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Grounding Ground and the (In-)Escapable Ill-Foundedness of the Inclusive 'Explains'

Yannic Kappes

The thesis that every grounding fact is grounded gives rise to an infinite series of grounding facts. According to Frugé ("Janus-Faced Grounding"), this series of grounds of ground amounts to a vicious regress. This paper (1) responds to Frugé's argument, (2) argues for a more plausible motivation for the vicious regress, and then (3) deploys a Bolzanian regress argument against this to defend the innocence of the series of grounds of ground.

Theories according to which every grounding fact is grounded give rise to the following kind of infinite series of grounding facts (let '$\prec$' express at least partial grounding):

$$Q$$

$$P \prec Q$$

$$\Gamma_1 \prec (P \prec Q)$$

$$\Gamma_2 \prec (\Gamma_1 \prec (P \prec Q))$$

$$\Gamma_3 \prec (\Gamma_2 \prec (\Gamma_1 \prec (P \prec Q)))$$

$$\dots$$

Here, let the Γ_i stand for whatever the grounds of the grounding fact in question are supposed to be: For example, according to Dasgupta (2014), these are certain essence facts; Sider (2020) holds that they can be of a more varied nature, while according to Bennett (2011), deRosset (2013b), and Litland

(2017), they are the grounds involved in the grounding fact that is being grounded.[1]

Against these accounts, Frugé (2023) attempts to show that the resulting infinite series of grounds of grounds constitute *vicious* regresses by arguing that they involve a kind of metaphysical dependence that allows to apply an analogue of Schaffer's (2010, 2016) consideration for the well-foundedness of grounding to the infinite series of grounds of ground. In what follows, I will develop Frugé's argument, argue against it, and draw a general lesson about the well-foundedness of metaphysical explanation from this discussion.

This is the plan: Section 1 presents Frugé's argument and argues that it fails. Section 2 discusses a related argument by (1) considerations akin to Frugé's counterfactual considerations, (2) introducing the inclusive sense of 'explains' and showing how each element in the series of grounds of ground is explained by its successor in this sense, and (3) arguing that the metaphor of explanation as a machine has a natural reading given which Schaffer's consideration for the well-foundedness of grounding applies *mutatis mutandis* to the infinite series of grounds of ground.[2] Against these considerations, section 3 fields a regress argument by Bolzano (2014b, para. 199) to argue for the innocence of the series of grounds of ground.[3]

1 Frugé's Argument

In a nutshell, Frugé (2023) argues for the viciousness of the series of grounds of ground by arguing (1) that what he calls a kind of "genuine dependence" holds between Q and all Γ_i in the series of grounding of ground (see above), and (2) that this allows applying (*mutatis mutandis*) Schaffer's consideration for the well-foundedness of grounding to reveal the viciousness of the series. I will now introduce the notion of well-foundedness and Schaffer's consideration for the well-foundedness of grounding, and then we will consider Frugé's argument in detail.

1 In Litland's case, this results from *factive* grounding facts being grounded in the grounds involved together with the corresponding *non-factive* grounding facts, which are zero-grounded.

2 For the record: My aim is not to endorse Schaffer's consideration or the well-foundedness of grounding in this paper, but rather to defend the possibility of conjoining them with theories according to which every grounding fact is grounded.

3 In arguing against conceptions of grounds of ground like Dasgupta's (2014), Bennett (2017, 207) offers a related argument; see footnote 15 below.

Proponents of the well-foundedness of grounding reject the existence of infinite regresses (i.e., downwardly non-terminating grounding chains) and circles of grounding, at least as long as the involved facts (or propositions, if you prefer) are not appropriately tethered to the fundamental. An important metaphorical consideration that motivates well-foundedness stems from Schaffer, according to whom grounding regresses are objectionable because in them, being would be "infinitely deferred [and] never achieved" (Schaffer 2010, 62):

> Grounding must be well-founded because a grounded entity inherits its reality from its grounds, and where there is inheritance there must be a source. […] [S]omething cannot be real merely by having a limitless sequence of ancestors, each claiming reality from its parents. There must actually be a source of reality somewhere. (Schaffer 2016, 95)

I will call this 'Schaffer's consideration'.[4] Before we continue, note that infinite series of grounds of ground are not downwardly non-terminating grounding chains (and thus well-foundedness of grounding is not sufficient to argue against them): no element of these series is *grounded* in the next element. Accordingly, proponents of accounts according to which every grounding fact is grounded have insisted that the resulting infinite series are unproblematic and that we can accept their accounts while remaining neutral on whether grounding is well-founded.

