

# Replies to Cameron, Dasgupta, and Wilson

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I want to start by thanking all three commentators for their excellent, probing remarks, and for taking the time to delve so deeply into my project. I appreciate the challenges and apologize for not being able to respond to every comment in the space available to me.

## Reply to Cameron

Cameron focuses largely on material from chapters 2 and 3, about the nature of building relations and to what extent they are unified. He challenges my argument for taking building relations to be antisymmetric and irreflexive, and then offers a different reason for doing so. He argues that his reason speaks in favor of generalist monism, and finally goes on to challenge my two arguments against generalist monism. (Generalist monism, recall, is the view that there is a single most fundamental building relation that obtains whenever one of the more specific ones does.) I will take these points in roughly reverse order.

The most important thing to say is that I did not commit myself to the claim that generalist monism is false. As I said in the *précis* (and as Cameron acknowledges in a footnote), my official attitude is agnosticism. Here is what I say in the book, before offering two considerations against generalist monism:

Let me be clear: I do not take either of these to be knockdown arguments. I thus do not take myself to show that generalist monism is *false*. But the arguments taken together are powerful enough to convince me not to gamble upon it, and to prefer the weaker claim that the many relations form a unified family (2017, 24).

The two arguments in question are a) that a general relation would fail to be extensional, and b) that a general relation would fail to be antisymmetric. As for a), I think I will simply grant Cameron's point. So the question comes down to the second argument, that a general building relation might fail to be antisymmetric.

My concern was that it might be possible for different building relations to hold in different directions. I offered a couple of potential cases of this (27-8), neither of which even *I* find all that plausible, and suggested that people inclined toward monism should insist that no such case is possible. That is, monists should endorse the following principle:

If  $x$  bears (or the  $xxs$  bear) some building relation to  $y$  (...),  $y$  cannot bear any building relation to  $x$  (28).

The question at issue, as I say in the book, is whether the principle is more plausible than the examples. I chose to err on the safe side, as it were, by allowing that perhaps this principle is false. Cameron is precisely arguing that it is true, and I will turn to his argument in a moment. The point for now is more of a structural one. I opt for pluralism simply because the claim that there are a variety of building relations that share certain features is a far weaker claim than the claim that there is a single most fundamental one that obtains whenever one of the more specific ones does. The weaker claim appeals to me for two reasons. One is the general fact that weaker claims are harder to falsify. The other is that the weaker claim goes well with what I called content neutrality in the *Précis*. Still, though, to be honest I would be happy to be argued out of my agnosticism. My past self believed monism, after all (2011).

So how does Cameron's argument go? He claims that the generativity of building relations entails both i) that all such relations are antisymmetric and irreflexive, and ii) the truth of monism. Generativity, recall, says that if  $a$  builds  $b$ , it makes  $b$  exist (or obtain, etc.). Cameron's central idea is that if  $a$  makes  $b$  exist, it cannot be that  $b$  likewise makes  $a$  exist; "where did they both come from, then? ... why are either of them there in the first place?" (484). Similarly if  $a$  were to make  $a$  exist: how can something make itself exist? These considerations, he claims, establish antisymmetry and irreflexivity. He then goes on to say that "the exact same considerations that render symmetric building via one relation impossible also render impossible Bennett's scenario of two different building relations holding between two distinct things in different directions" (485). What difference does it make, he wonders, whether  $a$  and  $b$  make each other exist by the same or different building relations? In either case we have things bringing each other into existence. So he says, in effect, that the principle above is true: different building relations cannot hold in different directions, and there is no block to generalist monism.

I am sympathetic to all of this. In my heart of hearts I am on Cameron's side. The problem is that I do not take these considerations to be compelling to the true believers in reflexive or symmetric building, or the true deniers of generalist monism (as opposed to agnostics like me). Cameron is, to some extent, preaching to the choir. A committed proponent of symmetric or reflexive building is going to be just fine with the idea that some things (or perhaps just God) bring themselves into existence, and that some things bring each other into existence. They will perhaps arm themselves with David Lewis' defense of the possibility of closed causal loops in time travel stories:

But where did the information come from in the first place? Why did the whole affair happen? There is simply no answer. The parts of the loop are explicable; the whole of it is not. Strange! But not impossible, and not too different from inexplicabilities we are already inured to. Almost everyone agrees that God, or the Big Bang, or the decay of a tritium atom, is uncaused and inexplicable. Then if these are possible, why not the inexplicable causal loops that arise in time travel (1976, 149).

Mere fist-pounding about where these self-grounded or loop-grounded entities come from is unlikely to sway someone in this mindset. That is (part of) why I remain agnostic

about generalist monism, and it is why I made the argument for antisymmetry and irreflexivity that I made in section §3.2.2: *that* argument that relies on what I would have taken to be uncontroversial premises that my opponents will accept.

