

# Chains of Being: Infinite Regress, Circularity, and Metaphysical Explanation

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A widespread view throughout not only contemporary analytic philosophy but also much of the Western tradition is metaphysical foundationalism, the idea that chains of grounding and ontological dependence must eventually terminate in something fundamental. If one entity depends upon another entity for its existence or nature, and that entity depends upon some further entity for its existence or nature, ad infinitum, the thought is that such an infinite regress would be vicious and so must terminate in some fundamental entities, entities that are ungrounded or independent. Unfortunately, in contemporary analytic metaphysics at least, there is a tendency to dismiss alternative non-foundationalist ontologies out of hand.

Ross Cameron's *Chains of Being* (2022) is a welcome and refreshing defence of the non-foundationalist alternatives. These include metaphysical infinitism, the view that chains of ground and ontological dependence can descend indefinitely without ever terminating in some fundamental entities, and metaphysical holism, the view that chains of ground and ontological dependence can go in circles. Cameron's book is an incredibly enjoyable read. It is well written, well argued for, and, with the slight exception of chapters 2 and 5, not unduly technical. Nonetheless, Cameron presents the more technical material in a highly accessible manner. Anyone interested in or working on these issues who lacks expertise in logic or set theory can understand and benefit from his original and insightful work.

In order to evaluate the foundationalist's claim that infinite regresses of ground and ontological dependence are vicious, it behooves us to get a handle on what the viciousness of an infinite regress consists in. In chapter 1, Cameron tackles this issue and argues for pluralism and relativism regarding viciousness. Pluralism says an infinite regress can be vicious for many reasons. Thus, on Cameron's view, there is no bad-making feature that all vicious regresses share. Relativism says an infinite regress can be vicious or benign depending on one's prior theoretical commitments. The result is that Cameron thinks it is hopeless to "look for some way of delineating good regresses from bad that we should expect various parties to the debate to be able to agree to prior to the question of whether a particular regress is vicious or benign" (38). Accordingly, pluralism and relativism work in Cameron's favour because it becomes difficult for the foundationalist to straightforwardly accuse the metaphysical infinitist or holist of a vicious regress of dependence.

An important result of chapter 1 is Cameron's distinction between what he calls *infinitely many finite chains* and *infinitely many infinite chains* of dependence, a distinction that strikingly resembles Thomas Aquinas's distinction between an accidentally ordered and essentially ordered causal series or regress. In *infinitely many finite chains* cases, we have a series of entities

standing in a dependence relation to each other. E1 depends upon E2, E2 depends upon E3, and so on, ad infinitum. But in this case each instance of dependence is self-contained. In accounting for E1 in terms of E2, you get a complete account of E1's existence or nature in terms of what it depends upon, namely E2, even though E2 depends upon some further entity, E3, ad infinitum (43). In *infinitely many infinite chains* cases, we have the same infinite regress of entities, yet we do not receive a complete account of E1 in terms of E2. In these sorts of dependency chains, the complete story involves E1 depending not only upon E2 but also upon E3, E4, ad infinitum. Thus, any given entity in the chain depends upon all the subsequent entities, and we never get a complete account of any thing's existence or nature because "there is always more of that account to be given" (44).

On Cameron's view, *infinitely many finite chains* are not problematic, while *infinitely many infinite chains* are. No matter how long the chain of dependence goes, the threat of *infinitely many infinite chains* is that we never arrive at a complete or successful explanation for the existence or nature of anything, because the success of each account of any given entity is held hostage to the success of the next account, ad infinitum. Cameron makes a helpful comparison between *infinitely many infinite chains* and the vicious regress we get with the homuncular theory of perception. On one version of the homuncular theory, what it is for person A to see X is for A to have a homunculus in her brain who sees X. What it is for that homunculus to see X is to have a sub-homunculus in their brain that sees X, and the regress is off. Cameron argues this sort of regress is vicious because it is a "What it is" regress. "What it is" claims are identity claims for Cameron. And so, if we are identifying some phenomenon and we have a chain of identity statements, then if any link in the chain is mysterious all of them will be (24).