Against this, Frugé (2023, sec. 2) argues that Schaffer's consideration *can* be extended to the infinite series of grounds of ground once we realize that Q metaphysically depends in a special way on each of the Γ_i (i.e., the grounds of the grounding facts in the infinite series of grounding grounds that starts with $P \prec Q$). Frugé calls this kind of dependence "connection dependence" and argues as follows:

> Why is connection dependence a genuine form of dependence? Suppose the following is the case: A grounds B, where C grounds that A grounds B. Then, B doesn't only depend on A. Instead, it also depends on C, because A only generates B given C. If there were no C to put A grounds B in place, then even if there were

4 While I focus on Schaffer's consideration here, other arguments for the well-foundedness of grounding exist. An example of an argument meant to establish an aspect of well-foundedness is Kovacs' (2018) argument in favor of the irreflexivity of grounding.

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> *A* there would be no *B*, since *A* wouldn't generate *B* because it wouldn't be the case that *A* grounds *B*. For example, if a collection of particles ground the composite whole of those particles only via a composition operation grounding this grounding fact, then if, perhaps counterpossibly, there were no composition operation then those particles would not ground that whole, because there would be no composition. (Frugé 2023, 976–977)

Having thus argued that Q metaphysically depends on Γ_1 in some genuine sense, he extends the argument to the rest of the Γ_i:

> Similar reasoning applies at each step in the stepwise path. If *D* grounds that *C* grounds *A* grounds *B*, then if there were no *D*, then even if there were *C* and *A*, then there would be no *B* because *C* would not generate that *A* grounds *B*, and so *A* would not generate *B*. And so on for each ground in the stepwise grounding path [i.e., in our terminology, the Γ_i]. Thus, connection dependence is a genuine form of dependence. *B* needs *C* in order to come about, and it also needs *D* in order to come about, and so on down the stepwise path. So *B* metaphysically requires each ground in its stepwise grounding path. (Frugé 2023, 977)[5]

Frugé then argues that (an analogue of) Schaffer's consideration applies:

> As Jonathan Schaffer says in the context of defending well-foundedness, if grounding did not terminate in an ungrounded ground, then "being would be infinitely deferred, never achieved" (2010: 62). But given connection dependence, then the same can be said for an infinite stepwise path of ever more grounding of grounding facts [i.e., series of ground of ground]. Even if ground were well-founded, if the grounding of grounding facts had no end, then 'being would be infinitely deferred, never achieved', since there would be no point at which it's ultimately settled

5 Bennett (2017, 207) argues that whatever grounds *P*'s grounding *Q* should also ground *P*. By considering grounding instead of "genuine metaphysical dependence," Frugé's counterfactual consideration can be understood as an argument for a generalization of this thesis. But as the discussion below suggests, there threatens to be an analogous consideration establishing that in addition to being grounded in P and the ground Γ_1 of $P \prec Q$, Q is also grounded in $P \prec Q$. While I am not sure what to think about Bennett's metaphorical consideration for her thesis, she rejects the latter result. See also footnote 15 below.

> that the grounded is generated. It would always need a further ground of a grounding fact. Therefore, if one thinks that violating the well-foundedness of ground is vicious, then one should also think that the fact regress is vicious—given that the grounded depends not just on its grounds but also on the grounds of its grounding facts, and, more generally, on the grounds in its entire stepwise path of grounding facts. (Frugé 2023, 978)

Now, I believe Frugé's argument misses its mark: Even if we set all worries about his counterfactual argument aside and simply grant that Q depends in some genuine metaphysical sense on all of the Γ_i—in fact, we can even assume this relation to be grounding itself—it is hard to see how Schaffer's consideration *could* apply. For the structure of connection dependence that Frugé assumes is not even an infinitely descending chain down which "being could be infinitely deferred," but rather that of an infinite collection of Γ_i, on each of which Q depends, but which do not stand themselves in relations of metaphysical priority.

