

Naomi Thompson is a lecturer in philosophy at the University of Southampton.

Discerning the Structure of Reality

Metaphysics is often described as the area of philosophy (or at least as one of the areas of philosophy) that deals with the “big questions”; it is concerned, at the most general level, with what there is, and with what it’s like. On one very popular way of thinking about metaphysics, questions about what exists take priority, but in the last few years philosophers including Kit Fine, Jonathan Schaffer and Gideon Rosen have been championing the idea that the most important questions in metaphysics are questions about the nature of things. More specifically, they are questions about *structure* – about what depends on what.

This is not supposed to be a new idea. Many philosophers claim that Aristotle took metaphysics to be about dependence – but it has taken on something of a new significance against a backdrop, for the last 50 years at least, of prioritising questions about what exists. Philosophers like Schaffer argue that such questions misplace the emphasis. *That* those things that exist exist (when they do) is relatively trivial. The interesting metaphysical questions are about the hierarchy of priority amongst existent things; about what is fundamental, and what derives from and depends on the fundamental.

Take a fact like the fact that I currently have a pain in one of my big toes (I stubbed it a moment ago). Many would not want to *deny* that I am in pain, but might nevertheless think that my being in pain is somehow *less fundamental* than my being in a particular brain state. My pain exists (I can attest to that) but what my pain depends on, what it really comes down to, is my being in this particular brain state. Consider a different example. It’s currently not not raining in Birmingham. But the fact that it’s not not raining in Birmingham right now seems to depend on the (simpler) fact that it’s raining in Birmingham right now. It is in virtue of the fact that it is currently raining in Birmingham that it is currently not not raining in Birmingham. Perhaps more fundamental again is the fact that moisture from the atmosphere is currently condensing and falling visibly in separate drops over Birmingham. These facts seem to form a hierarchy of priority. One more example. There is a table in front of me. That table is made up of atoms; the existence of the table depends on the existence (and arrangement) of the atoms that form it. The atoms thus seem to be more fundamental than the table.

If things are arranged in this way – such that they form a hierarchy of priority – there must be some kind of relation between the entities in the hierarchy. A tempting, but ultimately misleading way to thinking about the relevant kind of dependence is as follows: if we didn’t have these atoms arranged in this way, we wouldn’t have this table. Tempting, because it seems to capture our intuition about the direction of the dependence (it’s the table that depends on the atoms and their arrangement, and not vice versa) but misleading, because the converse is also true: if this table didn’t exist, then there wouldn’t be these particular atoms arranged in this particular way.

There are no ways in which the world might be such that it includes these atoms arranged in this way but doesn’t include this table, because of the sense in which this table *just is* these atoms arranged in this way. Consequently, we can’t state the dependence between the table and the atoms in merely modal terms; in terms of possibility and necessity. Instead, that dependence is generally characterised in terms of *grounding*. Grounding relations cut more finely than merely modal relations like existential dependence (the dependence of the existence of one thing on the existence of another). They are supposed to capture the direction of dependence between entities even when those entities can’t be separated modally. Thus, the atoms *ground* the table, but the table doesn’t ground the atoms. The same relation is supposed to hold between my being in pain and my being in a particular brain state, and between the fact that it’s not not raining in Birmingham right now and the fact that it is raining in Birmingham right now; grounding relations are everywhere, structuring reality.

Philosophers who like to think in terms of grounding don’t think the notion can be explained or introduced in more basic terms, and so they have run in to some trouble when trying to characterize more precisely what they have in mind, and to convince us that it’s worth talking about. One key way to convey what they mean is to impress on us that grounding is an

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explanatory relation – it looks as though the fact that it is currently raining in Birmingham *explains* the fact that it is currently not raining in Birmingham. But this is not explanation in the familiar, causal sense. Appeal to more examples (another favourite recourse of the friend of grounding) helps to make this clear. Assume for a moment that moral facts (facts like “poking your little brother in the eye is wrong”) depend on natural facts (facts like “poking your little brother in the eye hurts him”). The relevant sense of dependence here is that of grounding. Poking your little brother in the eye is wrong *because* or *in virtue of* its hurting him, but it’s not the case that hurting your brother *causes* the action to be wrong; hurting your brother is what the wrongness of the act of poking him in the eye consists in (just like the atoms and their arrangement are what the table consists in). Or think about the relationship between legal facts and social facts. Presumably the legal facts (like “Sam and Rob are married”) are thus-and-so *because* the social facts are thus-and-so (someone said some words and Sam and Rob signed some papers), but the social facts being as they are doesn’t *cause* the legal facts to be as they are; the sense in which the legal facts depend on the social facts is a non-causal sense of “because”.

Once we have this notion of grounding in our metaphysical toolkit, we can put it to work. Many use the notion of grounding in order to spell out the idea that a subset of the things that exist (or perhaps a subset of facts) between them explain or account for all the other things that exist (or all the other facts). That subset of facts or things are the *fundamentalia*, and everything else is derivative. Suppose, for example, that one thought that psychological facts could be fully explained or accounted for in terms of biological facts; the biological facts ground the psychological facts. In turn, the biological facts are grounded in chemical facts, themselves grounded in physical facts. Suppose those physical facts are grounded in further facts at the microphysical level, but that’s where we stop. There’s no further level of facts that explain or account for what happens at the microphysical level. On this conception of reality, the microphysical facts are fundamental – they’re ungrounded, and they ground everything else. Not all philosophers subscribe to this foundationalist account of the structure of reality, even if they think that there are grounding relations. Some think that chains of grounding continue infinitely and so nothing is fundamental (because everything is grounded), and others think that grounding structures are best described not as a chain but as a web, but we can set those alternatives aside here.

