

Karen Bennett *Making Things Up* Oxford: Oxford University Press, 2017, Pp. xi, 260.

Karen Bennett's book defends the layered picture of reality: some things are more fundamental than others. And as a book in metaphysics, it takes these layers to be of metaphysical significance. But contrary to others sympathetic to this picture, metaphysics is not distinctly concerned with the bottom layer --- what is most fundamental --- nor is there a single notion of priority which underlies this layered structure, as those would have it, who believe that a single relation of metaphysical grounding gives rise to the layers. Instead, metaphysics is concerned with the fundamental as well as the non-fundamental, and as opposed to a single grounding relation we have a family of "building relations". *Being more fundamental than* is to be understood in terms of building relations, as the obtaining of a somewhat complicated condition on such relations. And building relations, in turn, are understood as a unified class of relations that have some general features in common: some logical features, necessitation, and "generation".

Bennett's book is a major contribution to the contemporary debate about grounding and related notions. It contains a detailed novel proposal about fundamentality in metaphysics, as well as numerous insightful discussions and criticisms of some alternative proposals. It is often insightful and innovative, but it also sometimes fails to achieve its goals.

Making Things Up can be read in two different ways: First as a book broadly within the grounding literature: a book that critically discusses various proposals about fundamentality besides making a novel one. So understood it concerns questions about the relationship between grounding and causation, the unity of grounding, grounding vs. building, and so on. Second, it can be read as a book that hopes to establish a certain picture of metaphysics: metaphysics as partly concerned with what is more fundamental than what, but not exclusively with what is most fundamental. The book is a clear success if read in the first way, but less so if read in the second way. Those who accept that metaphysics is closely tied to fundamentality, grounding, or Bennett's building relations, will find much of great value in the book, including many challenges to the by now fairly standard views about this picture as well as a novel alternative proposal. But those who find this approach to metaphysics somewhat alien might not be compelled towards conversion. Since one of Bennett's main goals in this book is to defend this picture of metaphysics and to establish that fundamentality as not a "dark notion" (p. 102), I will focus my discussion on why I think this part of the book is less successful.

Bennett first introduces building relations by example: composition, constitution, set formation, and a few others. She then characterizes building relations abstractly, as those that meet some conditions: some logical requirements, necessitation, and "generation". Maybe somewhat surprisingly, Bennett wants to leave it open whether the examples given first actually are building relations in the more general characterization. Bennett then understands absolute and relative fundamentality in terms of building relations: something is absolutely fundamental if it is unbuilt, and something is more fundamental than something if a certain more complicated

condition spelled out in terms of building relations holds. This leads to what Bennett describes as her deflationism: fundamentality talk is to be understood in terms of building relations, not some further primitive relationship. And since these building relations are quite innocent, this shows that relative and absolute fundamentality are not “dark notions,” but unproblematic, in particular unproblematic for metaphysics.

The notions of relative and absolute fundamentality on Bennett’s deflationary account are as innocent or dark as the notions used to define it. Relative fundamentality is understood in terms of building relations, and although the details are a little complicated and spelled out in chapter 6, the key to “comfort[ing] those who are otherwise inclined to find fundamentality a dark notion” (p.161) is whether the notion of a building relation itself is dark or not. Bennett gives a general characterization of building relations as those that meet some general logical conditions (e.g. being irreflexive), as those that necessitate, and as those that are “generative” (p.32). Of those, being generative sticks out as the most dubious. Bennett devotes section 3.4 to this notion, and to me this is one of the most central and most surprising sections of the book. With many others, Bennett argues that being generative goes beyond necessitation, since {Socrates} and Socrates necessitate each other, but only Socrates *brings about* {Socrates}. This extra element beyond necessitation is expressed in many equivalent ways, according to Bennett, including “in virtue of” and “makes it the case” (p.58). Now, these are, of course, exactly the notions and examples that motivated introducing a notion of grounding into metaphysics. And those are the exact notions that some people find rather dark, myself included. Relying on such notions to enlighten the concept of relative fundamentality might seem dubious, unless more is said about what generation is supposed to be. Bennett discusses two ways of understanding generation: First it could be taken as a primitive metaphysical relation: a primitive *in virtue of* relation. But this option would not be very helpful in the attempt to illuminate relative fundamentality via Bennett’s deflationism. A primitive *in virtue of* relation as part of the definition of what a building relation is will not be much better than going straight for a primitive notion of relative fundamentality. Second, we could adopt conventionalism about which relations are generative. That Socrates brings about {Socrates}, but not the other way around, is not due to something worldly, but merely a reflection of our talk: “there is no such further relation; there is nothing but our generative talk” (p. 59). This option would take away the mystery of what the *in virtue of* relation is, but it is a rather radical option to take in this debate, and it has several radical consequences, to be discussed shortly. It was truly a surprise to me to read that Bennett’s sympathies lie with the second option, even though officially she hopes to remain neutral about them (p. 59).