Since the structure of metaphysical priority that would seem to be required for Schaffer's consideration to apply is indeed that of an infinitely descending (and non-tethered) chain of dependence, one would have expected Frugé to argue that the elements of the series of ground of ground (i.e., those at the beginning of this paper) stand in a relation of metaphysical priority, but he does not do so. To an extent, this problem is perhaps obfuscated by Frugé's talk of "B metaphysically [requiring] each ground in its stepwise grounding path," which might suggest that this path consists in a chain of connection dependence holding between the elements of the series of grounds of ground (rather than the Γ_i), but this is not the case.

Additionally, Frugé seems to take issue with there seemingly being an infinity of Γ_i on which Q is connection dependent (e.g., "It would always need a further ground of a grounding fact."). But first, it is not easy to see what is supposed to be objectionable about this (many facts are only fully grounded in infinitely many facts taken together), and second, the assumption does not even follow, as the available accounts of the grounds of ground demonstrate: For example, on the Bennett-deRosset view, all Γ_i are identical to the original ground of Q, i.e., P in our case.

While I thus conclude that Frugé's argument fails, I will now show how one might attempt to substantiate in a different way the idea that series of ground of ground involve a relation of productive metaphysical priority that

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allows an analogue of Schaffer's consideration to apply and show the regress to be vicious.

2 Three Better Considerations?

Let us discuss three considerations in favor of the thesis that the elements of the series of ground of ground stand in a relation of metaphysical priority (grounding or other) to which Schaffer's consideration applies. While I ultimately reject these considerations, I believe that they (or something close enough) are plausibly what motivates uneasiness about the series of grounds of ground.

2.1 *Counterfactual Considerations*

It may be tempting to think that a case can be made for the claim that each element of the series of grounds of ground counterfactually depends on its successor. For example, one might think that had $P \prec Q$ not been the case (and Q not been overdetermined by having a distinct further ground besides P), then Q would not have been the case. Moreover, one might even think that (counterpossibly) if P had been the case but $P \prec Q$ had not also been the case, then Q would still not have been the case. But while this is plausible for *some* instances, even setting overdetermination aside, counterexamples abound: For example, assuming $P \prec P \vee Q$, it is not in general the case that had $P \prec P \vee Q$ not been the case, then $P \vee Q$ would not have been the case: Even if $P \vee Q$ is not overdetermined (because only P is true but not Q), it might still be the case that if P had been false, then Q would have been true (and hence $P \vee Q$ too).[6] What is more, even if all such cases could somehow be excluded, counterfactuals do simply not map onto relations of metaphysical priority (at least not in the required way): For example, had $T(P)$ not been the case (let '$T(\,)$' be the truth operator), then P would not have been the case either; if anything, P has metaphysical priority over $T(P)$.

Now, rather than getting bogged down in thinking about counterfactuals further, let us consider two further attempts to argue that there is a relation of productive metaphysical priority (to which Schaffer's consideration applies) that holds between the elements of the series of grounds of ground—staying neutral for now on the question whether this alleged priority relation would

6 Many thanks to the editors and an anonymous referee for discussion here.

be grounding or not; let us call it 'gog-priority'. The first attempt stems from an inclusive sense of 'explains' and the second from a particular reading of the metaphor of the machine.

2.2 *The Inclusive Sense of 'Explains'*

I assume that explanation why has the following tripartite structure (see, for example, Schaffer 2017):

> Base. A set of reasons why the explanandum obtains, e.g., causes or grounds.
>
> Link. An explanatory connection between the reasons in the base and the explanandum; these could either be instances of explanatory relations such as causation or grounding (call these 'type 1') or explanatory generalizations such as laws of nature or metaphysics, (explanatory) schemata, or (explanatory) inference rules (call these 'type 2').
>
> Explanandum. That which is being explained.

For an example, consider an explanation why a certain rose is red (Explanandum) in terms of its being scarlet (a ground that constitutes the explanation's Base) and the grounding fact of the rose's being scarlet grounding it's being red (or a metaphysical principle that states that instantiations of determinates ground instantiations of corresponding determinables).

In a restrictive sense, only the elements of the Base explain the Explanandum—the rose's being red is explained by its being scarlet, while the grounding claim or metaphysical principle plays a different (for example, explanation-backing) role. It is this restrictive sense that corresponds to 'because', which connects a sentence that expresses a reason why with a sentence that expresses an Explanandum (cf. Schnieder 2010; and Skow 2016).