In a moment, I will turn to Cameron's criticism of that argument. But before doing so, I want to call attention to a further problem with Cameron's argument against the claim that different building relations can hold in different directions between the same two things—a problem I would expect the true denier of generalist monism to exploit. This is that it *does* make a difference that it is two different building relations. Consider the familiar thought that we can explain why something exists in two quite different ways: causally or constitutively (i.e., in terms of what I call 'vertical building relations'). Why does this table exist? Because some people in a woodshop made it a while ago. Why does this table exist? Because there are some bits arranged tablewise that compose it. Now, this kind of case of course involves no circle, and no self-building. Nonetheless, it is the thin end of the wedge for the sort of people who positively believe that different building relations can hold between two things in different directions. The reason is this: either sort of explanation can be put forward as a *complete account* of why the table exists. And one might think those two complete explanations contradict each other. If  $x$  is fully accounted for by  $p$ , how can it also be fully accounted for by  $q$ ? But of course there is no contradiction. There is no contradiction because the two different explanations invoke different building relations: causation and composition. Clearly, a full discussion of the interplay between how the table is caused and how it is composed must wait for another occasion; we are in the territory of Jaegwon Kim's supervenience argument (e.g. 2005) and the exclusion problem for mental causation (in the book, I discuss it briefly on 74-76). The point for now is just that most people think there is no contradiction, and if there is no contradiction, then things can be built in quite different ways by different building relations. That is the thin end of the wedge against the claim that towards the claim that different building relations can hold in different directions between the same two things.

Finally, I want to turn to Cameron's criticism of my own argument for the claim that all building relations are irreflexive and antisymmetric. My argument (40-43) is basically as follows. Suppose symmetric or reflexive building were possible. Further suppose what I call the  $B \rightarrow MFT$  principle: if  $a$  builds  $b$ ,  $a$  is more fundamental than  $b$ . These two suppositions entail that there would be reflexive and symmetric instances of the *more fundamental than* relation. But there cannot be such instances, as all relations like *taller than* or *cheaper than* or *more F than* are antisymmetric and irreflexive. So one of the two premises must go, and I argue that it is preferable to adopt an account of relative fundamentality in terms of building (of which the  $B \rightarrow MFT$  principle is one small piece) than to endorse symmetric or reflexive building. Cameron challenges this argument by denying that the relevant kind of relation must be antisymmetric and irreflexive.

A terminological note before proceeding: in the book, I call this class of relations 'comparative relations,' and Cameron adopts that usage. However, I should instead have called the class something like 'inegalitarian comparative relations'. What I had in mind was a class that includes *taller than* and *shorter than*, but does not include *the same height as*, which of course is reflexive and symmetric. Yet *the same height as* relation could reasonably be called a comparative relation! I shall thus use the 'inegalitarian' terminology in what follows. The claim under dispute, then, is that all inegalitarian comparative relations are antisymmetric and irreflexive.

Cameron argues that this claim is false if endurantism is true. After all, Cameron is taller than he used to be, and given endurantism Cameron-now is identical to Cameron-then. So, he says, *taller than* can hold reflexively over time. Similarly, Cameron now is taller than his mother was in 1985, even though in 1985 his mother was taller than him. So *taller than* can hold symmetrically over time. These claims are, crucially, about instances of the relation that obtain over time. Nothing Cameron says challenges the thought that inegalitarian comparative relations are antisymmetric and irreflexive *at times*.<sup>1</sup> But, as he points out, I claim that building relations can obtain over time. So if I want to claim that those are antisymmetric and irreflexive, and if I want to argue for that by means of the claim that *more fundamental than* is antisymmetric and irreflexive, I have a problem.

Now, I could of course reply by denying endurantism in favor of perdurantism. But Cameron is quite right that I do not want to do that. To do so would fly in the face of content neutrality. Besides, it is important to see that Cameron's claim is of independent interest, aside from the particular context of whether the *more fundamental than* relation is irreflexive and antisymmetric. What Cameron is putting on the table is a cousin of the problem of temporary intrinsics (Lewis 1986, 203-4), and I want to address it on its own terms. Is it really true that endurantists should say that *taller than* and the like can hold symmetrically and reflexively?

My own gut reaction is that they should not, and that the argument relies on the kinds of violation of the indiscernibility of identicals that are problematic for endurantists. Whatever the endurantist wants to say to that problem—to the problem of temporary intrinsics—can probably be manipulated to avoid the conclusion. I have nothing further to add about the question of the irreflexivity of inegalitarian comparative relations. But I do have more to add about their antisymmetry.

That's because it turns out that there are interesting questions here about how to think about antisymmetry over time. In particular, the following two notions are not equivalent:

Diachronic antisymmetry<sub>1</sub>:  $R$  is diachronically antisymmetric<sub>1</sub> =<sub>df</sub> for all  $x$  and  $y$  such that  $x \neq y$ , if  $x$  bears  $R$  to  $y$  at time  $t$ , there is no time  $t_n$  such that at  $t_n$ ,  $y$  bears  $R$  to  $x$ .

Diachronic antisymmetry<sub>2</sub>:  $R$  is diachronically antisymmetric<sub>2</sub> =<sub>df</sub> for all  $x$  and  $y$  such that  $x \neq y$ , if  $x$  at  $t$  bears  $R$  to  $y$  at  $t_n$ , it is not the case that  $y$  at  $t_n$  bears  $R$  to  $x$  at  $t$ .

Relations that are diachronically antisymmetric<sub>1</sub> are ones that cannot 'flip', as it were—things that stand in such relations cannot change in ways that make the relation hold the other direction at a later time. Perhaps *being a larger number than* is an example. 6 is a larger number than 5, and there's no changing things so that later on 5 is a larger number than 6. Unsurprisingly, most relations are not diachronically antisymmetric<sub>1</sub>—as Cameron points out, things change.