What the second, conventionalist option makes vivid is the question why metaphysics should care about fundamentality if it is understood along the lines of Bennett’s deflationism. If being generative is conventional, it is due to us and our speech which relations are generative. And if building relations need to be generative and fundamentality is to be understood in terms of building, then it is partly due to us what is more fundamental than what. In light of this there are two main options: First, part of the subject matter of metaphysics is due to our conventions, and metaphysics should not be understood as a discipline that concerns itself with reality independently of our description of reality. This is a broadly anti-realist conception of

metaphysics, but it can maintain that metaphysics at least in part is concerned with relative and absolute fundamentality. Second, one could stick with a realist conception of metaphysics, but declare relative and absolute fundamentality, as understood by Bennett, to be largely irrelevant for metaphysics. Conventionalism naturally leads to anti-realism, and to go anti-realist in metaphysics can seem like a way of giving up on metaphysics as it was intended. Realism can be defended with a primitive *in virtue of* relation, but this won't appease the "dark notion" worriers. Bennett is officially neutral about conventionalism, despite being a sympathizer, but even so, it highlights an issue with Bennett's deflationism: why should we think that relative fundamentality on the deflationary understanding should be seen as being of special relevance to metaphysics? And this issue, it seems to me, goes to the core of Bennett's view.

Many of Bennett's examples of presumptive building relations --- constitution, composition, etc.--- are of uncontroversial metaphysical significance. But the question remains whether this is always so, and whether the relation of being built or generated itself is of special metaphysical significance. Let me illustrate the worry with an example not from Bennett's book.

Talk of being built or being generated is ubiquitous in mathematics: The natural numbers are generated from the prime numbers, a vector space is generated from its base, the real line is built from intervals, and so on. Such talk could, of course, be merely metaphorical and not to be taken very seriously, but the same is also true for talk of generation in more straightforwardly philosophical examples. If we take it at face value for the moment, then it seems to lead to the conclusion that a building relation holds between the prime numbers and the composite, i.e. non-prime, numbers: the latter are generated from the former with multiplication, since every number is the product of prime numbers. To say that the composite numbers are generated from the prime numbers with multiplication is to state a mathematical fact, in the terminology used in mathematics. On Bennett's deflationary understanding of relative fundamentality it follows that the prime numbers are more fundamental than the composite numbers, since a building relation holds between them. And in a way, everyone can agree: they are more fundamental when it comes to being generated with multiplication. That is just to restate the mathematical fact. But the question remains whether there is any relevant metaphysical difference between the prime numbers and the composite numbers. Are all numbers metaphysically equal, or are some special in some metaphysically interesting way? This question seems to be left open by observing a simple mathematical fact. To be sure, one could hold that prime numbers are metaphysically special among the natural numbers, but merely observing the mathematical fact seems to leave it open. To hold that all numbers are metaphysically equal does not seem to contradict mathematics. But on Bennett's deflationism the mathematical fact leads to relative fundamentality facts. The question then is this: why should we think that the deflationist's relative fundamentality facts are of special interest to metaphysics? Simply because the composite numbers are generated from the primes guarantees that the composite numbers are not fundamental, since they are built. Bennett is surely right in arguing that metaphysics is not only concerned with the fundamental. But on her deflationism, should metaphysics be concerned with fundamentality at all? I did not find a sufficient answer to this worry in the book, but I hope the prime number example illustrates the worry.

Bennett would succeed in illuminating relative fundamentality as not being a dark notion if we adopt conventionalism about generation as well as her deflationism, but it would remain unclear why metaphysics should be concerned with fundamentality so understood. If we instead take generation to be a primitive metaphysical notion, then it wouldn't help those who found relative fundamentality to be dark. Bennett's deflationism illuminates one notion of fundamentality, but leaves open the question why this notion is of special metaphysical interest. I didn't find this question resolved, but for those who have answered it for themselves, and who do accept a close connection between metaphysics and fundamentality, Bennett's book makes much progress on how this connection is to be understood more precisely.

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