But there also exists another sense of 'explains', in which links also (partially) explain their explananda. In this sense, the rose's being red is explained by it's being scarlet and the corresponding grounding fact of metaphysical principle together: Base and Link(s) together explain$_{\text{inclusive}}$ the Explanandum. This sense is, for example, operative in how the DN-model of explanation is often framed: Boundary conditions and laws (or lawlike generalizations)

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together form the explanans, and the explanans (or what is contained therein) explains the EXPLANANDUM (in the inclusive sense).

Equipped with this inclusive sense of 'explains' and assuming that instances of grounding correspond to instances of explanation, we can observe that the elements of the series of grounds of ground are (partially) explained$_{\text{inclusive}}$ by their successor, which is a type 1 LINK of a grounding explanation of its precursor. For example, Γ_1 is a ground of $P \prec Q$, and $\Gamma_1 \prec (P \prec Q)$ is a LINK of the corresponding grounding explanation. Therefore, $P \prec Q$ not only counterfactually depends on $\Gamma_1 \prec (P \prec Q)$ but is moreover partially explained$_{\text{inclusive}}$ by it.[7]

Hence, if there are series of grounds of ground, then the inclusive 'explains' allows for infinitely descending chains. Moreover, 'explains$_{\text{inclusive}}$' would presumably not be well-founded in the sense that any explained$_{\text{inclusive}}$ fact is ultimately explained$_{\text{inclusive}}$ by unexplained$_{\text{inclusive}}$ facts.[8] For consider a series of grounds of ground: Perhaps all elements could have a fundamental ground outside the series, but then the involved grounding relations give rise to further series (assuming that all instances of grounding are grounded, of course), and so on.[9]

Now, given the inclusive sense of 'explains' and the fact that the explanation in question is a metaphysical one, *some* metaphysical explanatory relation (i.e., a relation that can be called such in some good sense) holds between the elements of the series of grounds of ground. Together with the previous counterfactual observation, this could lead one to think that the relation in question is a relation of productive metaphysical priority, i.e., gog-priority. Assuming further that all such priority relations are subject to a variant of Schaffer's consideration, the viciousness of the series of grounds of ground would then follow.

7 This consideration relies on there being type 1 LINKs rather than only LINKs of type 2; see the next subsection for discussion.

8 Even focusing exclusively on metaphysical explanation. The non-well-foundedness of explanation in general can arguably already be established on the basis of the non-well-foundedness of causation; cf. Schaffer (2016). This incidentally puts pressure on Frugé's (2023, 975) claim that "for any explanation both explainers and explanations must come to an end."

9 For a different kind of argument in favor of the thesis that the inclusive 'explains' (even restricted to metaphysical explanation) is not well-founded, see Hicks (2020) and Kappes (2022).

2.3 *Metaphor of the Machine*

Indeed, I believe that there is something of a sense that Schaffer's consideration or a variant of it applies to gog-priority (if it applies at all) and that this can be brought out by a particular, yet arguably natural, way of construing the metaphor of grounding (or explanation) as a machine (cf. Litland 2017):

> Think of grounding (or explanation) as a machine: Instances of grounding are machines that take inputs (grounds) and use them to generate outputs (groundees). But for a machine to be able to generate something, it either has to exist without having been generated, or it has to be generated first. But this means that the series of grounds of ground corresponds to a series of machines, each generated by a previous machine, and so on *ad infinitum*. It seems like each machine inherits its reality from a further machine that generates it, and thus its reality is infinitely deferred and never achieved.[10]

Now, this understanding of the metaphor of the machine is not mandatory. First, it is just not clear why the causal-temporal relation between the machine and its output within the metaphor should have an analogue in a relation of productive metaphysical priority within reality: after all, metaphors break down somewhere, and this might well be where this one does.[11]

Second, as one of the anonymous referees for this paper has thankfully pointed out, if we assume explanatory LINKs only to be of type 2, that is, explanatory inference rules (as, e.g., Litland does) or certain laws (as, e.g., Schaffer does), rather than instances of grounding, we should presumably understand the metaphor as involving these rules or laws as their machines. But since, e.g., in Litland's case, roughly speaking, a general rule for grounding introduction is sufficient to generate all statements of higher order ground, no hierarchy of ever-descending explanatory machines is required. As the referee has pointed out, moreover, these accounts can avoid the regress of inclusive explanation: Roughly, in a case of P grounding Q, Q will be inclusively explained by P together with a metaphysical law or a statement concerning the validity of the relevant rule of explanatory inference (i.e., one linking

10 Something like this *might* also underlie Frugé's (2023) temporal analogy.

11 Proponents of the well-foundedness of grounding who, like Schaffer, believe that causation is not well-founded have a further compelling reason for this.