But antisymmetry<sub>2</sub> has nothing to do with how things change. It has to do with the nature of relations that span time, that hold between temporally separated relata. (I admit

<sup>1</sup> In a footnote, Cameron suggests that time travel cases might put pressure on this. But I have always taken time travel cases to tell against endurantism. If endurantism is true, and if ordinary concrete things (unlike universals) cannot be completely in more than one place at a time, how can I travel back to talk to my younger self?

that I am not entirely sure how an endurantist should best make sense of antisymmetry<sub>2</sub>. But if she cannot, so much the worse for endurantism. Cameron is happy to say that “Ross-in-2017 is taller than Mom-in-1985” (484); that is the kind of crosstime relation I have in mind.)

*Taller than* is not antisymmetric<sub>1</sub>; that is what Cameron’s argument shows. But it is plausibly antisymmetric<sub>2</sub>. And this is not an uninteresting, trivial feature; not all relations are antisymmetric<sub>2</sub>. *Same height as* is not. If I in 2018 am the same height as my mother in 1985, my mother in 1985 had better be the same height as me in 2018. Indeed, if you think through a raft of examples, you’ll see that all the relations you would have thought were antisymmetric before reading Cameron’s argument come out antisymmetric<sub>2</sub>; *mutatis mutandis* for the symmetric ones.

In particular, *more fundamental than* is antisymmetric<sub>2</sub>. Is it antisymmetric<sub>1</sub>? That depends on whether things can change their relative fundamentality status over time. Can *a* start out more fundamental than *b*, and later change to be less fundamental than *b*? Quite generally, whether a relation is diachronically antisymmetric<sub>1</sub> is going to depend entirely on whether things can change the properties in virtue of which the relation obtains. But regarding the issue at hand: the claim that *more fundamental than* is asymmetric<sub>2</sub> can be plugged into my argument. I thus do have an argument not only for the claim that synchronic building relations are irreflexive and antisymmetric, but also for the claim that diachronic building relations are diachronically antisymmetric<sub>2</sub>.

### Reply to Dasgupta

Dasgupta focuses on two main issues: how best to understand generativity, and our ongoing discussion about what builds the building facts. I’ll take these issues in turn.

Dasgupta suggests that I ought to say that generation is a building relation, and indeed, a special one “insofar as it characterizes the class of building relations” (490). I think he is right that given how he understands relations, there is a generation relation, and the existence of that relation makes something close to (but short of) generalism true. But it doesn’t “threaten the pure egalitarian picture we started with”, at least not on one way of understanding the generativity requirement.

Recall that I intentionally formulate the generativity requirement in terms of what is appropriate to *say*: building relations license a certain kind of talk. If a building relation obtains between *a* and *b*, it is true/apt to start saying things like ‘*b* exists because *a* does’, ‘*b* obtains in virtue of *a*’s obtaining,’ and so forth. As Dasgupta notes, I explicitly intend this to be compatible with a range of understandings of exactly *why* such talk is rendered appropriate. He quotes one passage from my book; I’ll quote another:

On one extreme is the claim that whenever a building relation obtains, a special further relation also obtains: a primitive *in virtue of* relation or something along those lines. . . On the other extreme is the claim that there is no such further relation: there is nothing but the generative talk. Why do building relations license or make true that kind of talk? They just do, as a matter of convention. . . . There are presumably positions between these two extremes as well (2017, 58-9).

Dasgupta goes on to suggest that my book contains the materials to argue against the primitive answer; I will briefly return to that later. What is on the table now is whether

my generativity requirement itself—rather than any particular backing story about why it is true—in fact posits any relation out there in the world. On the extreme that there is a primitive relation backing this ‘because’ talk, it clearly does, but the more conventionalist extreme can naturally be framed as denying that there is any generation relation—as I do both in the above passage and in the passage that Dasgupta quotes.

In footnote 1, Dasgupta acknowledges this, and says that he’s just using ‘relation’ in the thin abundant sense according to which the relation is just the set of pairs  $\langle P, Q \rangle$  such that the sentence ‘P explains Q’ is licensed. But if *this* is all that’s meant, I do not see how generation is a relation distinct from and, as it were, alongside the other building relations. Rather, it is just their disjunction. At least, because generativity is necessary for a relation to count as building, the set of pairs  $\langle P, Q \rangle$  such that the sentence ‘P explains Q’ is licensed will also include all pairs  $\langle P, Q \rangle$  such that P stands in some particular building relation to Q. Whether it includes *only* such pairs—and thus is definitively identical to the set of all instances of any particular building relation—depends on whether generativity is itself sufficient for building. I myself am inclined to think that it is, but I have not argued this. (See my discussion of Cameron’s claim that generativity suffices for antisymmetry, irreflexivity, and generalist monism. Note also that only someone sympathetic to the claim that causation is a building relation can endorse the sufficiency claim—the claim that *only* building relations license generative talk.)

To come at the same point from a different angle: on the abundant conception of properties with which Dasgupta is working, there are disjunctive relations. So take the disjunction of all the particular building relations: the set of pairs  $\langle P, Q \rangle$  such that P stands in any particular building relation to Q. This is a most general building relation which is instantiated whenever a more specific one is. This is in the spirit of what I called generalism, minus the reference to a relation’s being a *version* of another. But it is of course not generalist monism, for it does not follow that the disjunctive relation is more fundamental than the disjuncts. (See 2017, 22–24 for discussion). It also is up for grabs whether it is asymmetric; see again the exchange between Cameron and me. The question for the moment is just: how does it differ from generation in the thin sense that Dasgupta has in mind? I do not see that it does.

The upshot is that whether there is a generation relation that is a candidate for being a *member* of the class of building relations—rather than a disjunction of the members—depends on what position backs the generativity requirement. On the lightweight conventionalist view on which the only relation answering to the talk is the set of pairs, it is hard to see that it does. But on a more heavyweight view on which a distinct primitive relation is posited, the question comes alive again.

