanations_{prop}. He also maintains that the correctness of

such explanations is a matter of their somehow “matching up with” the structure of the world in the right way (*ibid.*:105). Why? Audi claims that explanations_{prop} are not the sort of things that can be brutally true (*ibid.*:108). Rather, “explanations require nonexplanatory relations underlying their correctness” (2012b:687). For Audi, what must be “tracked” by explanations_{prop} is the structure which “is conferred by the [nonexplanatory] determination relations that hold among the world’s inhabitants” (2012a:105). Causation is one such determination relation, which underwrites the correctness of *causal* explanations_{prop} such as ‘The window smashed because the rock hit it’.⁸⁷

According to Audi, the class of “metaphysical” explanations_{prop} of concern consists of “certain non-causal explanations, including those philosophers give, e.g., in saying that a statue has its aesthetic properties in virtue of its physical properties” (2012a:101). Given discussion in Chapter 2, together with other examples provided by Audi, I take such explanations_{prop} to be those somehow regarding constitutive determination.⁸⁸ And as they concern *non-causal* matters, causation cannot underwrite their truth. Instead, Audi posits “ground” as the pertinent determination relation, *a primitive worldly relation which holds between facts*.⁸⁹ So, the correctness of explanations_{prop} concerning not-causal-but-constitutive determination is a matter of such explanations adequately tracking this grounding relation between facts.

Importantly, Audi’s determination relations generally are to be understood as primitive, worldly relations between worldly entities or phenomena, relations of “*making so*, of *bringing about*, or of *being responsible for*” (2012b:688; emphasis original). Notably, such locutions mirror those discussed in Chapter 3 regarding *ontic* explanations. Thus, it seems that

⁸⁷ N.B.: Audi may call his determination relations “nonexplanatory”, but on the notion(s) of explanation here discussed, determination relations are seemingly explanatory_{ontic} connections, i.e., forms of explaining_{ontic}.

⁸⁸ For further examples from Audi, see, e.g., (2012a:106-7), (2012b:686).

⁸⁹ Recall Audi’s *worldly* conception of facts, according to which a fact is, e.g., “just a thing’s instantiating a property (or some things’ instantiating a relation)” (2012a:103).

Audi's determination relations are those by which some worldly entities or phenomena may "account for" or $\text{explain}_{\text{ontic}}$ others. For Audi, then, there seems to be at least one way in which some *facts* non-causally $\text{explain}_{\text{ontic}}$ others – i.e., by *grounding* or constitutively determining them. Audi's account thus meets the minimal condition on $\text{explanations}_{\text{rep}}$ of (MCE). The $\text{explanations}_{\text{ontic}}$ and $\text{explananda}_{\text{ontic}}$ are worldly facts – things' having properties – and the $\text{explanatory}_{\text{ontic}}$ connection between them is a robustly metaphysical, worldly determination relation.

Audi's position regarding the propriety of $\text{explanations}_{\text{prop}}$ is a form *explanatory realism*, a position about the nature of explanation defended by, e.g., Kim (2010) and Ruben (1990), and which has also been used in substantiating a worldly relation of "ground" by, e.g., Schaffer (2016a).⁹⁰ According to explanatory realism,

Objects or events in the world must really stand in some appropriate 'structural' relation before explanation is possible. Explanations work, when they do, only in virtue of underlying determinative or dependency structural relations in the world. (Ruben 1990:210)

The sense of explanation rendered "possible" here should be that of $\text{explanation}_{\text{rep}}$. And what renders such $\text{explanations}_{\text{rep}}$ possible are the determinative or dependency structural relations whereby some relata $\text{explain}_{\text{ontic}}$ others. Analogous views are elsewhere adumbrated in grounding literature. For example, Rodriguez-Pereyra says explanation "is not and does not account for grounding – on the contrary, grounding is what makes possible and "grounds" explanation" (2005:28). And Schaffer writes, "[e]xplanations are backed by dependence, [and] grounding and causation are forms of dependence" (2017b:11; emphasis original).

⁹⁰ Though, one which holds between entities of various ontological categories, not (just) facts.

So, putting things together: On Audi’s view, “ground” is metaphysical dependence relation of constitutive determination between *facts*, needed to ensure the truth or correctness of non-causal explanations_{prop} like those expressed in or by 1-7, insofar as any are true or correct.⁹¹ Let us call this conception of ground ‘ground_{fact}’ henceforth.

b. Dasgupta

For Dasgupta, *ground* is explicitly an *explanatory* notion (2014a:3). He says uses the term ‘ground’ to refer to both one sense of ‘because’, and to a mode of *metaphysical* or *constitutive* explanation in which the former is employed (2017:75).⁹² Additionally, according to Dasgupta, explanations are also “answers to why-questions” (2017:78).⁹³ But unlike Audi, Dasgupta isn’t explicit on what “answers” are. He says explanations are things one can “give” and “search for” (2014b:558); things which themselves “describe” aspects of the world (2014a:3); and things “typically expressed with the sentential operator ‘because’” (2014a:3). Thus, explanations seem to be *representational* for Dasgupta. And as he maintains that “grounding theorists are not committed to an ontology of propositions” (2017:80), let’s say that he conceives of “ground” *qua* explanation_{rep} as at least explanation_{sent}.⁹⁴ For Dasgupta, ground itself is thus explanation_{rep}, and not a worldly relation between facts which backs or underwrites such explanations_{rep}. Let’s call this conception of “ground” *qua* explanation_{rep} ‘ground_{exp}’.

⁹¹ I note here, again, that Audi denies that *existence* is a genuine property, and so he may not believe that those of 1-7 involving explicit attempted reference to existence are true or correct.

⁹² Dasgupta seems to use the terms ‘metaphysical’ and ‘constitutive’ interchangeably in characterizing the relevant explanations; cf. (2016: §I) and (2017: §§I and II). I take them to be synonymous for Dasgupta henceforth.

⁹³ N.B.: This would at least *seem* to suggest that, e.g., explanations_{ontic} are not “really” explanations, insofar as they aren’t *themselves* answers to why-questions, even if they can somehow *partake* or *be involved in* such answers.

⁹⁴ Dasgupta also explicitly refers to what he calls ‘grounding explanations’ as being “statements”, however the latter are to be understood (cf. 2014b:558).

Now, what makes instances of $\text{ground}_{\text{exp}}$ instances of *constitutive* $\text{explanation}_{(\text{sent})}$ in particular? Dasgupta contrasts constitutive and *causal* explanation. For example, in *constitutively* explaining the fact that some water is hot through recourse to the fact that the water has high kinetic energy, “we have not *causally* explained what brought about...the heat...we have rather explained what underlying facts *constitute* the phenomena” (2017:75; emphasis original). This offers at least a seemingly intelligible distinction between causal and constitutive explanation; the latter, perhaps, isn’t concerned with “moving and shaking” in the way the former is.⁹⁵

But we may wonder: What is it for some *facts* to “constitute” a *phenomenon*? What is it for, e.g., the fact that the water has high kinetic energy to constitute the phenomenon of the water being hot? At least *prima facie*, such “constitution” seems to be a form of *ontic* explanation. Additionally, Dasgupta claims that *aspects of the world* – objects, people, activities, etc. – are things that “explain” and “are explained”; e.g., a “single conversation might partly explain why a conference is occurring, but does not fully explain it” (2014a:3).⁹⁶ In this way, such “aspects” also seem to be $\text{explanations}_{\text{ontic}}$ of others. If so, at least *superficially*, Dasgupta seems to commit himself to things like facts, and an $\text{explanatory}_{\text{ontic}}$ connection that holds between them, as well as between “aspects of the world”.

Yet at the same time, Dasgupta claims that, in *merely* stomaching ground *qua* $\text{constitutive explanation}_{\text{rep}}$,

⁹⁵ I note that Dasgupta limits himself to *constitution* rather than *constitutive determination*, a distinction he may not recognize. Yet I think some of his examples – such as those regarding the mental and the physical are best understood in terms of the latter, for reasons similar to Audi’s worry discussed in Chapter 2 about moral properties not in *any* sense being “made up of” natural properties.