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P and *Q*), plus the law or statement concerning the validity of the rule that governs what grounds grounding facts. While this does not get rid of the corresponding infinite series of grounding facts, it does avoid any regress of inclusive explanation.

Now, while I find this very compelling, my aim in this section was to attempt to come up with possible reasons that could be what motivates uneasiness concerning the series of grounds of ground, and this I believe the above version of the metaphor of the machine achieves even in the light of the previous paragraph.

2.4 *Taking Stock*

The series of grounds of ground has been considered unproblematic by those committed to it (cf. Bennett 2011; deRosset 2013a; Dasgupta 2014; Litland 2017). For one, it is not an infinitely descending series of grounds and not obviously problematic in any other way. But more importantly, its proponents assume there to be a strong theoretical reason to allow for it: otherwise, it seems there must be at least some ungrounded grounding facts. But together with a principle of purity of the fundamental, this leads to the result that every entity (and other constituent of facts) is fundamental.[12]

Above, I have developed potential reasons in favor of the claim that the elements of the series of grounds of ground stand in a relation of gog-priority such that an application of Schaffer's consideration reveals the series to be objectionable. Though I ultimately reject these reasons, I take them to (1) provide a plausible diagnosis for the uneasiness concerning the series of grounds of ground that one occasionally encounters outside of print and which is likely shared by Frugé, and (2) substantiate this uneasiness to a point that is worth further engaging with.

While I have already mentioned some possible objections above, I will now argue that gog-priority runs into a version of Bolzano's regress.

3 With Bolzano against Gog-Priority

Let us suppose for the sake of argument that grounding is well-founded and that at least part of what reveals this is Schaffer's consideration. Given

12 But see Correia (2023) and Barker (2023) for some challenges to purity, and Frugé (2023) for a non-trivial conception of fundamentality that allows for ungrounded grounding facts.

these assumptions, let us turn to gog-priority and see whether it is a notion to which an analogue of Schaffer's consideration applies (given the above considerations that motivated considering gog-priority as a genuine kind of metaphysical priority in the first place).

Now, either gog-priority just is grounding too or it is not: In the former case, insofar as Schaffer's consideration applies to grounding, so does it to gog-priority, because the latter just is (a subcase of) grounding. In that case, the series of grounds of ground would constitute a vicious regress. Alternatively, gog-priority is a *sui generis* metaphysical priority relation besides grounding, for which we want to investigate whether Schaffer's consideration applies or not. Therefore, let us first consider whether gog-dependence could be grounding and then generalize our argument.

3.1 *Could Gog-Priority Be Grounding?*

I argue that in this case, grounding facts are not fully grounded in their conventional grounds (the non-gog-priority grounds), and at least the corresponding higher-order grounding facts (which are gog-priority grounds) must be added. For example, $P \prec Q$ will not be fully grounded in its conventional grounds Γ_1; rather, it would at least require $\Gamma_1 \prec (P \prec Q)$ too. This can be brought out by reflection on the metaphor of the machine as construed in the previous section (relying on this construal of the metaphor seems dialectically appropriate since I have diagnosed it as underlying the idea that gog-priority exists as a genuine relation of metaphysical priority subject to Schaffer's consideration).

On this understanding, both the input of the machine and the machine (i.e., the grounding fact) ground the output. In a way, the causal relations that hold within the fiction of the metaphor between the input and the output as well as the machine and the output stand, on this view, simply for grounding. But again, within the metaphor, input and machine can cause the output only together. Therefore, on this understanding, it would seem that the metaphor suggests that Γ_1 and $\Gamma_1 \prec (P \prec Q)$ somehow ground $P \prec Q$ together, neither on its own sufficient as a full ground. Additionally, if we assume otherwise, it would seem that applying Schaffer's consideration would not get us the right result: something that has a full fundamental ground (as $P \prec Q$ would have via its ordinary ground Γ_1) surely has "achieved being"; there being an

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infinitely descending chain of further grounds would not seem to detract from this.[13]