So, which is right? I hereby admit that this issue is the biggest unsettled question in the book. My neutrality on this issue might be taken to be a problem, and I agree that I should figure out what I think here. On the other hand, it was (and is) extremely conducive to my goal of setting out a framework view that can be adopted by a variety of people with quite different metaphysical commitments.

Dasgupta frames the question as whether generation is joint-carving: is one of “countless generation-like relations” (491) metaphysically distinguished or not? I think of the question as being whether or not there is a (perhaps) fundamental generation relation, distinct from the building relations I started with, that obtains whenever the building relations do. And, for the record, the kind of conventionalism I had in mind is an analogue of Ted Sider’s conventionalism about modality. He says that there are various different

kinds of truth—mathematical, metaphysical, etc.—and how they are classified into kinds is not conventional. What's conventional is rather which kinds of truth get deemed to be necessary. In the case at hand, the analogue conventionalist view is that there are a variety of antisymmetric, irreflexive, necessitating relations, and what is conventional is which of those license 'in virtue of' and 'because' talk.

Dasgupta suggests that some styles of argument that I use elsewhere in the book can be deployed against the claim that there is a distinct, robust generation relation. I find Dasgupta's suggestion intriguing, though in the interests of word count I will not engage with it here. I face an embarrassment of riches, both within Dasgupta's own comments and in the fact that there are several commentaries on forthcoming on my book. I will discuss his suggestions—as well as my reliance on recombination arguments—in my forthcoming reply to commentators in *Inquiry*.

In section 3, Dasgupta returns to our ongoing discussion about the grounds of the grounding facts, and his contribution makes real progress on this issue. Let an *ordinary grounded fact* be a grounded fact that is not 'about' grounding: for example, the fact that this mug is red, or the fact that this table exists. Let a *grounding fact* be a fact that is 'about' grounding: for example the fact that *a* grounds *b*. Dasgupta is absolutely right to explicitly distinguish what he calls the "second-order" question of whether general principles belong in the grounds of the *grounding* facts from the "first order" question about whether they belong in the grounds of an ordinary *grounded* fact. Although it feels somewhat painful to inject more labels into this debate, perhaps doing so will help the discussion.

Grounded Fact Principle-ism: The grounds of ordinary grounded facts include general principles.

Grounded Fact Antiprinciple-ism: The grounds of ordinary grounded facts do not include general principles.

Grounding Fact Principle-ism: The grounds of grounding facts include general principles.<sup>2</sup>

Grounding Fact Antiprinciple-ism: The grounds of grounding facts do not include general principles.

These views can be combined in the three ways Dasgupta notes, and one more besides.

Exclusive package: Antiprinciple-ism about both grounding facts and ordinary grounded facts.

Inclusive package: Principle-ism about both grounding facts and ordinary grounded facts.

Mixed package 1: Grounding Fact Principle-ism and Grounded Fact Antiprinciple-ism.

Mixed package 2: Grounding Fact Antiprinciple-ism and Grounded Fact Principle-ism.

Finally, recall the view I endorse in both 2011 and chapter 7 of the book:

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<sup>2</sup> This is what Dasgupta calls 'connectivism' in his 2014.



Upwards Anti-primitivism: the grounds of a grounding fact are the same as the grounds invoked in the associated ordinary grounded fact: if *a* grounds *b*, *a* also grounds the fact that *a* grounds *b*.

Let me say a bit about these views and the relations among them.

One central point is that the question of whether principles belong in the grounds of grounding facts is somewhat orthogonal to the question of whether upwards anti-primitivism is true. As Dasgupta correctly points out, a view that satisfies the inclusive package can satisfy upwards anti-primitivism (and, I note, the same is true of a view that satisfies the exclusive package). This means that the mere claim that the grounds of grounding facts must include general principles—i.e., Grounding Fact Principle-ism—is therefore not a denial of upwards anti-primitivism (*contra* Dasgupta 2014 and Rosen 2017). What *does* contradict upwards anti-primitivism are the mixed packages, for they both take the grounded fact and the associated grounding fact to have different grounds.<sup>3</sup>

Further, Dasgupta is also quite right to point out that the argument he calls my “central intuition” (my p. 196) is an argument against mixed package 1. I agree. It is also an argument for upwards anti-primitivism. But it is not an argument against the inclusive package.

To locate some players: Dasgupta’s earlier self (2014) defended Grounding Fact Principle-ism and assumed Grounded Fact Antiprinciple-ism, yielding mixed package 1. If I set aside his concerns that the dispute might be verbal, his current self endorses the inclusive package. Gideon Rosen 2017 also defends the inclusive package, at least for the special case in which the grounded facts in question are legal facts.<sup>4</sup> Jonathan Schaffer (personal communication) defends the exclusive package.<sup>5</sup>

So where do I stand? One should expect me to defend the exclusive package. After all, my arguments against Dasgupta in chapter 7 (208–211) are arguments against Grounding Fact Principle-ism (and thus for Grounding Fact Antiprinciple-ism). And given my upwards anti-primitivism, it follows that I should defend Grounded Fact Antiprinciple-ism—if there is no principle in the grounds of the grounding fact, and the grounds of the grounding fact are identical to the grounds of the associated grounded fact, then there is no principle in the grounds of the grounded fact either. So that yields the exclusive package. But I am not in fact going to defend the exclusive package in full generality. That’s because I have come to see that my earlier arguments and intuitions were colored by focusing on certain kinds of case. For other kinds of case, I think

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<sup>3</sup> This is certainly true of mixed package 1, at any rate. It could be argued that a view that satisfies mixed package 2 is still in the spirit of upwards anti-primitivism. Suppose a view—I do not claim it to be plausible!—according to which *a* plus a general principle grounds *b*, and *a* alone grounds [the fact that *a* plus a general principle grounds *b*]. While the grounded fact and the grounding fact do not have the same grounds, at least the grounds of the grounding fact are *included* in the grounds of the grounded fact. Nothing extra is brought in.