If we do subscribe to the foundationalist way of thinking (if we can, for example, explain or account for the biological facts in terms of the microphysical facts) we can give a neat and simple account of how things fit together. Moreover, we can talk about derivative facts and entities whilst remaining true to Ockham’s razor, the apparently intuitive idea that one ought to keep things simple, and ought not to posit entities beyond necessity. It’s generally thought that other things being equal, the fewer facts or entities we find ourselves believing in, the better. The idea is that if we have this hierarchical view of reality, we don’t have to worry about multiplying entities beyond necessity; what matters is just that we don’t multiply *fundamental* entities beyond necessity. After all, everything else that exists can be explained in terms of the fundamental. By appeal to grounding we can provide a simple account of how different parts of reality fit together, we can respect intuitions about dependence, and (as Schaffer argues) we can explain why metaphysics is interesting even though questions about what exists seem pretty shallow and trivial. But there is, in my view, a worry about this appeal to grounding. I’ll describe it, and explain my preferred solution.

The problem has to do with the epistemology of grounding; how we could come to know about the grounding relations, if they exist. As with the vast majority of metaphysical claims, we can’t tell whether or not grounding claims are true by conducting empirical investigations. Just as the world would appear the same to us if we had souls as it would if we didn’t, or would appear the same if past, present, and future times all existed as it would if only the present moment existed, a world without grounding relations would look to us just as a world with grounding relations would look. It’s a difficult and often overlooked task of a metaphysical theory to provide an account of how we can acquire justified beliefs supporting that theory, but in the case of grounding the question seems particularly pressing. One reason is that grounding needs to earn its place – grounding is a relatively recent posit, and in the interests of ontological

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economy, we want to be sure there's good reason to posit its existence. Much is at stake. What is being suggested here is that we completely rethink both the task and the methodology of metaphysics (as it has been understood since the 1950s at least). The most important metaphysical task is no longer to be thought of as one of working out what exists, but instead is that of discerning the structure of reality.

Friends of grounding generally hold that we can come to know about grounding by reflecting on our intuitions about cases. When we think hard enough about what grounds the fact that it is currently not raining in Birmingham, it just becomes clear to us that it must be the fact that it is currently raining in Birmingham. But other cases are harder. An alleged early example of a grounding question can be found in Plato's *Euthyphro Dilemma*: is an action right because the gods demand it, or do the gods demand the action because it is right? Centuries of argument have been conducted over which direction the grounding relations run in in this case. People have strong intuitions in both directions, and so it is not clear that our intuitions are to be relied upon. Even if it were the case that everybody felt the same way about the direction of dependence here, modesty demands that we consider explanations other than that we have some deep insight in to the fundamental structure of reality (for example, that that our cognitive architecture is set up in such a way as to find facts about morality easier to understand than facts about the demands of the gods). The worry is that the friend of grounding assumes without argument that intuitions about grounding reveal facts about fundamental reality.

The friend of grounding might reasonably argue that the details of how we find out about what grounds what aren't the important things here. The important claim is rather that metaphysics is about grounding, and it's no surprise that there are some obstacles when it comes to ironing out the details. That metaphysics is about grounding we can argue (as a number of philosophers have) on the basis of how we can simplify other metaphysical theories, satisfy our intuitions, explain how things fit together, and so on. But these (it seems to me) are merely pragmatic benefits of engaging in grounding-talk, and moreover, they are demands that can be met even if we eliminate grounding-talk altogether.

In my view, the appeal to grounding is a dispensable part of the more central idea that the task of metaphysics is to discern reality's structure. As I argued early on, at the heart of the grounding revolution is the notion of explanation, and explanation is a notion with which we are already very familiar (which is precisely why that notion is invoked in order to try and shed light on the notion of grounding). But explanation, as we ordinarily understand it, is an epistemic phenomenon. It has to do with seeking to understand things. Grounding relations are supposed to exist mind-independently, and it is that feature (in conjunction with their empirical invisibility) that makes one wonder how we can come to know about them. But something is only explanatory to someone if it advances her understanding, and so there is no mystery about how we can acquire justified beliefs about explanation. I am justified in believing that the physical facts explain the chemical facts if and only if I can come to understand the chemical facts on the basis of the physical facts.

I take it that the sort of explanation relevant to metaphysics is distinctive in some ways. Metaphysical explanations are explanations of *what makes something the case* (to be distinguished from, for example, causal explanations of *why something happened*). A metaphysical explanation of the window's being broken is that its parts are disconnected; that's what its being broken consists in, it is what makes it the case that the window is broken. A causal explanation of the window's being broken, by contrast, is that I threw a brick at it. The notion of metaphysical explanation is all we need to account for intuitions about dependence, to outline an account of fundamentality (fundamental facts and fundamental entities are not made the case by anything further), and to explain why metaphysics is about more than just what exists. Metaphysics is about how things fit together, but it's about how things fit together in a system of explanation that is intimately related to our understanding.