Now, to simplify, we write 'P' for 'Γ_1' and 'Q' for '$P \prec Q$' (but also consider that if the full grounds of all grounding facts must contain something like $\Gamma_1 \prec (P \prec Q)$, then it seems plausible that something analogous holds for all cases of grounding). On the first level, we thus have (let '$\prec$' express at least partial ground):

$$P, (P \prec Q) \prec Q$$

Here is the crux: If P can only ground Q together with help from $P \prec Q$, it would also seem that $P, (P \prec Q)$ cannot fully ground Q alone! Rather, it seems that they too would need help, namely, from $P, (P \prec Q) \prec Q$. At least, the alternative seems objectionably ad hoc: If $P \prec Q$ is indeed a ground, how come $P, (P \prec Q)$ can fully ground Q, while P cannot?

This result (i.e., that $P, (P \prec Q)$ cannot be a full ground of Q because it does not contain a LINK-like element that takes us from $P, (P \prec Q)$ to Q) can be supported by at least one of the considerations that originally motivated that there is something problematic about the series of grounds of ground: Within the metaphor of the machine construed as above, input and machine together *cause* the output. According to my diagnosis, this is what underlies the idea that the relation of gog-priority (which we have here identified with grounding) holds between $P \prec Q$ and Q. But then it seems that we should be able to apply the metaphor to $P, (P \prec Q) \prec Q$ too: This instance of grounding corresponds to a machine that takes P and the original machine (corresponding to $P \prec Q$) as inputs and gives out Q. But then the current understanding of the metaphor delivers that Q is also at least partially grounded in $P, (P \prec Q) \prec Q$, we can apply the metaphor again, and so on!

Now, if what I have just said is correct, then we run into a version of Bolzano's (2014a, para. 199; cf. Rusnock and George 2014) regress:

$$P \prec Q$$

$$P, (P \prec Q) \prec Q$$

$$P, (P \prec Q), (P, (P \prec Q) \prec Q) \prec Q$$

$$\ldots$$

13 Granted, lest a further problem of reality achieving happen somewhere along that infinitely descending chain, all of its elements must be fully grounded in something fundamental.

Bolzano outright rejects (his version of) this series as incoherent, but he does not provide an argument. I submit that there is at least some intuitive strangeness to this series, and while this might not be a particularly strong reason in general, it may have more bite in the present context where we argued against a position itself to a good part motivated by similar intuitions.[14]

Now, for our opponent, who set out to avoid an allegedly problematic infinite series, the situation is already somewhat awkward, but could they perhaps bite the bullet and declare the plurality of all the grounds constructed above to be a full ground Ω of *Q*? I do not think so because, presumably, we should apply the crux argument to Ω too. But by doing so, we seem to reveal that Ω cannot be a full ground of *Q* either: in Ω, there is no grounding fact that takes us from all the grounds in Ω to *Q*! Yet, as I have argued above, this is what the above construal of the metaphor of the machine would require: Within the metaphor, the machine that takes Ω as input and gives out *Q*—it causes *Q* together with the Ω. But since causation is the metaphorical analogue of grounding here, the grounding fact that takes us from the Ω to *Q* would have to be included in a full ground of *Q*—yet, it is not among the Ω!

One might now consider whether a full ground of *Q* could be obtained from Ω by some transfinite construction similar to how Ω was constructed, but as long as the result is such that we can say something that amounts to those grounds (i.e., those resulting from the construction) grounding *Q*, it looks like we can apply the crux and obtain a further grounding fact that should be part of the full ground but was not constructed. Thus, unless declaring full grounds to be ineffable and giving up talking about them like above is considered an option, I conclude that Bolzano's regress must be avoided.

In this subsection, I have argued that given (1) the motivation (from the previous section) for gog-priority being a genuine kind of metaphysical priority to which Schaffer's consideration applies and (2) the assumption that gog-priority just is grounding, Bolzano's regress arises. Since Bolzano's regress must be avoided, (1) is undermined given (2). Next, we will drop assumption

14 Perhaps it could be possible to tell a story that actually supports the innocuousness of Bolzano's series by developing the idea that the new partial ground that is added at every step in the series somehow builds upon the previous partial grounds, thus getting us closer and closer to *Q* and reaching it at the limit? Thus understood, *P* gets us to some extent to *Q*, its getting us there to some extent gets us a little further, and so forth, until at the limit, we reach *Q*.