<sup>4</sup> Arguing for what I call Grounded Fact Principle-ism about legal and moral facts is one of the main points of the paper, but he also endorses Dasgupta’s Grounding Fact Principle-ism (284–5) along the way. He flirts with a fully general version of Grounded Fact Principle-ism (283–4), and thus with endorsing the inclusive package about all grounded facts, but in the end does not commit to it (esp. 298).

<sup>5</sup> Schaffer does think general principles have an important role in metaphysical *explanation*, but denies that they belong in the *grounds*. He is a separatist about grounding and metaphysical explanation: ground backs metaphysical explanation, but is not identical to it. The separatism is key to his defense of the exclusive package.



Grounded Fact Principle-ism is correct. That means that for certain kinds of case the inclusive package may be correct.

How can the exclusive package be the right way to go in some cases but not others? I increasingly think that the issues here turn on general questions about how general principles relate to their instances, and that the answers to those questions may be different in different domains.

In particular, I think Gideon Rosen is probably right that legal facts—that a certain building is illegal, or that two particular people are married—are partially grounded in general principles. Rosen says, for example,

while it would be fine to *say* that the building is illegal because it's a six-story building on Main Street, this is shorthand. A full grounding explanation must cite this pre-legal fact together with a general legal fact, e.g., the fact that according to provision 20.3(c) of the building code, for all  $x$ , if  $x$  is a six-story building on Main Street,  $x$  is illegal (2017, 286).

I agree. Neither the building itself nor the fact that it is six stories tall has the power, as it were, to generate the fact that the building is illegal. To use a phrase I've used before, the illegality fact can't just "unfold upwards" from the building's height (2011, 33; 2017, 196), because it is factors extrinsic to the building that do the work. The general principle needs to—as it were—hook onto the building's height and pull up the fact that the building is illegal. Grounded Fact Principle-ism is true of legal facts.

Note that I am talking in a very 'governing' way about the legal principles. They do work; they do not merely describe. The crucial point here is one that Rosen notes (287): no one is a Humean about the building code, or about laws of this sort more generally. Obviously the building code governs rather than merely describes; obviously it is not grounded in its instances, but rather in some to-be-specified complex social activities and agreements.

I take this to be centrally important. In my book, I engaged in some hazy rumination about the relation of the debate about what grounds the grounding facts to debates about Humeanism (212–13). Here, I'll tentatively add something more concrete. Hypothesis: whether a general principle can figure in the grounds of a fact—whether an ordinary grounded or a grounding fact—depends upon what grounds the generalization. If the generalization is grounded in its instances, or at a minimum plausibly taken to be temporally posterior to its instances, it cannot figure in the ground either the grounding facts or of ordinary grounded facts. But if it is otherwise grounded, or at least plausibly taken to be temporally *prior* to its instances, perhaps it can figure in both.

Consider again Rosen's general legal fact: for all  $x$ , if  $x$  is a six-story building on Main Street,  $x$  is illegal. As I've already noted, this is not grounded in its instances. It is also temporally *prior* to its instances in the sense that the generalization can perfectly well be true before there are any illegal 6 story buildings on Main Street. Indeed, it need not have instances at all. This is a special feature of legal—and perhaps other normative—generalizations. They can work like that, because they aren't exactly about how the world already is, but rather about how it *ought to be*.

Normative generalizations are probably not the only example. Consider generalizations that could be taken to be analytic or stipulative. The disjunction example may be one.

After all, the generalization “for all  $x$  and  $y$ ,  $[x \rightarrow (x \vee y)]$ ” isn’t plausibly true in virtue of its instances, but rather in virtue of how the ‘ $\vee$ ’ connective is defined. Indeed, I take Dasgupta’s Martian outpost example to be like this. The reason he finds it nonvacuously true *now* that “if  $x$  is a human settlement on Mars then  $x$  is a Martian outpost” is that this is basically a definitional truth. I myself don’t take it to “lie in the essence of Martian outposts”; there are no Martian outposts, so they don’t have essences. Rather, the general principle states how we are to use the phrase ‘Martian outpost’, and it is temporally prior to its instances.

The upshot is that in certain domains, perhaps the inclusive package is correct. The grounds of the fact that the building is illegal are the height of the building plus a general principle, and they are also the grounds of the fact that they ground the building’s illegality. But in other domains, I cling to the exclusive package. Consider the fact that I am experiencing phenomenal state  $p$  now. This isn’t plausibly grounded in my physical state *and* a general principle; it’s just grounded in my physical state! That is the kind of example I was focused on when defending upwards anti-primitivism and Grounding Fact Antiprinciple-ism. For such cases—cases involving laws of nature—I remain drawn to the exclusive package, and perhaps to Schaffer’s strategy for defending that package (see note 5). What this reveals, of course, is that I have Humean leanings: I think that laws of nature are derivative from local matters of particular fact, and thus cannot figure in the grounds of those local matters of particular fact. I have no grand defense of Humeanism to offer, and I do not promise that I will never waver from it. But it is what is in the background of this debate about what grounds the grounding facts.