⁹⁶ Cf. also: “...the sentences in Γ describe those aspects of the world that together explain its being the case that S ” (2014a:3).

if one asserts that a meeting occurred because various people gathered in a room, one may be committed to the existence of meetings, people, and rooms, but not abstract entities such as facts or propositions (2017:79);

and that

the grounding theorist need not think that ground is part of reality; she need not think that there is some worldly item, *grounding*, that constitutive explanations track. She just thinks that some things are thus-and-so because of others. (*ibid.*:81)

There are two important claims here. Firstly, Dasgupta believes that in merely utilizing locutions like,

“The following facts—that T, that U, ... —constitutively explain why S”; or,

“The proposition that S is true because the propositions that T, that U, ... are true”,

one doesn’t by this act alone commit oneself to an ontology of facts or propositions, nor to any robust account of truth – just as we discussed in Chapter 3 (*ibid.*:79). Perhaps such locutions are shorthand for “proper” representations, and surface ontological commitments can be paraphrased away when such statements are understood accordingly.

Secondly, and *pace* Audi, Dasgupta believes that a grounding theorist can consistently maintain that “ground” *qua* constitutive explanation_{rep} does *not* require, e.g., “ground” *qua* some worldly determination or “production” relation between facts or other sub-propositional entities to underlie its correctness (*ibid.*:80). In claiming that there are true or correct instances of ground_{exp}, one needn’t *also* countenance, e.g., ground_{fact}. Thus, one interested in constitutive explanations needn’t necessarily endorse *explanatory realism*, as does Audi (and Schaffer). But why?

Dasgupta notes – as also seen above – that there are DN models of *causal* explanation_{rep} which don’t require a *worldly relation* between some sort(s) of worldly entities (*ibid.*:81); he also recognizes that this may be true for unificationist accounts of causal explanation as well, such as those of, e.g., M. Friedman (1974) and Kitcher (1981). Moreover, it’s seemingly an open question which account of causal explanation_{rep} is right.⁹⁷ Observing this dialectical state of affairs, and taking *constitutive* explanation to be appropriately comparable to its causal cousin, Dasgupta maintains that in merely countenancing constitutive explanation_{rep}, one needn’t *also* postulate some worldly relation between *facts* or entities of other sorts which is supposedly needed to underwrite it. As he puts it,

we can all give constitutive explanations without knowing what kinds of structures such explanations might track, what ontological gadgets the explanation presupposes, and so forth. (2017:76)

So, Dasgupta doesn’t endorse any particular truth- or correctness-conditions for *constitutive* explanations_{rep}, *even if* he believes some such explanations are true or correct; personally, he is undecided on such matters (2017:80). For Dasgupta, it’s plausible for a friend of constitutive explanation_{rep} to maintain merely that such explanations are *somehow* informative about why “some things are thus-and-so because of others”, without further commitment.

⁹⁷ Cf. Woodward (2017) for overview and discussion

II. Constitutive explanation – ontic or representational?

Note that both Audi and Dasgupta offer a posit called ‘ground’, but something different in each case. Dasgupta uses ‘ground’ to label a kind of representational, constitutive *explanation*; Audi uses it to refer a worldly relation of constitutive *determination* which he believes underwrites the correctness of such explanations_{rep}. Where Dasgupta countenances a kind of explanation_{rep} concerning constitutive determination, Audi accepts *both* such representational explanation *and* a worldly relation – i.e., an explanatory_{ontic} connection – of such determination underlying it.

But, who’s right? In particular, *must* we endorse Audi-style explanatory realism and so admit at least *some* worldly determination relation, whether between facts or other entities? If not, what could nonetheless permit one to utilize the language of “determining” or “arising from” or “fixing”, as does Dasgupta?

To be fair, much of Dasgupta’s (2017) is concerned with just how deflationary a theorist can be while still finding at least something answerable to the name of ‘ground’ – namely, constitutive explanation – philosophically profitable. Displeased with: the “reification” of ground as a worldly relation; treatment of ground as *metaphysically*, and not just, e.g., *intellectually* primitive; and the maintenance by some that “constitutive explanations are *objective* and *absolute*”; Dasgupta wonders just how much metaphysical baggage a theorist interested in constitutive *explanation_{rep}* can plausibly reject, while still finding it useful in “*limning many issues of intellectual interest*” (*ibid.*:78, 76, respectively).

Perhaps Dasgupta is right about some things. *Maybe* constitutive explanation is available for use by those with a wider range of metaphysical and philosophical beliefs than those largely operative – implicitly or otherwise – in the literature on “ground” thus far, such

as some sort of general realism. *Maybe*, as we’ve seen, natural-language glosses of explanatory statements don’t commit one to facts or propositions. And *maybe*, across-the-board explanatory realism isn’t right. Here, however, I believe we must once again be sensitive to the overall metaphysical pictures under which we are operating.

We can see these issues at play in Fine’s work on “ground” *qua* constitutive explanation. For Fine, “ground” is *explicitly* understood to be “a distinctive kind of metaphysical explanation” (2012a:37). Yet, though Fine spills much ink on “explanation”, he isn’t explicit also about what “explanation” *is*, especially regarding whether he conceives of it as representational or ontic. Part of the reason for this is a desire to be neutral, like Dasgupta, on the existence of things like facts, propositions, certain worldly relations, theories of truth, and so on; and also to be neutral on particular accounts of such things, if at all endorsed.⁹⁸

Yet I believe there’s a deeper, stronger reason for Fine’s neutrality – intended or not. Fine recognizes, it seems, that not just “explanation” is at issue, but *entire metaphysical worldviews*. It’s worth noting that Fine believes that “the principal importance of the notion [of ground *qua* constitutive explanation] is to the question of reality” (2012a:40); and that “Questions of ground...are *central* to realist metaphysics. Indeed, if considerations of ground were abolished, then very little of the subject would remain” (*ibid.*:41). But he says that it’s “hard to say in general what constitutes a constitutive explanation” (2015:296). How do we square the purported difficulty of precisely delineating some notion – i.e., constitutive explanation – with the contention that this very notion is at the heart of our investigations? How are we supposed to employ it in adjudicating metaphysical disputes if we have difficulty understanding it?

⁹⁸ Cf. (2012a:46-7), and especially (2001:16).

Matters become even more acute when we consider the details of Fine’s proposal, on which ground *qua* constitutive explanation is supposed to be a notion so metaphysically unbiased that it is to be usefully employable

even if we decide at the end of the day to adopt a position in which the reality of the external world is rejected in favor of the reality of a purely phenomenal world or in which fictional characters are dismissed in favor of the literary works or acts by which they are introduced. (2012a:41)

But if so, then constitutive explanations – and in particular, if understood representationally, on what such explanations depend for their truth or correctness – cannot assume any particular metaphysics from the start. For if the *basic* notion were sensitive to such issues as, e.g., the reality of the external world – if the very notion of ground *qua* constitutive *explanation* were to *prejudge* such substantial metaphysical matters – then it quite plausibly may not be able to be anything like a neutral arbiter of them.

Of course, it’s likely controversial that there could even *be* an informative or contentful notion so impartial and theoretically isolated. Unfortunately, this is not something I have space to pursue here. Regardless, the details of a theory of at least constitutive explanation_{rep} are likely to be filled in based on, e.g., one’s broader philosophical beliefs, whether they construe the world as material or mental, monist or pluralist, and so on. But I think we should note a difference between *neutrality* and *deflation* about such matters, especially regarding things that purportedly “explain” and “are explained” – i.e., those entities or phenomena which stand in the explanatory_{ontic} connection, here being some kind of constitutive determination.

To be *neutral* on the details of constitutive explanation_{rep} may be to say that there is *some* explanatory_{ontic} connection appropriately named ‘constitutive determination’, which holds between entities or phenomena *somehow* involved in constitutive explanations_{rep}, but to

be non-committal as to what, both such things and such a connection are. Neutrality may allow for different metaphysical views to fill in the details of constitutive determination.