After Cameron argues for infinite chains and circles of ontological dependence by defending Boffa set theory in chapter 2, he uses the distinction between *infinitely many finite chains* and *infinitely many infinite chains* to argue in chapter 3 that infinitism faces a problem. The bad news for infinitism is that the foundationalist can meet an explanatory demand that the infinitist cannot. The good news for infinitism, on Cameron's view, is that we need not associate explanation with ontological dependence, and so the infinitist need not adopt the foundationalist's explanatory goals in the first place. Let's look at the bad news first.

Cameron suggests the following two claims are true with respect to ontological dependence, but not grounding, and therefore lead to a problematic regress of ontological dependence (97).

Dependence: If E1 is ontologically dependent on E2, it is so partly in virtue of the fact that E2 exists and/or has the nature it has.

Essence: If E1 is ontologically dependent on E2, it is part of the nature of E1 that it is ontologically dependent on E2.

Cameron thinks the relation of dependence that holds between sets and their members obeys Essence (99). It is part of the nature of the set of the Xs that it is ontologically dependent upon each of the Xs. Cameron endorses Dependence on the grounds that ontological dependence is an internal relation. The very fact that E1 exists or has the nature it has holds partly in virtue of E2's existence and nature. Cameron argues that Dependence and Essence cause trouble for infinitism because now we have a way of linking dependency claims such that the account of each entity is held hostage to all the rest, just as it is in cases of *infinitely many infinite chains* (100). There is a failure of explanation here because a complete account of E1's existence and nature involves not just E2 but all the entities after it on the infinite chain. The foundationalist doesn't countenance such infinite chains of dependence, and so doesn't fall prey to this kind of explanatory failure.

I'm not convinced, however, that Cameron needs to concede this alleged bad news to the foundationalist. Recall that he compares *infinitely many infinite chains*, of which the ontological

dependence regress under consideration is supposedly an instance, with the homuncular regress, and that he thinks the homuncular regress is vicious because it is a regress of “What it is” claims. Thus, even if we grant Dependence and Essence, it only follows that the regress of ontological dependence under consideration here is vicious if it is a “What it is” regress. But a set-membership regress is not a chain of “What it is” claims. As Cameron himself says, “[I]t is not true, on my view, that *what it is* for {Socrates} to exist is for Socrates to exist. As Fine says, Socrates' nature has nothing do with any set's existence so why should his existing just be what it is for some set to exist” (136)? If I'm correct here, it is good news for Cameron because it would mean that he needn't concede to the foundationalist that infinitism exhibits a kind of explanatory failure that foundationalism does not. But it would undermine the motivation for him to divorce metaphysical determination from explanation, which we turn to next.

As a result of the alleged bad news for infinitism, Cameron denies the standard link between explanation on the one hand and ontological dependence and grounding on the other. He argues that the alleged explanatory failure of infinite chains of ontological dependence would be a *reductio* of infinitism if the point of metaphysical determination relations was to provide metaphysical explanations (109). On Cameron's view, metaphysical determination and explanation are distinct. In chapter 3, Cameron provides examples of cases where he thinks metaphysical determination and explanation plausibly come apart. For example, {Socrates} supposedly ontologically depends upon Socrates. But Cameron questions whether Socrates' existence really explains {Socrates}' existence. Do we really increase our understanding of the sudden appearance of sets in the world by pointing to non-sets (112)? As Cameron himself concedes, however, whether readers find these sorts of cases plausible will depend, in large part, on how committed they are to metaphysical determination relations being associated with explanation to begin with.

In the remainder of chapter 3, Cameron develops his own account of metaphysical explanation in terms of “What it is” claims, which are not to be understood in terms of ontological dependence or grounding. For Cameron, an explanation is “metaphysical” in so far as it is an explanation of the nature of some phenomenon (142). His suggestion is that we have a metaphysical explanation of some phenomenon,  $\Phi$ , if there is a true “What it is” claim, of the form “What it is for  $\Phi$  just is for  $\Psi$ ” (135). On Cameron's view, one and the same fact in the world can be structured in different ways and hence be described differently. For example, Cameron understands Lewis's modal realism as the view that what it is to be possible just is to be true at some world. On Cameron's view, there is no grounding or dependence involved here. Rather, this is just the same worldly phenomenon described equally accurately in two different ways. Nonetheless, Cameron argues that one of these descriptions can be explanatorily more basic than the other, and as a result the “What it is” claim can help us understand an otherwise intractable phenomenon (141).