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(2) and argue that a Bolzanian regress arises (and hence (1) is undermined even if gog-priority is not grounding).[15]

3.2 *Suppose Gog-Priority Is* Not *Grounding*

To round off the argument, assume now that gog-priority is *not* grounding but some *sui generis* kind of metaphysical priority relation. Suppose Q is fully grounded in a fundamental fact P and gog-posterior to $P < Q$ (i.e., P's fully grounding Q is gog-prior to Q). Let us consider how Schaffer's consideration might apply in this situation: Suppose first that something can "achieve reality" already by being fully grounded in something fundamental. Then that thing's *additionally* being located at the top of an infinitely descending, non-terminating chain of gog-priority would not seem to impact Q's being real—Q would have already "achieved reality" by being fully grounded in something fundamental.

Therefore, it seems our opponent should rather hold that neither only something's being *grounded* in something fundamental nor only its being gog-posterior to something fundamental can be sufficient for the thing's having achieved reality, or (we might say) "having been made real." In our example case, this means that while P fully grounds Q and Q is gog-posterior to $P < Q$, neither P nor $P < Q$ on its own is sufficient to make Q real. Rather, P and $P < Q$ only make Q real together.

Now, whatever this relation of real-making would be (perhaps it could just be the disjunction of grounding and gog-priority?), it looks like the opponent of the series of grounds of ground must hold that an analogue of Schaffer's consideration applies to *it*, and hence that for something to be real, it must either not be made real by anything or be fully made real by some things that are not made real by anything.

But then it seems like we can run the crux argument with real-making instead of grounding and thus construct the Bolzanian regress for this relation of real-making: If P can only make Q real together with help from $P < Q$, why

15 Mentioning Carroll's related regress, Bennett (2017, 207) offers a similar argument against theories like Dasgupta's, according to which grounding facts are grounded in principles that connect grounds with groundee. Her argument relies on the claim that whatever grounds a grounding fact $\Gamma \prec Q$ must also ground Q (for a (pre-emptive) response to Bennett's regress, see Dasgupta 2014, 587–589). While I cannot assess Bennett's metaphorical consideration for that claim here, a likely upshot of our present discussion is that it must not generalize to the grounding facts themselves: Claiming that $\Gamma \prec Q$ must be a ground of Q is what gets our regress argument going.

believe that P, $(P < Q)$ can fully make Q real on their own? It would seem that they also need help, namely, from some fact concerning P and $P < Q$'s (partially) making Q real. At least, the alternative seems ad hoc: If $P < Q$ indeed (partially) makes Q real, how come P and $(P < Q)$ together can fully make Q real, while P alone cannot?

It seems that the reasons our opponent has to believe that P can make Q real only together with $P < Q$ seem to carry over to P's and $P < Q$'s together making Q real: Consider once the metaphor of the machine as construed above, within which input and machine together *cause* the output. This causal relation is the metaphorical equivalent of the relation of real-making that we are currently considering.

But then our opponent would have to produce a good reason to stop the metaphor thus understood from applying to real-making as well: Like grounding, real-making can metaphorically appear as a machine that takes inputs (the "real-makers") and puts out real things. But why would the metaphorical parallel between causation and grounding in the original (stretched) metaphor then not have its equivalent here? If our opponent cannot produce a good answer, it would seem that P's and $P < Q$'s making Q real itself would have to be a real-maker of Q, and by similar reasoning to what we used above in the case of grounding, it would then seem that P and $P < Q$ alone cannot fully make Q real. Rather, they would at least have to be accompanied by *their* making Q real, thereby starting the Bolzanian regress for real-making.

Again, one might criticize this argument for its dependence on an intuitive assessment of a particular understanding of the metaphor of the machine. But consider the dialectical situation once more: This is the very kind of consideration that, according to my diagnosis in section 2, underlies the idea that the series of grounds of ground is problematic. Thus, at least unless the opponent of the series of grounds of ground comes up with a different argument, they are confronted with the Bolzanian regress whether they understand gog-priority as grounding or as a *sui generis* relation of metaphysical priority.

4 Conclusion

Let us recapitulate: Section 1 argued against Frugé's argument for the viciousness of the series of ground of ground: Even if his notion of connection dependence corresponds to a genuine form of metaphysical priority, the resulting structure does not allow for an application of Schaffer's consideration to the series of ground of ground.