To be *deflationary*, however, may be to say that there needn't be *any* sort of explanatory_{ontic} connection – however minimal – that *actually holds* between the things supposedly constitutively explained, and those invoked as their constitutive explanations_{ontic}. This may be possible on, e.g., a completely agent-centered, interest-dependent, anti-realism about explanation_(rep). But such a view, I believe, risks undermining the (constitutive) explanatory project, at least insofar as we take ourselves to be actually talking about *the world*. And this, it seems, at least Dasgupta does. As he repeatedly emphasizes, we are interested in “our world and not our concepts” (2017:77). As he goes on to say,

The grounding theorist insists that...the mind-body problem primarily concerns the nature of *minds*, not “minds”; that the question of [spacetime] substantivalism likewise concerns *the world*, not our way of thinking about it... [T]he worldly questions of interest...are, rather, questions of explanation. What explains (in the constitutive sense) the mind? What explains physical geometry? (*ibid.*:77-8; emphases original)

[E]xplanations—both constitutive and causal—generally concern worldly phenomena, not representations of such. When I ask what constitutively explains why there is a meeting occurring, I am asking why there is *a meeting*, not why some proposition or representation of the meeting is true. (*ibid.*:80; emphasis original)

If we are interested in “questions of [constitutive] explanation”, and we are also interested in those regarding *the world*, then there must be available at least *some* account of such explanations according to which they properly concern (things in) the world.

The problem is that on pragmatic or other deflationary views about explanation *simpliciter*, we risk demoting explanation to being merely a conceptual matter, and if so, risk not talking about the world. Explanation, remember, is an essentially relational phenomenon.

I think this is indisputable, and a claim to the contrary changes the subject. If so, there must be *some* connection *somehow* signified by involved in an explanation_{rep} of any sort. But if this connection isn't one between things-in-the-world, then among what may it hold? What seems to be the most obvious alternative is, e.g., concepts. But if the correctness of explanations_{rep} depends only on some connection between concepts, it seems implausible to maintain that these very explanations_{rep} would still somehow be about the world and the entities or phenomena which populate or partake in it.

This is not to say that pragmatic or deflationary views about explanation are entirely untenable. It *is* to say, however, that such views are (likely) untenable for those who take themselves to be interested in what they believe are genuine issues of realism, and who believe that they can and really do, at least sometimes, talk about the world. And if so, and if we are concerned with explanations_{rep} regarding some entities or phenomena in terms of some others, then there must be *some* sort of “accounting for” connection, however minimal, between these actual things.

Now, one may understandably not feel justified to posit, e.g., a worldly relation between facts, merely to ensure the truth or correctness of explanatory certain claims and as discussed, paraphrases may be available. However, it is *exactly* the senses of connectives like ‘because’, and predicates like ‘accounts for’ and ‘explains’, to which Dasgupta defers which are at issue in debates about “ground”, and which theorists like Audi, Schaffer, and Rosen have worked to clarify. Merely saying that, e.g., “*x* because *y*” in some “particular sense” of ‘because’ is of little help without further elucidation of this “particular sense”. And it’s also of little help to simply substitute some other supposedly synonymous words for ‘because’ without *any* accounts of their meanings either.⁹⁹

⁹⁹ Cf. Dasgupta (2014b:558) for a menagerie of supposed synonyms.

Now, Dasgupta, and similarly Fine, are likely aware of these issues, and may not be trying to say more about them. Even so, we are left with minimal insight into the phenomenon of interest – i.e., that which Dasgupta calls “constitution”, or which I’ve more broadly called “constitutive determination” – without *some* positive proposal as to: the meanings of the “explanatory” metaphors and connectives; or the conditions under which representations which employ such terms are true; or, even the conditions under which, e.g., a sentence counts as a constitutive explanation_{rep} at all. An intuitive grasp can only do so much, and a shortage of explication makes it difficult for one to determine what to believe more precisely.

But if the understanding of “explanation” as *somehow* non-trivially dependent on metaphysics is right, then unfortunately, to be more specific one may incur at least some substantial commitments. Audi is explicit on this score: “My approach here will be to elucidate grounding within the boundaries set by some of my other metaphysical positions” (2012a:102). The best we can do without *any* further metaphysical detail is perhaps to claim that whatever is “explained” by some explanation_{rep} *must be somehow and relevantly connected* to whatever is invoked as its explanation(s)_{ontic}, i.e., to whatever “accounts for” it.

At this point, I think it’s worth asking: Are we *merely* concerned with delineating, to the extent possible, the basic structure of some kind of *representational* constitutive explanation *prima facie* serviceable by theorists with any manner of metaphysical leanings? Or, are we rather inquiring about such explanations in attempts to aid and build a more specific metaphysical picture of the world? If the latter, we may have to bring at least some metaphysical views to the table, for it would be difficult to say much about what constitutive explanations_{rep} are to communicate or report without any idea of, e.g., what (kinds of) things there are to report in the first place.

Ultimately, I think that those like Dasgupta and Fine have mostly attempted to do the former and have been motivated to recognize this kind of explanation not least because “it is needed to formulate many core philosophical issues” (Dasgupta 2014a:1). Alternatively, others like Audi, Schaffer, Rosen, and Raven have tried to fit constitutive explanation into their respective (realist) metaphysics. Audi, we’ve seen, is explicit regarding these matters, and he also recognizes the shortcomings of his approach:

The cost of working within these assumptions is that the resulting theory will not serve to adjudicate certain metaphysical disputes that one might have thought grounding was supposed to help settle. (2012a:102)

So, where are we left? It seems that different philosophers may have arrived at different theories of “ground” in (large) part on the basis of engaging in different theoretical tasks. Maybe this isn’t too worrisome; maybe real *agreement* is masked by mere terminological discrepancies. However, upon closer inspection, and even limiting ourselves to a broadly realist metaphysics, significant discord remains. While some may remain agnostic about whether there is, namely, a grounding *relation* in addition to (representational) grounding or constitutive *explanation*, others have more to say. And among them, there are different *robustly metaphysical, worldly* relations of constitutive determinations countenanced for different reasons, all christened ‘ground’.

In the space remaining, I would thus like to consider how to best understand constitutive *determination* and constitutive *explanation_(rep)* within a broad sort of metaphysical realism, according to which:

- (i) there is a “mind-independent”, external world, containing at least *some* entities or phenomena like objects, properties, relations, facts, states of affairs, events, and so on;
- (ii) representations that *purport* to be about worldly entities or phenomena *really can be* or *are* about them; and
- (iii) there are, or could be, true or correct explanations_{rep} about such worldly entities or phenomena in terms of some other(s).

Ultimately, to achieve this, I believe that philosophers operating in such a context need to examine their metaphysics more closely, and to refine their discourse regarding “explanation” so as to avoid obfuscation and error. Let us now see how and why.

III. Constitutive explanation and metaphysical realism: towards a “grounding” relation

Recall that, basically, all we were earlier left with from Dasgupta was a claim to the effect that it is sometimes appropriate to say that “some things are thus-and-so because of others”, where ‘because’ is to be understood in *some* constitutive-and-not-causal sense. Yet, even if the basic distinction between *cause* and *constitution* is intuitively intelligible, this alone doesn’t tell us what justifies our taking constitutive explanations to concern, namely, the *world and its inhabitants* – e.g., people, minds, spacetime, meetings, baseballs, holiday parties etc. – as opposed to, e.g., concepts of such things.

If so, must say more. Yet we may, like Dasgupta or Fine, be unsure whether one must endorse Audi-style explanatory realism – according to which *all* explanations must be underpinned by determination relations – perhaps due to qualms about recognizing entities

such as *facts* for the singular purpose of accounting for the correctness of (constitutive) explanations. Given this, can one maintain a broad sort of metaphysical realism while both respecting at least *some* seemingly important sense of ontological neutrality – such as that about the existence of entities like facts and propositions, or that regarding specific metaphysical theses about, e.g., the connections between moral or and natural properties, the structure of objects, or the nature of the mental – and simultaneously being more specific than have been Dasgupta and Fine? Can we say anything more about what’s going on beneath the surface of constitutive explanations_{rep}?

I think we can, and that Fine’s work can assist in this regard. There remains a tension with attempts to deflate constitutive explanation, while preserving the supposed and sometimes explicit *metaphysicality* with which it is concerned, insofar as one is also concerned with realism as delineated above. Given this metaphysicality, there may be good reason to believe the explanatory_{ontic} connection which constitutive explanations_{rep} involve, or which they somehow signify or represent or report, is a genuine *metaphysical dependence relation*. If so, we are then tasked with is determining the nature of this relation. And I think that a strict focus on “explanation” and its surface grammar lead misidentification of the correct posit, due to a lack of distinction between explanation_{ontic} and explanation_{rep}.

A note before continuing: I’m not primarily concerned here with *defending* any particular conception of “ground”, nor the “usefulness” of the notion to begin with, especially from objections like those made by J. Wilson (2014) and Koslicki (2015). Unfortunately, I don’t have the space to do so here. Rather, I am interested in attempting to determine the most plausible account of the “grounding relation”, *given* recognition of some unified phenomenon of constitutive determination, and *given* a broadly realist context.