### Reply to Wilson

Jessica Wilson and I have some fundamental (sorry) disagreements. We part ways about causation, and about the directedness of building relations. And some of our disagreements are intractable. For example, she faults my views for being inconsistent with strong emergentism, the view that a phenomenon can be both built and fundamental. I think strong emergentism is incoherent, I think strong emergentists have no reasonable way to understand what ‘fundamental’ means, and the entire picture outlined in the book is intended to be incompatible with it (e.g. 64-65). Nonetheless, as I hope to show in this reply, there is more common ground about relative and absolute fundamentality than she makes out. Let me start, though, with causation.

Wilson’s primary objection to the claim that causation is a building relation is to the consequence that causes are more fundamental than their effects. I agree with her that this claim is “no part of our concept of causation” (503), and I certainly do not offer it as a bit of conceptual analysis of either the concept of causation or the concept of relative fundamentality. Indeed, I concede that “our pretheoretic, intuitive, uncashed out notion of relative fundamentality or ontological priority is more closely affiliated with building relations other than causation” (2017, 169). But it is important to remember that on my picture, the claim that causes are more fundamental than their effects is simply the unsurprising claim that causes are causally prior to their effects. Thus the only potentially objectionable move here is my decision to use the words ‘more fundamental than’ in a way that covers causal priority as well as, say, grounding priority. Or, to put the same point slightly differently, the only potentially objectionable move is the decision to count causal priority as a kind of relative fundamentality.

Why do I make this decision? The details are in §6.6.2, but the gist is this. It has to do with my deflationary project about what it means to call something more fundamental than, or ontologically prior to, another. On my view, there is no more content to the claim that one set of ‘goings-on’ (I like Wilson’s phrase) is more fundamental than another than that certain patterns of building relations hold: perhaps the first is absolutely fundamental and the second is built, perhaps the first helps build the second, etc. For the current point, the full details that I spell out in chapter 6 are irrelevant. All that matters is that there is no more to the obtaining of relative fundamentality relations than the obtaining of various building relations. Ontological priority isn’t some big, mysterious phenomenon; it can be read off patterns of grounding, composition, and the like. And causal priority is exactly alike in this regard. It is nothing mysterious, or at any rate no more mysterious than causation itself. So, as I put it in the book, my choice to use ‘more fundamental than’ in a way that covers causal priority is a rhetorical choice as much as anything else. I opt for the somewhat revisionary usage because it highlights the crucial point that there is nothing special about relative fundamentality.

There is more to say about Wilson’s discussion of causation, but I hereby relegate a much less central point to a footnote.<sup>6</sup> It is time to move on to relative fundamentality.

Wilson is skeptical of my project of reducing relative fundamentality to building relations, because she thinks doing so requires “establishing a direction of priority” for each building relation. I agree that there is an important question here that my book doesn’t answer. However, I do not think her argument shows what she thinks it shows, and I do not think her preferred answer to the question contributes anything substantive beyond my own view.

Wilson’s main reason for thinking that building relations do not settle a direction of priority has to do with a case involving a dispute about whether parts are more fundamental than the wholes they compose. The dispute in question is between a pluralist who thinks that wholes are always less fundamental than their parts, and a monist who thinks that sometimes they are, and sometimes it goes the other way around. (It is important that this is not a monist who thinks that wholes are always more fundamental than their parts.) I agree with Wilson that this dispute—as opposed to the one between a pluralist and the monist described in the parentheses—is “not plausibly construed as a dispute

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<sup>6</sup> Wilson rejects my methodological principle that analogous puzzles and questions about causation and purely vertical determination should be given analogous answers, unless there is good reason not to. In her discussion, she says that Jaegwon Kim

is concerned with causal overdetermination but not concerned with ‘grounding’ overdetermination, precisely because there is not even a *prima facie* question of how some completely vertically dependent goings-on could have multiple bases (as when an instance of red is determined by multiple increasingly specific determinates) (504).

I take it Wilson is saying that this is an arena where there just is no analog issue about vertical determination. But that is incorrect. First of all, Kim is not restricting attention to causal overdetermination, but is explicitly worried about a kind of ‘mixed’ overdetermination. His supervenience argument is entirely predicated on the idea that there is something wrong with an event’s being both caused and grounded, and he says that “the tension between vertical determination and horizontal causation has been, at least for me, at the heart of the worries about mental causation” (2005, 38). Second, Wilson is wrong to think that what she calls ‘grounding overdetermination’ is impossible. Prime example: the fact that something exists. Another example: the fact that my father is a parent. (He had two children). I gesture at an interesting possibility involving composition on p. 75. So I think there absolutely are parallel issues about overdetermination in the causal and ‘vertical’ cases, as well as the mixed case.

over which direction of priority should be associated with parthood” (498), as Wilson puts it. In Wilson’s terms, this dispute is over whether there is a direction of priority associated with parthood at all. In my terms, it is about whether either composition or decomposition is a building relation. In my terms, her monist claims that *neither composition nor decomposition is a building relation*. He would claim that both relations fail the generativity requirement: he will not say, in full generality, that wholes exist in virtue of their parts, nor will he say that parts exist in virtue of their wholes.

The point is that the availability of this particular monist position does not show that building relations do not “establish a direction of priority” nor that they cannot be used in a reductive account of relative fundamentality. It just shows that the monist in question does not think that composition or decomposition are building relations, and thus—by my lights—thinks that they are irrelevant to relative fundamentality.