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Section 2 discussed three related considerations in favor of the thesis that a well-founded relation of metaphysical priority holds between the elements of the series of ground of ground. These concerned certain counterfactuals, the inclusive sense of 'explains', and a natural reading of the metaphor of explanation as a machine. While I ultimately argued that we should not endorse these three considerations, I suggested that we should take them seriously as likely underlying the claim that the series of ground of ground is vicious.

Finally, in section 3 I argued that endorsing the viciousness of the series of ground of ground based on the considerations identified in the previous section runs into a variant of Bolzano's regress. Hence, we should reject the problematic considerations and can maintain the innocence of the series of ground of ground.*

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References

BARKER, Jonathan. 2023. "Against Purity." *Ergo* 9(50): 1381–1409, doi:10.3998/ergo.2919.

BENNETT, Karen. 2011. "By Our Bootstraps." in *Philosophical Perspectives 25: Metaphysics*, edited by John HAWTHORNE, pp. 27–41. Hoboken, New Jersey: John Wiley; Sons, Inc., doi:10.1111/j.1520-8583.2011.00207.x.

—. 2017. *Making Things Up*. Oxford: Oxford University Press, doi:10.1093/oso/9780199682683.001.0001.

BOLZANO, Bernard. 2014a. *Theory of Science. Volume 1*. Oxford: Oxford University Press. Translated by Paul Rusnock and Rolf George.

—. 2014b. *Theory of Science. Volume 2*. Oxford: Oxford University Press. Translated by Paul Rusnock and Rolf George.

CORREIA, Fabrice. 2023. "A New Argument for the Groundedness of Grounding Facts." *Erkenntnis* 88(4): 1577–1592, doi:10.1007/s10670-021-00416-7.

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Dasgupta, Shamik. 2014. "The Possibility of Physicalism." *The Journal of Philosophy* 111(9–10): 557–592, doi:10.5840/jphil20141119/1037.

deRosset, Louis. 2013a. "Grounding Explanations." *Philosophers' Imprint* 13(7).

—. 2013b. "No Free Lunch." in *Varieties of Dependence: Ontological Dependence, Supervenience, and Response-Dependence*, edited by Miguel Hoeltje, Benjamin Sebastian Schnieder, and Alexander Steinberg, pp. 243–270. Basic Philosophical Concepts. München: Philosophia Verlag, doi:10.2307/j.ctv2nrzhj9.

Frugé, Christopher. 2023. "Janus-Faced Grounding." *Ergo* 10(34): 968–991, doi:10.3998/ergo.4664.

Hicks, Michael Townsen. 2020. "Breaking the Explanatory Circle." *Philosophical Studies* 178(2): 533–557, doi:10.1007/s11098-020-01444-9.

Kappes, Yannic. 2022. "Self-Explanation and Empty-Base Explanation." *The Journal of the American Philosophical Association* 8(3): 436–453, doi:10.1017/apa.2021.8.

Kovacs, David Mark. 2018. "What is Wrong With Self-Grounding?" *Erkenntnis* 83(6): 1157–1180, doi:10.1007/s10670-017-9934-y.

Litland, Jon Erling. 2017. "Grounding Grounding." in *Oxford Studies in Metaphysics*, volume X, edited by Karen Bennett and Dean W. Zimmerman, pp. 279–316. New York: Oxford University Press, doi:10.1093/acprof:oso/9780198791973.003.0012.

Rusnock, Paul and George, Rolf. 2014. "Introduction." in *Theory of Science. Volume 2*, pp. xv–liv. Oxford: Oxford University Press. Translated by Paul Rusnock and Rolf George.

Schaffer, Jonathan. 2010. "Monism: The Priority of the Whole." *The Philosophical Review* 119(1): 31–76, doi:10.1215/00318108-2009-025.

—. 2016. "Grounding in the Image of Causation." *Philosophical Studies* 173(1): 49–100, doi:10.1007/s11098-014-0438-1.

—. 2017. "The Ground Between the Gaps." *Philosophers' Imprint* 17(11).

Schnieder, Benjamin Sebastian. 2010. "A Puzzle about 'Because'." *Logique et Analyse* 53(211): 317–343.

Sider, Theodore. 2020. "Ground Grounded." *Philosophical Studies* 177(3): 747–767, doi:10.1007/s11098-018-1204-6.

Skow, Bradford. 2016. *Reasons Why*. New York: Oxford University Press, doi:10.1093/acprof:oso/9780198785842.001.0001.