Thus, let's first turn to the supposed "metaphysicality" of constitutive explanation, and then to consideration of a relation of ground.

a. The 'metaphysicality' of "ground"

Even though Fine is "officially" neutral on the precise details of constitutive explanation_{rep} – i.e., neutral regarding the truth-or-correctness-conditions of such explanations – he sometimes uses language which is curiously "metaphysical".

As noted, Fine takes "ground" to be a "form of explanation". But the way in which he does so is unclear. He uses the term 'ground' to variously refer to, for example:

- (a) "an explanatory relation" (2001:15);
- (b) "a distinctive kind of metaphysical explanation" (2012a:37);
- (c) "a constitutive form of determination" (*ibid.*); and
- (d) "a *metaphysical form of explanation in its own right*" (*ibid.*:42; emphasis fine).

Given such statements, it's worth asking: Does Fine actually take "ground" to itself be a metaphysical phenomenon – i.e., is "grounding" a robustly metaphysical form of explaining_{ontic}? Or is "ground" to be understood as "explanation" in *some* representational sense, which is merely "distinctive" in concerning a distinctive, and distinctively metaphysical, subject matter – i.e., that of constitutive determination (the details of which are left underspecified)?

On their own, perhaps such remarks about a *relation*, a form of *determination*, and a form of explanation *in its own right* can be paraphrased away. Yet they may become more difficult to tolerate after rumination on ground's supposed metaphysical import. Much of Fine's

work in his (2001) and (2012a) is concerned with a properly “metaphysical conception of reality” and the “essentially metaphysical matter of determining what grounds what” with which questions of realism for various subject-domains are concerned (2001:15). Fine also says about ground things like:

The relationship of ground is a form of explanation; in providing the ground for a given proposition, one is explaining, in the most metaphysically satisfying manner, what it is that makes it true. (*ibid.*:22)

In what, one may wonder, does “ground” *qua* representational constitutive explanation consist if it’s supposed to supply the most *metaphysically satisfying* explanation of phenomena?

To throw a final wrench into things, Fine appears to analogize *causation* with *constitutive determination*:

there may be a distinctive kind of metaphysical explanation, in which explanans and explanandum are connected, not through some sort of causal mechanism, but through some *constitutive form of determination*. I myself have long been sympathetic to this idea of *constitutive determination* or “*ontological ground*”. (2012a:37; emphases mine)

Given this surface analogy, and given *also* that Fine uses ‘constitutive determination’ and ‘ontological ground’ apparently interchangeably, why aren’t we to think that ground itself is a metaphysical phenomenon like that posited by Audi? Is the intention of this comparison to strongly analogize causation *qua* robustly metaphysical relation, and *constitutive determination*? If Audi is right that causal *relations* back causal *explanations_{rep}*; and if ground “stands to philosophy as cause stands to science” (*ibid.*:40); then why don’t grounding *relations* back grounding *explanations_{rep}*?

There thus seems to be a tension between the “metaphysicality” and the supposed ontological neutrality of ground *qua* constitutive explanation_{rep} as conceived of by Fine. One may worry that it’s unclear where this “tightest metaphysical connection” comes from if it’s not *really* metaphysical (2001:15) – a conclusion one may be tempted to make in light of Fine’s ostensible shirking of ontological commitment. How are we to resolve such tension?

I think these considerations regarding the metaphysicality of ground may have important consequences when theorizing about how to model constitutive explanations_{rep} in the realist context with which we are concerned. One option in this regard may be to endorse a deductive-nomological account of *constitutive* explanations_{rep} analogous to that of *causal* explanations_{rep}. And if this is right, perhaps one needn’t endorse any robust metaphysical relation between explanation_{ontic} and explanandum_{ontic}, just as one seemingly needn’t endorse a robustly metaphysical *causal* relation in the case of causal DN explanations_{rep}.

However, one may worry that such an account wouldn’t respect the “essentially metaphysical matter” of determining “what grounds what” just canvassed. It’s worth noting a potential difference between causal and constitutive explanations in this regard. In particular, given proclivity toward realism of some form, one might see an *asymmetry* between the reasons we have for skepticism about causation and constitutive determination as being genuine, robustly metaphysical relations. Just because, e.g., Norton argued that we may sensibly doubt there is really a unified phenomenon of *causation*, this doesn’t mean that the same will hold for *constitutive determination*. We shouldn’t just assume that, whatever the dialectical state of affairs is for *causal* explanation_{rep}, the same holds true for *constitutive* explanation_{rep}.

For example, as has been noted, there is an apparent metaphysical *independence* which obtains in cases of *causation*, or at least causal *explanation*, that seems to be lacking in their supposed constitutive analogues. If so, there may be a nontrivial *metaphysical* necessitation of

some form which obtains in cases of constitutive determination. And if a determined entity or phenomenon is really something like a “metaphysical consequence” of its determiner(s), this necessitation seems to be *directional* and *non-incidental*, i.e., not merely and coincidentally covariational, as seen in Chapter 2.¹⁰⁰ This apparent necessitation is also seemingly not open to the sort problems of, e.g., preemption that causation may be, and so the connection may also be the thought to be stronger in this respect too.¹⁰¹ And adding to the potential metaphysical baggage, the connection is often taken to follow from the *essence* or *nature* of at least *some* of the entities or phenomena involved alone – in fact, by those who favor both ontologically inflationary and deflationary conceptions of ground.¹⁰²

Still, the nature of this necessitation is left open. But we might nonetheless think that the ‘because’ is significantly stronger and stricter in cases of constitutive as opposed to causal explanation, in a way that could suggest that there is or must be, namely, some *relation* which holds between the explanation(s)_{ontic} and explanandum_{ontic} *themselves*. That is, we might think that given the metaphysical baggage just discussed – at least some or even most of which might be lacking in the causal cases – the appearance of a *metaphysical relation* in the constitutive case is thus harder to reject, especially if we *also* take constitutive explanations to concern worldly entities or phenomena themselves. Insofar as “explanation” is essentially “relational” in a broad sense of the word, so that there must be *some* sort of explanatory_{ontic} connection between explanation_{ontic} and explanandum_{ontic}, the connection in this instance at least shows important signs of being *metaphysical*.

¹⁰⁰ Though, this it may share with at least some accounts of causation.

¹⁰¹ Cf. Bernstein (2016). The possibility of *grounding* preemption has been discussed, however by, e.g., A. Wilson (2017).

¹⁰² Cf., e.g., Audi (2012b: §III), Dasgupta (2014b: §V), Fine (2012a: §1.11), Raven (2015: §6.3), Rosen (2017: §I).

This is not to say that given the above considerations, there must be, viz., a single *sui generis grounding relation* in such circumstances.¹⁰³ But it does seem to suggest there is *some* sort of metaphysical relation in the vicinity. Of course, one may nonetheless have reason to be skeptical. If one has general empiricist leanings, for example, one may doubt any sort of metaphysical posit, and so not be convinced by current reflections. Or, perhaps one may think, like Lowe, that there may be relational *truths* yet no relational truth-makers (2016). But *if* one is willing to countenance metaphysical relations, and *if* considerations of *constitutive determination* both here and in Chapter 2 were of any help in providing a handle on a distinct and seemingly unified phenomenon, then perhaps we may have good reason to think there is *some* genuinely metaphysical relation of constitutive determination presently at play.

I take none of these considerations to be definitive. However, many theorists of “ground”, including those of interest here – as we’ve seen with, e.g., Audi – have been interested in treating it as a unified, robustly metaphysical phenomenon, rather than *merely* as a form of representational explanation (as may, e.g., Dasgupta). Given this, it’s worth looking at posits offered in the area. That is, let’s run with this idea, that there really is a distinctive and distinctively *metaphysical* phenomenon of constitutive determination, and that it takes the form of a metaphysical dependence relation – a “grounding” relation. What then, is this relation? Between what does it hold, and why?