So, how do building relations give rise to relative fundamentality relations? Let me reiterate my own picture, and then return to Wilson’s question about “settling the direction of priority”. There are a variety of building relations, which I take to be anti-symmetric, irreflexive, necessitating (sort of), and generative. To say that they are generative is to say that they license ‘because’ and ‘in virtue of’ claims that mirror their directedness. If composition is a building relation, as most non-monists think, then wholes exist in virtue of the existence and (perhaps) arrangement of their parts. Which goings-on are prior to or more fundamental than which others is fully settled by what patterns of building relations obtain—both amongst them and between them and the fundamentals, if any—in a way that I spell out in detail in chapter 6 (the full story involves a further complexity about kinds).

How does this picture answer the question of what “settles the direction of priority”? That depends on what exactly that question means. One way to understand the question is this: given a building relation  $R$  such that  $a$  builds-via- $R$   $b$ , what settles that  $a$  is prior to or more fundamental than  $b$ ? The answer to this question is in the above paragraph. Holding fixed that  $R$  is a building relation, if  $a$  builds  $b$ ,  $a$  is more fundamental than  $b$ . I literally intend that as (partially!) definitional of ‘more fundamental than’. So I take it the intended question has more to do with which direction counts as building in the first place, along these lines: given a relation  $R$  such that  $aRb$ , what makes it the case that  $R$  rather than its converse is a building relation? The answer to this question is also given in the last paragraph. The question is just, which of  $R$  and its converse meet the requirements on counting as a building relation? Frequently, necessitation alone can settle this question, for frequently the necessitation only goes one way.<sup>7</sup> As I note in the book, however (56-7), there are cases where the necessitation is symmetric, and then generativity does the work.

So here is what I take to be the central question Wilson is getting at when she asks what “settles the direction of priority”: what settles whether  $R$  or its converse meets the generativity requirement? Here, I shrug. There are two reasons for this shrug, reflecting two layers of intentional neutrality on my part.

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<sup>7</sup> For example, I think it plausible that composition meets the necessitation requirement, and decomposition does not. That’s because I think it plausible that the existence and arrangement of the parts necessitates the existence of the whole, but not plausible that the existence of the whole necessitates the existence and arrangement of the parts. I think the latter not plausible because I think mereological essentialism is not plausible. (Admittedly, this example elides over the book’s long discussion of necessitation vs. necessitation in the circumstances (§3.3), and the potential role of extrinsic properties.)

First, as I make clear throughout the book, (but most explicitly on 15-18), I want to leave room for disagreement about which relations count as building relations. I want the overall apparatus of my view—the characterization of what it takes for something to count as a building relation, the role of such relations in establishing relative fundamentality relations, and so forth—to be available to people who disagree about more first-order metaphysical views. For example, both a priority monist and a compositional pluralist can accept everything I say in the book, except for various examples that reflect my own personal predilection for pluralism (i.e., for taking composition to be a building relation). But of course those two precisely disagree about whether composition meets the generativity requirement.

The second layer of intentional neutrality is this. Suppose the first issue is set aside, and everyone agrees that *R*, not its converse, meets the generativity requirement and counts as a building relation. Another question remains: *why* does it meet the generativity requirement? That is, why does the fact that *a* builds *b* via *R* make it apt to say things like ‘*b* obtains because *a* does’ and the like? Here there is a range of possible answers, and I officially left the matter open (58-59; 184-5). As I said in response to Dasgupta, I freely admit that that is the biggest unanswered question in the book. At one extreme is conventionalism;<sup>8</sup> at another is a robust realism; in between there may be other possibilities. Leaving it open allows philosophers with a range of quite different background commitments to be on board with the framework of my view. In particular, it makes room at the table for philosophers antecedently suspicious of talk of ‘prior to’ or ‘more fundamental than’.

Because of this intentional ecumenism, Wilson is right that I did not give a full, substantive story about what gives building relations their direction. But the reason is not the possibility of building relations that sometimes hold one direction and sometimes another, as she argues. The reason is rather my desire to avoid certain first order disputes about which relations really are building relations, and, more centrally, my silence—and, indeed, admitted uncertainty—about the true underpinnings of generativity.

Finally, let me say a few things about Wilson’s own preferred answer (‘third’ on p. 499). Here is her answer, with minor complexities edited out for simplicity:

The priority ... associated with building (small-g) relations is fixed by what goings-on are (or serve as) fundamental, where what goings-on are fundamental is a primitive matter ... For example, if the Cosmos is fundamental, its proper parts are nonfundamental; if atoms are fundamental, their fusions are nonfundamental; and priority between non-fundamenta, where such exists, is determined by relevant metaphysical facts (registering, e.g., how the non-fundamenta are small-’g’ related to the fundamenta, whether the non-fundamenta fall under salient types, whether instances of the one type can exist in the absence of instances of the other, etc. (499).

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<sup>8</sup> Wilson says that the conventionalist answer is unacceptable, because “what is wanted in a metaphysical realist rather than anti-realist account of relative fundamentality is some relevant metaphysical basis for this phenomenon. Conventions are irrelevant to this project” (499). This misunderstands the dialectic. I did not commit to a realist story, and the book contains no “implied. . . metaphysical realism about relative fundamentality” (499). Rather, my story about relative fundamentality that is explicitly and intentionally neutral about whether realism is true (e.g. 184-5). If one chooses the conventionalist understanding of generativity, one has left the “metaphysical realist” project far behind. One would be claiming that there is no relative fundamentality structure given by and inherent in the mind-independent world, but is rather reflective of us, our concepts, our conventions.