A major theme throughout Cameron's book is his methodological preference for explanatory neutrality. The reason Cameron thinks the bad news for infinitism—that infinite regresses of ontological dependence exhibit explanatory failure—is not so worrying is because he thinks the infinitist isn't obligated to accept the foundationalist explanatory demand in the first place. The foundationalist presumably begins her theorizing with the explanatory goal of explaining all the derivative entities while exempting or taking for granted the fundamental entities and then discredits infinitism for failing to account for all the derivative entities. Cameron argues that the infinitist needn't adopt this explanatory demand in the first place because, as we saw above, he denies the link between determination and explanation. But he goes even further and suggests that explanatory demands in general are a pragmatic and theoretically relative affair. He says, “[W]e simply take for granted some features of reality, and demand explanation for others, and there are only pragmatic reasons for our choice: what are we happy to take for granted, and what needs to be explained *given* our theoretical goals and starting point” (107). Thus, we shouldn't hold fixed certain explanatory demands without good reason to.

Cameron does not, however, offer much justification for his take on the explanatory structure of the world. And this lack of justification is especially surprising given the recent resurgence of interest in the principle of sufficient reason (PSR) within the grounding literature (Dasgupta 2016; Raven 2021; Amijee 2021). The proponent of the PSR, formulated as “All facts have grounds,” for example, will insist that there is an objective explanatory structure to the world, one that constrains our metaphysical theorizing. Cameron simply assumes without argument that there is no objective explanatory structure to the world and that there are no good reasons to favour some explanatory demands as more plausible than others. This, I think, begs the question against the proponent of the PSR. In general, I agree with Cameron's contention that we should not hold fixed certain explanatory demands without good reason to. I just think Cameron hasn't adequately engaged with the reasons.

In chapter 4, Cameron investigates several metaphysical views that allegedly exhibit circles of ontological dependence and grounding. He argues against the following principle:

*No Circularity:* There are no things, E1-En, such that E1 is ontologically dependent on E2 and E2 is ontologically dependent on E3 and E3 is ontologically dependent on E4 and . . . and En-1 is ontologically dependent on En and En is ontologically dependent on E1 (157).

Typically, thinkers will argue for No Circularity on the grounds that dependence and grounding relations are explanatory relations and that circular explanations vitiating explanation. Cameron accepts that circular explanations are bad explanations. But since he denies the link between determination and explanation, he argues there is no longer any reason to rule out circles of dependence. Instead, circles of dependence can allow for holistic explanations (159).

Cameron advocates for a version of metaphysical holism modelled after epistemic holism. Instead of maintaining that explanation transfers along lines of metaphysical determination, explanation is a more holistic affair. On Cameron's view, we get an explanation of the nature of the system of entities as a whole, as a result of the pattern of ontological dependence that holds among them (163). Thus, Cameron parts ways with other proponents of metaphysical holism who accept that ground or dependence relations, as explanatory relations, can go in circles. Though I personally am not sympathetic to metaphysical holism, I think Cameron's is the most plausible version to date. It allows for circles of ground and dependence without maintaining that A literally explains B and B literally explains A.

In chapter 5, Cameron concludes the book by arguing for infinite regresses and circles of ground. He argues that there are infinitely many truth-teller sentences—sentences whose entire content is that they themselves are true—and that infinitely many of them are true, and infinitely many of them are false. He assumes what he calls “Grounding-Truthmaking,” that the truth of a true declarative sentence is grounded by the worldly phenomenon that the sentence declares obtains (204). In fact, he thinks truthmaking just is a species of grounding (235, n. 5). My only complaint here is that anyone hoping for an argument in favour of infinite chains or circles of ground obtaining strictly between worldly phenomena or facts will find chapter 5 disappointing. But I do not intend this complaint to reflect on the quality and originality of argument in this chapter.

Overall, Cameron's book is an exciting and original treatment of a very timely topic. It contains a rich treasure trove of arguments and insights that I cannot do justice to in this short review. Cameron not only convincingly argues for the non-foundationalist alternatives but also forces the metaphysical foundationalist to seriously evaluate her own presuppositions. I would recommend his highly accessible book to anyone both inside and outside the field of metaphysics.

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