¹⁰³ N.B.: Audi (2012a) thinks there is just one relation in the vicinity. Fine (2012a) differentiates between metaphysical, natural, and normative grounding. The question of the “unity” of grounding remains open; for recent defense, see Berker (2017); and for criticism, see Litland (2018).

b. The relation of *metaphysical ground*

According to Fine, “philosophy is often interested in questions of explanation – of what accounts for what – and it is largely through the employment of the notion of ontological ground that such questions are to be pursued” (2012a:40). The “accounts for” locution used here seems to be very much like that of not representational but *ontic* explanation, of some entity or phenomenon “making” another exist, or obtain, or be thus-and-so. Insofar as we are talking in such circumstances about the world and things in it, I have suggested that this sort of “accounting for” must be ultimately dependent on *some* sort of explanatory_{ontic} connection holding between at least *some* things of interest. It is one thing to be *neutral* about this connection – while maintain that nevertheless there is one – and another thing to be *deflationary* about it. If I am right about Fine’s aims in presenting his of “ontological ground”, he wanted to develop a theory that was at least largely or importantly metaphysically unbiased. Perhaps, then, some neutrality can be excused. However, Fine does have more specific things to say when pressed on the matter of what the “accounting for” of which he speaks actually amounts to.

In his introducing his notion of “ground”, Fine originally spoke in terms of “truths” *qua* propositions:

We take *ground* to be an explanatory relation: if the truth that *P* is grounded in other truths, then they account for its truth; *P*’s being the case holds in virtue of the other truths’ being the case. (2001:15)

Such talk is very much suggestive as of there being a *relation* between *propositions*, and *a fortiori* propositions. If so, it would seem that this is an account of ground according to which

some propositions or their truth explain_{ontic} others. At times since, Fine has seemingly endorsed as much.¹⁰⁴

Yet in recent work, Fine has also been amenable to the idea that

...insofar as [ground] is regarded as a relation, it should be seen to hold between entities of the same type and insofar as a choice needs to be made, these entities should probably be taken to be worldly entities, such as facts, rather than representational entities, such as propositions. (2012a:43).

This would seem to have it that *facts* are the things that stand in a metaphysical relation of constitutive determination, the things that ontically “account for” other such things. Facts are entities, on this view, and are distinct from *propositions*. Yet in the very same paper, Fine also says that, e.g., “the *fact* that the ball is red and round...[is] perhaps identical to the *proposition* that the ball is red and round” (*ibid.*:74, fn. 24; emphasis original). We are thus left wondering whether facts and propositions are identical or not, and which, if either, stand in some grounding relation to other entities of the same category.

What are we to make of all of this? How are to understand how and why Fine hops between different posits, sometimes taking some as more plausible than others, sometimes not, sometimes endorsing neutrality, sometimes not?

I want to offer a conjecture. In attempting to respect the apparently strong, unified metaphysicality with which *claims* of ground are concerned – i.e., that whereby “statements of metaphysical ground are the strictest form of in-virtue-of claim” (Fine 2012a:38) – Fine recognizes that there may have to be *some* sort of explanatory_{ontic} connection that holds between “things-in-the-world” – insofar as constitutive explanations_{rep} are genuinely concerned with such things. To figure out what this connection may be, what Fine does is then reads the

¹⁰⁴ Cf. (2012b:3; 2015:297).

natural-language explanatory statements of ground – i.e., explanations_{rep} regarding constitutive determination – and suggests taking them at ontological face-value. Thus, when confronted with purported explanations_{rep} like

8. The truth of the proposition ‘The strawberry is red’ “grounds” the truth of the proposition ‘The strawberry is colored’.
9. The truth of the proposition ‘The strawberry is red’ “explains” the truth of the proposition ‘The strawberry is colored’.
10. The fact that the strawberry is red “grounds” the fact that the strawberry is colored.
11. The fact that the strawberry is red “explains” the fact that the strawberry is colored.
12. It is true that the strawberry is colored *because* it is true that the strawberry is red.
13. It is true that the strawberry is colored *in virtue of* the fact that the strawberry is red.

the at least *prima facie* reasonable response is to believe that *if* there is some real metaphysical dependence relation of constitutive determination in the neighborhood, reported by purported explanations_{rep} like 9-13, then it *must* be one which sits on the surface of such claims, holding between facts, propositions, or the truth-properties of the latter.

Yet, as we saw in the previous chapter in examples (a)-(n) regarding Turing’s death, this needn’t be so. Assume that Turing’s ingestion of cyanide – an *event* – *really did* cause his death – another *event*. Then, even though *none* of (a)-(n) directly referenced these events, I believe they still may all plausibly be read as explanations_{rep} of the event that was Turing’s death. And I believe they all may be read this way because they elliptically, indirectly represent or somehow signify the explanatory_{ontic} connection of *causation* that holds between these events. That is, they indirectly represent the particular instance of causation, C: Turing’s ingestion of cyanide *caused* his death. And C is what may be understood to underwrite the truth or correctness of (a)-(n), not (necessarily) some relation(s) between propositions or facts.

And I believe that it is a focus on the phenomenon itself, rather than the means by which it is or may be represented, which makes this clear.

Now, I am not saying that this picture is actually right. But I do believe it is plausible and capable of being maintained by a theorist who believes there is a genuinely metaphysical relation of causation, and who believes that its relata are events. I think it is a mistake to assume that the structure or grammar of explanations_{rep} – which, *qua* answers to why-questions, may be restricted to certain forms – *must* mirror the structure of the explanatory_{ontic} connection which they (somehow) report, or which (somehow) underlies their truth or correctness. In the causal case, we may have good reason to believe that causal explanations_{rep}, even when expressed using fact-talk, do not actually – or at least *necessarily* – report a genuine metaphysical relation between, e.g., facts, at least in the first instance. If there is such a relation between facts, it may perhaps exist or obtain only derivatively on, e.g., the events or *causal* relation between events which the facts and the fact-relation somehow involve. But then we should ask ourselves: do we have reason to think similarly in the case of explanations_{rep} regarding constitutive determination?

I think we may. Let's take a closer look what some of examples 9-13 may be saying when read at face-value. Note that in both 9 and 11, 'explains' seems like it should be read in the *ontic* mode. And insofar as *truth* (*qua* property) and *facts* are not (intrinsically) representational things, 'explain' doesn't seem amenable to a representational reading here. But if so, then whatever is on the left-hand-side is ostensibly being said to "account for", or "be responsible for", or causally or non-causally determine, or "generate" what is on the right-hand-side. But then we must ask ourselves: How plausible is it that, e.g., the *truth* of one proposition *is itself responsible for* the truth of some other? How plausible is it that the *primary* explanatory_{ontic} connection is one between, e.g., the truth-properties of propositions?

Think about the matter in terms of truth-making, for a moment, and look at example 9. Here, we seem to be superficially told something like: The truth of ‘The strawberry is red’ *makes true* ‘The strawberry is colored’. But why think this is right? We may think that ‘The strawberry is red’ *qua* sentence or proposition is itself *made true* by, e.g., the strawberry’s being red, or the strawberry’s redness (trope), or the fact that the strawberry is red, or the strawberry’s particular instantiation of the redness universal, and so on. But if so, shouldn’t we think that – at least in the first instance, or at least primarily – ‘The strawberry is colored’ *qua* sentence or proposition is likewise *made true* by analogous sorts of things? Shouldn’t we think that ‘The strawberry is colored’ is *made true* by, e.g., the strawberry’s being colored, or the strawberry’s coloredness (trope), and so on – *rather* than by the *truth* of some other sentence or proposition, such as ‘The strawberry is red’?

Of course, considerations like these may lead us into muddy waters, trying to wade through issues like whether and which and how and why, e.g., propositions may have multiple truth-makers, or have their truth over-determined. Even so, I think the main point stands. I think that saying that the truth of one proposition “explains” the truth of another is – not necessarily always, but at least in many circumstances of present interest – an *elliptical* or *indirect* way of saying something else, of representing an explanatory_{ontic} connection *prior* to that of the truths of propositions. Perhaps this is, e.g., a connection obtaining between determinable and determinate properties, an instantiation of the latter “generating” one of the former, or maybe one determinate trope “producing” or “accounting for” or even “sustaining” a determinable trope. That is, *maybe* what’s *really* going on is that, e.g., the redness trope of the strawberry *itself* somehow (non-causally) “accounts for” or “generates” or “sustains” – or somehow otherwise *ontically* explains – the coloredness trope of the very same strawberry. And maybe it is *this* explanatory_{ontic} connection of constitutive determination holding between

tropes that makes it correct – albeit derivatively – to say that propositions about, or facts involving, such tropes “explain” or “ground” other such propositions or facts.