She calls this “a different account of relative fundamentality, which adverts to primitive fundamentality” (501). Here are three points about this account.

First, this is similar to the account I argue for in the book. Wilson does claim to have a different account of absolute fundamentality than I do—more on that below—but the overall outline she gives is basically my picture. I take it as a datum that all nonfundamentals are less fundamental than all fundamental things. And I argue at great length that relative fundamentality relations between nonfundamentals are given by the patterns of building relations that obtain amongst them, between them and the fundamentals, as well as some information about kind membership. Perhaps Wilson is only interested in how the nonfundamentals are built of *fundamentals*, rather than the building relations that obtain between nonfundamentals. But the fact remains that if her view is that small-‘g’ grounding relations from the fundamentals are what make certain goings-on count as less fundamental than others, her view is in the ballpark of mine.

So my first point is about the similarities between the basic structure of our positions. But my second point is that I do not see how she can have this kind of position. The key point is that Wilson rejects  $B \rightarrow \text{MFT}$ ,<sup>9</sup> for two reasons. One is that she allows small-‘g’ grounding relations to hold reflexively and symmetrically. The other is that she believes in strong emergence: she thinks that sometimes, one thing small-‘g’ grounds a fundamental thing. But those commitments are incompatible with the claim that facts about “how the non-fundamenta are small-‘g’ related to the fundamenta” make it the case that the former are less fundamental than the latter. On her view, sometimes one thing small-‘g’ grounds another and yet is not more fundamental than it. Now, I suppose the small-‘g’ relations could *partly* settle what is more fundamental than what, but then we are left with an open question about what else is doing the work—what makes the difference between cases where a small-‘g’ grounding relation makes for relative fundamentality, and cases in which it does not.

Third, it seems to me that Wilson is punting on the Big Hard Question just as much as I have. She thinks that I have not explained why—for example—composition rather than decomposition is a building relation. But neither has she. Like me, she is not engaging in the first order dispute about priority pluralism and priority monism; she merely spells out her position in conditional terms. And even if we assume that composition is a building relation—that atoms are mereologically fundamental, and fusions nonfundamental—there remains a question about *why* we can say that composites exist in virtue of the existence (and perhaps arrangement) of their parts. Her dismissive remarks about conventionalism indicate where on the spectrum of possible positions her answer would lie, but that is not itself an answer.

Finally, Wilson also disagrees with my treatment of absolute fundamentality. Wilson claims that I am wrong to take fundamentality to be unbuiltness—what I call ‘independence’—in part because of the cases of symmetric and reflexive building that she takes to be possible. She claims to reject the modified version of independence that I offer to people who endorse such cases, and says that what is

core to our notion of fundamentality is, first, that the fundamental goings-on are basic, and second, that they serve as a basis for whatever else there might be. (This last is along the lines of what Bennett calls the ‘completeness’ conception.) (502).

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<sup>9</sup> In the book, I took her to accept it (43).

But even more than in the case of relative fundamentality, I think there is more common ground here than Wilson suggests.

First, it is clear that I take completeness to also be a very important thread of our tangled fundamentality concept (§§5.3, 5.4, 5.6). Second, the passage quoted just above invokes the notion of basicness without explanation. What is it for a going-on to be basic? One natural answer is that to be basic is to be unbuilt. Which is independence.

Third, it is unclear to me why Wilson is intent upon rejecting the proffered alternative independence\*. She herself says that the fundamental goings-on “do not *collectively* metaphysically depend on anything else” (503) even though they may depend on themselves or each other. This is very much in the spirit of the independence\* I offered in the book. Now, perhaps the confusion is this: I only intended independence\* as a passing suggestion. I did not mean to imply that the letter of that exact principle is the only possible way for a defender of reflexive and symmetric building to understand fundamentality in an independence-like way. Any precisification of the following basic idea counts as an independence-like understanding of fundamentality: the fundamentals can be unbuilt, self-built, or mutually built, but none are built by anything nonfundamental.<sup>10</sup>

Overall, Wilson and I disagree about a lot. But there is also common ground. We share a commitment to the basic idea that there are a variety of building or small-’g’ grounding relations, the obtaining of which contribute to—for me, exhaust—the relative fundamentality structure of the world.

## References

- Bennett, Karen. 2011. Construction area (no hard hat required). *Philosophical Studies* 154: 79–104.
- . Forthcoming. Replies to Audi, Bliss, Rosen and Wang. *Inquiry*.
- Dasgupta, Shamik. 2014. The possibility of physicalism. *The Journal of Philosophy* 111: 557–592.
- Kim, Jaegwon. 2005. *Physicalism, Or Something Near Enough*. Princeton, NJ: Princeton University Press.
- Lewis, David. 1976. The paradoxes of time travel. *American Philosophical Quarterly* 13: 145–152.
- . 1986. *On The Plurality of Worlds*. Oxford: Blackwell.
- Rosen, Gideon. 2017. Ground by law. *Philosophical Issues* 27: 279–301.

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<sup>10</sup> One final remark about independence\*: Wilson rejects it because it conflicts with what she calls claim V, my intention to offer a reductive account of relative fundamentality in terms of building. It does, but Wilson misreads the dialectic. The whole point is that I offered it as a notion of absolute fundamentality for someone who rejects that desideratum. I don’t endorse the idea that fundamentality is independence\*.