Insofar as Fine doesn’t want to commit himself to any particular such connection – perhaps to avoid prejudging substantial metaphysical matters, such as whether there really are, e.g., *tropes* – he is left with locutions like that of 9. And the strict focus on such locutions and others like it – i.e., the strict focus on the surface, “natural”-sounding language of purported explanations_{rep} – may lead us to believe that what we are *really* or *primarily* interested in – from a metaphysical point of view – is an explanatory_{ontic} connection between truth-properties, or between propositions, or between facts. But, I think, if and when further details are filled in by some particular metaphysical picture, it may become apparent that we are or may not be *primarily* interested in, e.g., the *representations* of certain entities or phenomena, nor in *facts* in which they may somehow partake.¹⁰⁵ Rather, we are or at least *may* be interested in the represented entities or phenomena *themselves*, and the explanatory_{ontic} connection(s) in which they may stand to one another.

Now, I want to stress that I don’t mean to say that there is *no way* that the relevant, primary explanatory_{ontic} connection could be one between facts or truth-properties or propositions. Rather, I believe that what one believes in this regard will depend, perhaps at least to some (considerable) extent, on the global or subject-specific metaphysical picture under which one operates. Maybe one who believes in a fact-first ontology – whereby, e.g., “the world is the totality of facts, not of things” (cf. Rayo 2017; Wittgenstein 2001 [1921]: 1.1) – could plausibly maintain that, e.g., example 11 – ‘The fact that the strawberry is red “explains” the fact that the strawberry is colored’ – when taken at ontological face-value, *really* is the most

¹⁰⁵ Depending, perhaps, on how “facts” are understood. I think I take less issue with Audi’s conception of ground *qua* metaphysical relation of constitutive determination between facts than I do with, e.g., Rosen’s, due to the particularities of Audi’s “worldly” conception of facts as just “things’ having properties”. Unfortunately, space doesn’t permit much further discussion.

metaphysically perspicuous reading of the $\text{explanations}_{\text{rep}}$ of interest, reporting a genuine $\text{explanatory}_{\text{ontic}}$ connection in which some *facts* ontically explain, or “account for”, or “generate”, or non-causally-but-constitutively determine some other(s).

But I don’t believe this *must* be so. I don’t think this matter is an all-or-nothing affair, such that one must endorse either, on the one hand, a metaphysically robust relation between things like *facts*, or *propositions*, or the *truth* of such propositions; or on the other, nothing at all, no $\text{explanatory}_{\text{ontic}}$ connection between any entities or phenomena *somehow* involved in or invoked by purported $\text{explanations}_{\text{rep}}$ regarding constitutive determination. It’s plausible and open to us to provide an alternative story, one according to which there is some genuine connection or even relation between things-in-the-world, but one which doesn’t sit on the surface of our go-to formulations of $\text{explanations}_{\text{rep}}$, yet for all that underlies the truth or correctness of the latter. We’ve seen as much in the causal case. Why may it not be so in the case of constitutive determination?

Like Dasgupta, I don’t believe that natural language explanatory claims in terms of *facts* immediately commit us to countenancing such things, nor a relation that holds between them. Representational explanations needn’t wear their underlying $\text{explanatory}_{\text{ontic}}$ connections on their sleeves. But, as I’ve suggested, I still believe there needs to be *some* such connection that holds between at least *some* entities or phenomena somehow involved in such $\text{explanations}_{\text{rep}}$, such that it *really is the case* that some such things *ontically* “account for” the former – at least insofar as we are committed to some sort of realism about the matters of interest. What I think we need to do in this regard is, while keeping an eye toward our understanding of $\text{explanations}_{\text{rep}}$, *look at the phenomenon of interest itself*. To take a line from Fine, I think that one who believes that the phenomenon of constitutive determination may *only* be understood as a relation between facts or truth or propositions “has an unduly

restricted conception” of what determines and what is determined – i.e., what kinds of things are grounds and grounded (2012a:43). And to take another,

In thinking about these matters, we need to restore ourselves to a state of innocence in which the metaphysical claims are seen to be about the subject-matter in question—be it mathematics or morality or science—and not about...the means by which it might be represented or cognized. (2001:7, 10)

To do this, let us look back to the metaphors with which constitutive determination was introduced in Chapter 2.

Start with a question: Does it seem right to maintain that facts are the *only* sorts of things that, in the present metaphysical sense, can “account for” or “produce” or “generate” or “be responsible for”? And are facts also the only such things which can be so produced? I don’t believe so. I don’t think we should write off other positions from the start. I think that instead, we should allow the possibility of a relation of constitutive determination which is neutral among the categories of its relata, and may allow for cross-categorical relations. Let us call this conception of ground *qua* worldly relation of constitutive determination between entities of arbitrary ontological category ‘ground_{rel}’.

Consider, as briefly mentioned above, the trope theorist, one who takes objects to bear particularized properties. Such a theorist may of course be apt to make an explanatory claim like ‘The strawberry is colored because it is red’. But she may nonetheless also believe that *the strawberry’s redness itself* – i.e., the trope borne or instantiated by the strawberry – may produce or generate or ontologically account for its coloredness. The redness *explains_{ontic}* the coloredness, *constitutively determines* it. The redness trope, in merely being the thing it is, as it is, determines the existence and/or properties of the coloredness trope. Or consider the case of Obama and his singleton, {Obama}. The former may perhaps be thought of as something

like the *non-causal source of being* for the latter. This is something that even a friend of facts could recognize. Obama *qua* concrete particular, it seems, stands as the *ontological foundation*, if not the *ultimate* such foundation, for the entity or phenomenon that is {Obama}, the singleton-set containing only the former President.

This conception of constitutive determination *qua* $\text{ground}_{\text{rel}}$ allows those with different metaphysical inclinations, even just among realists of various sorts, to countenance a metaphysical dependence relation of constitutive determination. For example, the bundle theorist could allow that $\text{ground}_{\text{rel}}$ relates properties with “material objects” (properly understood), such that properties *ground* – i.e., serve as a (ultimate or non-ultimate) ontological foundation for through *constitutively determining* – material objects. Similarly, the doctrine ofhylomorphism may be comprehensible in such terms; e.g., *matter* which is of, or somehow instantiates, a certain *form* constitutively determines the existence and/or properties of a concrete particular. Certain metaphysical debates could then be understood, at least in part, as being about what grounds what in a way that is *directly concerned with the phenomena themselves*, as opposed to *only* representations of the phenomena, or facts in which those phenomena partake. They could be understood as debates about how certain entities or phenomena *themselves* “arise out of” others, such as, e.g., mental properties “arising out of” or “being generated by” physical properties.

Moreover, if ground *qua* relation of constitutive determination is to be understood as the “structuring relation in the *building project* of explaining how some phenomena are “built” from more fundamental phenomena” (Raven2015:322), I think – along with Schaffer (espec. 2009a) – that this conception of $\text{ground}_{\text{rel}}$ can allow for cross-ontological-categorical conceptions of (at least relative, but not relativized) fundamentality. Of course, this is not something that all believe we must countenance. Audi, for example, distinguishes between

“explanatory” and “compositional” fundamentality – the former concerned with grounding, the latter with mereology – holding that the two are not necessarily interdefinable (2012b:710). But there may be a sense in which we want to say that, even though, e.g., the particles that compose Obama are *not* themselves members of the singleton-set {Obama}, they are still relatively more fundamental than this set. The particles constitutively determine Obama, who constitutively determines {Obama}.

And, on this topic, I believe that the present conception of $\text{ground}_{\text{rel}}$ as holding between entities of arbitrary category better respects the intuitive role that some relation of “ground” is supposed to play in conceptions and determinations of relative and/or absolute fundamentality. On Rosen’s conception of $\text{ground}_{\text{fact}}$, for example, “a fact is fundamental...if it does not obtain in virtue of other facts, and...a *thing* is fundamental if it is a constituent of a fundamental fact” (2010:112). But one may worry that this has things backwards, especially if, like Rosen, one thinks *facts* are metaphysically posterior to “things”, like material objects; according to Rosen, remember, *facts* are “built up from objects, properties, relations, and other worldly items” (2017:299, fn. 2). For on such a view, it might seem strange – or even contradictory – to say, e.g., that an object is only granted its fundamentality status by being a component of an ungrounded fact. Rather, one might want to say that an object or other entity *itself* is fundamental by being ungrounded, or by not being constitutively determined in any way by any other entity or phenomenon. What sorts of things are fundamental, on this view, can then be filled in by one’s preferred metaphysics, without needing to accept a mediator of, e.g., *facts* for this purpose (if not so desired).

Of course, none of this is to say that *facts* are not or cannot be involved in this conception of constitutive determination *qua* $\text{ground}_{\text{rel}}$. As it stands, on the conception of facts like that of, e.g., Rosen, perhaps facts themselves are *constitutively determined* by, and so

grounded_{rel} in, the objects, properties, and relations which are somehow their constituents. This may be appealing, I think, if we consider a view of facts on which they are somehow posterior to their constituents. On this view, *facts* don't constitutively generate the objects, properties, and relations which are their constituents. If this is so, then there may be a sense in which *ground_{fact}* can be subsumed under *ground_{rel}*.¹⁰⁶

Interestingly, even those who “officially” endorse a conception of the relation of constitutive determination as holding between facts sometimes lapse into talk of an explanatory_{ontic} connection between things other than facts. Audi, for example, suggests that “the wrongness of a given act is explained by its natural properties” (2012a:105); this seems to be a case in which *properties* and not *facts* “explain” other properties in the ontic sense. Moreover, while Rosen speaks primarily of *facts* “explaining” other facts, he also slips into talk of “laws”, both essential and moral, as being “unexplained explainers” (2017:291); of the *truth* of propositions “explaining” the *truth* of others (2010:126); and also of *things* whose *natures* might “explain” (2010:133) – in all cases in an apparently ontic sense. Raven discusses the *existence* of temporal snapshots of an object being “explained by” the existence of the object (2012:687).¹⁰⁷ And interestingly, even when our philosophers of interest speak explicitly in terms of facts, they often make recourse to the grounding connection as being mediated by the natures of the *objects* and *properties* involved in such facts, as opposed to the natures of the facts (cf., e.g. Rosen 2017:282; Dasgupta 2014a:9; Fine 2012a:74). If so, then why not just shoot straight for the objects and properties themselves?

The question we are then faced with, upon recognition of such surface wavering, is of what these theorists mean to speak of *primarily*. Is talk of, e.g., properties and events as

¹⁰⁶ Although, one may have concerns that *facts* don't actually constitutively determine one another, on this view, at least in the first instance, as mentioned above. The details would take some piecing together.

¹⁰⁷ Along with an interesting example of *shapes*, like triangles, “explaining” things (2017:630).

“explaining” other such things just loose language meant to stand in for talk of, e.g., *facts* as the “real” ontic explainers? Or is it the other way around? I think it depends, and in particular, and as emphasized here throughout, it depends on what metaphysical picture of the world one ultimately ends up adopting. But I believe on many views, especially those according to which *facts* are metaphysically posterior to the objects and properties by which they may somehow be composed or constituted, the latter is going to be the case; that is, I think, in most or at least very many circumstances of interest, various entities and phenomena *other than* facts may be the ontic “explainers”. Things other than facts will be, e.g., the non-causal sources of being, or generators or determiners, the phenomena from which others “arise”.

If this is right, then I think it’s worth trying to piece together how and why things may have gone astray. And as I’ve mentioned, I believe *how* this has happened has to do both with thinking that the surface grammar of explanations_{rep} must piece-for-piece match up with the structure of the world; and also with lack of recognition of the difference between, and perhaps conflation of, ontic and representational explanation. It is difficult to find explicit claims to this effect, but I nonetheless believe that some claims from friends of ground_{fact} are quite suggestive, demonstrative of the perilous ambiguity of “explanation”. I think these matters are especially apparent in the work of Raven.

Raven claims the following:

Ground leads a peculiar explanatory/metaphysical double life: a fact’s grounds *explain* it by its *holding in virtue of* them. (Raven 2012:689; emphasis original)

In calling this supposed double life “peculiar”, Raven seems to suggest that *no* other phenomenon shares these joint explanatory-metaphysical attributes in an importantly similar way. Keep this in mind. Additionally, the operative sense of “explains” is at least ostensibly

ontic, especially with the emphasis on ground’s metaphysicality; “holding in virtue of” seems analogous with our phrases of “accounting for” and “generating”. Yet, in explicitly juxtaposing “explanatory” and “metaphysical”, one might feel that Raven is suggesting that this “explanatory” aspect concerns instead *representational* explanation, co-opted into a worldly affair. This may especially seem to be so in conjunction with the suggestion that *unionists* – i.e., those who maintain that ground *is itself* a form of explanation – should hold that “Just as *some* kind of worldly explanation is given merely by citing what causes what, unionists might also say that so too *some* kind of worldly explanation is given merely by citing what grounds what” (2015:326). This is an apparent echo of a claim by Rosen, according to whom ground is “an explanatory relation—to specify the grounds for [p] is to say why [p] obtains. (2010:117).¹⁰⁸

But herein lies the issue: An explanation is “given” by “citing”, according to Raven; while for Rosen, to “specify” the grounds of some fact is to “say” why the fact obtains. But how are we to understand such things? To *cite* or *specify* seems to be something either an agent or a representational entity or phenomenon can do; let’s focus on the latter. Then, what does it mean for an “explanation” to be “given” by a representation? There seem to be two plausible readings. On the first, an “explanation” is “given” in that the representation expressed is *itself* an explanation_{rep}, because it somehow signifies or reports – at least on Raven’s understanding of ground *qua* relation of constitutive determination between facts – of what fact(s) some (other) fact is, e.g., a “metaphysical consequence”. On the second reading, an “explanation” is “given” in that the former facts are *offered* or *represented* by some explanation_{rep} *as explanations_{ontic}* of the latter fact, the explanandum_{ontic}. So, on the first reading, “explanation” is concerned in the first instance with representation; on the second, with the entities or

¹⁰⁸ N.B.: ‘[p]’ = ‘the fact that p’.

phenomena directly, but the sense in which they are “given” is still a product of *being represented* as explanations_{ontic}.

Seeing as Raven qualifies the relevant “explanation” as “worldly”, he would seem to have the second reading in mind. But if so, I fail to see how this makes it the case that, e.g.,

one of ground’s distinctive hallmarks is how it links metaphysics to explanation. Somehow, ground is *metaphysical* because it concerns the phenomena in the world itself, but also *explanatory* because it concerns how some phenomena hold in virtue of others. (Raven 2015:326)

Why? Consider that, in one of the quotes provided above, Raven compares the kind of “explanation” under consideration to that which is “given merely by citing what causes what”. But if some “worldly explanation” is given by citing what causes what, this would just seem to mean that, e.g., some event is *offered as* the explanation_{ontic} of some other event – the explanandum_{ontic} – the former “accounting for” the latter via the explanatory_{ontic} connection of *causation*, i.e., the relation between events. Reciting Rosen, to specify the *cause* of some event *e* is then to “say” why the event *e* obtains. But, this being so, is it now the case that causation *qua* metaphysical relation between events is to be understood as “explanatory” or as a “form of explanation” too? If so, great! But it should be recognized as a form of *ontic* explanation, separate from that of *representational* explanation by which it may be signified, insofar as neither events nor the causal relation in which they stand are themselves representational. But then why does ground *qua* metaphysical relation between facts lead some peculiar explanatory/metaphysical double life that isn’t also lived by causation?

Now, there may certainly be *some* sense in which “distinctive kind of explanation” is “provided” when citing what *grounds* what. For it may well be the case that the relation of constitutive determination is something like the “tightest possible connection” between

phenomena, one (always) entailing a sort of strict metaphysical necessity with which causation doesn't deal (cf. Fine 2001, 2012a). If so, then the *way* in which some entities or phenomena “obtain in virtue of” some others may differ in cases of causation and of constitutive determination, at least as regards the strength of the necessity with which this “in virtue of” locution is supposed to specify.

Yet even so, if the constant analogies with causation and causal explanation offered by proponents of ground *qua* relation between facts are to carry any weight in theorizing about and understanding constitutive determination – seen both here, and above in Fine's work – I don't see why ground-theorists fail to distinguish between “ground” *qua* some explanatory_{ontic} connection between entities and phenomena ultimately of interest, and also some form of constitutive explanation_{rep} in which the former is involved. Alternatively, I don't see why ground-theorists fail to treat *causation* as a “form of explanation_(ontic)” too. And I believe it stands to be rebutted that there is *no* sense in which *effects* “hold or obtain in virtue of” their *causes*, insofar as in both constitutive and causal cases, the determined and determiner are taken to be distinct phenomena (cf. Audi 2012a), and the determination is supposed to occur via laws of some sort, whether essential or physical (cf. Rosen 2017).¹⁰⁹ If effects really do “obtain in virtue of” their causes, but via “weaker” laws, then causation may also be seen to lead this supposedly peculiar “explanatory” life.

Now, you may be wondering: How do the considerations immediately above rely on a confusion or conflation? I believe that on Raven's view, “ground” is being recruited to play the roles of both representational and ontic explanation. It is at once the non-causal-but-constitutive “generating” relation between facts, and also something that “provides”

¹⁰⁹ Schaffer (2017a) also endorses a view of laws as being involved with “metaphysical explanations”, but is neutral as to what they involve, and rejects the essentiality view.

explanations in a way incredibly like that of representational explanations. In this vein, Raven goes on to claim: “Since ground is an explanatory *relation*, its relata must be apt for explaining or being explained” (2015:327). Apparently, this means that the “relata must concern how things are” (*ibid.*). And it is on *this* basis that Raven concludes that *facts* are the most plausible candidate for the relata of ground; objects are “disqualified for being unable give or receive explanations”, while *events* are “too concrete” (*ibid.*).¹¹⁰

I have two questions. Firstly, *why* do the relata of an “explanatory relation” have to “concern how things are”? I believe this thought comes from assuming, e.g., that whatever is true of explanations_{rep} – especially those of the sentential connective form, which involve intentional entities or phenomena like sentences or propositions – must also be true of the explanations_{ontic} or other worldly things on which the truth or correctness of the representational explanations depends. But I don’t think this can be assumed without argument, especially if, e.g., *causation* really is an explanatory_{ontic} connection, and if such “concerning how things are” is not required in the causal case.

Secondly, do *facts* really “concern how things are”? What does this even mean, anyway? It’s not clear that they do or could, if they aren’t themselves representational. Raven at least seems to be ascribing an *aboutness* to facts that they might not have. Of course, the natures of things like facts, propositions, states of affairs, and so on are controversial, and some take them to be interrelated in important ways.¹¹¹ But Raven himself states that: “a *fact* is the *state of reality* a true representation represents, not the *representation* of that state” (2015:327; emphasis original). But insofar as a fact is *not* a representation, how can we say that it

¹¹⁰ Sider, for example, has objected that particular material objects “are too unstructured too explain” (2012:161). See also, e.g., Bliss & Trogon (2016: §3), Trogon (2013:105), Raven (2015:327) for similar concerns.

¹¹¹ For example, see McGrath & Frank (2018: §9) on the connection between facts and propositions.

“concerns how things are”? A fact might be “built up from” worldly constituents without nevertheless *concerning* or *being about* such constituents.

I can only conjecture, but I think *why* this conflation has been made (if it has) has to do, at least in part, with the particular ways in which some discuss “ground” *qua* constitutive explanation_{rep}, such as Fine and Dasgupta. Some of Fine’s remarks are especially telling in this regard, such as when he says, “all that is properly implied by the statement of (metaphysical) ground itself is that there is no stricter or fuller account of that in virtue of which the explanandum [sic] holds” (2012a:39). Remarks like this, together with the supposedly strong “metaphysicality” with which ground or constitutive determination is associated, may *somehow*, perhaps, lead to the idea that such “statements of metaphysical ground” – at best explanations_{rep} – must be read at ontological face-value, as indicating some strong metaphysical dependence relation between those things superficially invoked as explanans_{ontic} and explanandum_{ontic}.

Overall, it seems that there may be some dangerous category mistakes here. These are just a few examples, and considerations of space do not permit me to reflect on others.¹¹² Even so, I think Raven’s remarks are motivated by the assumption that “ground” *qua* relation between facts is some sort of thing which at once has the features of both of ontic and representational explanation; this is why it’s treated as both a robustly metaphysical relation, and which must relate things that “concern how the world is”. But I think it is mistaken to assume this, and I believe that a theoretical distinction should be maintained on the one hand between constitutive determination *qua* explanatory_{ontic} connection *qua* metaphysical dependence relation, and on the other, constitutive *explanations_{rep}* which somehow represent,

¹¹² In particular, they don’t permit me to consider the ambiguities about how “explanations” may be “expressed”, and about how to interpret phrases like “what gets explained” and “what does the explaining”, as used by Raven at (2015:324); similar issues arise for Dasgupta (2016:381-2).

or report, or signify, or otherwise involve – directly or not – (instances of) the former. And I believe that when this distinction is maintained, and when one focuses on the seemingly unified phenomenon of constitutive determination – as adumbrated in Chapter 2 – there is a solid case to be made that, considered as a robustly metaphysical dependence relation, ground *qua* constitutive determination needn't be limited to holding merely between facts – even if it *may* hold between such things. Ultimately, however I think the details will need to be filled in by the metaphysical picture under which one operates – whether material or mental, fact- or object-first, property-focused or otherwise, and so on.

CONCLUSIONS

I believe the subject matter of “metaphysical ground” is not an easy one to penetrate, especially given the current dialectical state of affairs regarding it, in which different theorists seem to be talking about different things, with different theoretical goals in mind. As I’ve suggested, some like Dasgupta and Fine seem to want to theorize about “ground” merely as a form of *representational* explanation – one concerning matters of constitutive determination – without filling in the metaphysical details. However, I’ve also maintained that, insofar as we believe such representations concern “things themselves”, and not just our concepts nor our representations of them, there will have to be at least *some* connection between these things such that one can maintain with propriety that some such entities or phenomena really do (ontically) “explain” or “account for” or causally or non-causally determine some other(s).

In this vein, many have gone on to endorse particular metaphysical pictures of the phenomena purportedly underlying such representational explanations. Yet I am wary that the pictures they draw, or views at which they arrive, are mistakenly motivated, in particular by confusion between and conflation of the varieties of “explanation”, discussed in Chapter 3. On the one hand, “things” may “explain” by somehow *themselves* “being responsible for” the existence, obtaining, or properties of other such “things” – e.g., by *causing* them, or perhaps by *non-causally-but-constitutively determining* them. In this way, some entities or phenomena are or may be *consequences* – whether causal, essential, metaphysical, modal-counterfactual, nomic, logical, mathematical, and so on – of others. On the other hand, *representations* may also “explain” by *somehow* representing or signifying – whether straightforwardly or elliptically, directly or indirectly – such an explanatory_(ontic) connection of consequence that holds between the entities or phenomena of interest themselves. As Rosen wrote, “Philosophers are right to

be fussy about the words they use, especially in metaphysics where bad vocabulary has been a source of grief down through the ages” (2010:109). I believe the same holds true in the present context, and I strongly believe these distinctions between different forms of “explanation” must be both maintained and taken into account when theorizing about “ground”, or just about any subject in which some *things* are said to “explain” other *things*. We mustn’t allow ourselves to fall prey to linguistic or otherwise representational ambiguities.

Of course, there are *many* issues related to “ground” that I have not touched on. I have not answered any skeptical concerns. I have not considered the formal properties of the “grounding relation”. I have not considered whether the phenomenon is “really” unified, or whether there are actually several different but related grounding relations in the area – perhaps metaphysical, nomic, and normative, as believes Fine (cf. 2012a). And I have not considered whether ground *qua* metaphysical dependence relation is to be understood as metaphysically primitive. However, I believe that the right ways to think about *these* matters will themselves depend on how we are best to understand the basic phenomenon of interest, what I believe is *constitutive determination*. And insofar as much of the basic motivational and conceptual discussion of this phenomenon occurs in the context of “explanation”, I have tried to see how these notions are related, and what we are to make of the supposed connections between them. Ultimately, and I have repeatedly emphasized, I think that explanation-talk can only take us so far and is also liable to mystify and obscure. In this respect, I believe that we need to spend some time looking at constitutive determination outside the context of “explanation”, to alternatively test thoughts and intuitions about it, and to see how it fits into a larger metaphysical picture under which one operates. In so doing, I believe that at least some prominent accounts of “ground” may themselves be built on shakier ground than their proponents realize.

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