

In Defense of the (Moderate) Disunity of Grounding*

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A *monist* about grounding holds that there is a single fundamental grounding relation; a *pluralist* holds that there are several fundamentally distinct grounding relations.¹ In this paper I do two things. First, I defend the moderate pluralism of Fine 2012 from two challenges recently presented by Berker (forthcoming[b]). Second, I show that the pluralist's most basic grounding relations are not asymmetric.

1 Pluralism: What and Why?

We will understand two relations to be *fundamentally distinct* when (i) neither relation can be defined in terms of the other; and (ii) there is no plurality of distinct relations in terms of which they can both be defined.² A pluralist holds that there are at least two fundamentally distinct grounding relations. Fine is a *moderate* pluralist; he holds that there are three fundamentally distinct grounding relations—metaphysical, normative,

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¹There is a dispute over whether grounding claims are best regimented using a grounding *relation* or whether they are best expressed using a sentential operator. Nothing, I say in this paper turns on this, and so I have followed Berker in couching the discussion in relational terms. It is however important that the disagreement is *worldly*. The pluralist and the monist disagree about which relations are out there in the world; they do not merely differ over how a single relation is represented (in language or thought).

²We here follow Berker except that we have strengthened the last clause to require not just that there is no single third grounding relation in terms of which they can both be defined but we require also that there is no *plurality* of grounding relations in terms of which they can both be defined. Since this makes it harder to be a pluralist this is dialectically appropriate. Since the disagreement between the monist and the pluralist is about what relations there are we take “definition” to mean *real* definition.

and natural grounding.³ For convenience I restrict my attention to the relationship between metaphysical and normative grounding; the points made carry over to natural grounding. For the remainder of the paper “pluralism” will mean moderate pluralism.

Though the goal of this paper just is to rebut arguments against pluralism, we should rehearse one of Fine’s main motivations for pluralism—leaving room for non-reductive realism about normativity. Later (§ 6) we have to check that the version of pluralism defended here does justice to this motivation.⁴

To see how non-reductive realism motivates pluralism suppose, for the sake of argument, that hedonistic act-utilitarianism is true. In that case, if an act maximizes pleasure it is right; but not only is an act that maximizes pleasure right, it is right *because* it maximizes pleasure. Could this be the “because” of metaphysical grounding? Fine holds that metaphysical grounding is always mediated through the essence of the grounded.⁵ If the “because” was one of metaphysical grounding it would then be essential to the Right that any action that maximizes pleasure be right. On the non-reductive view in question, however, there is no essential connection between the Right and any naturalistic feature like maximizing pleasure. From this we conclude that normative grounding is distinct from metaphysical grounding. The difficulty in defining normative grounding in other terms (see e.g., Fine 2012, pp. 39-40) now provides some evidence for taking normative and metaphysical grounding to be fundamentally distinct.⁶

Let us now turn to Berker’s arguments against the pluralist.

2 Berker’s Challenge: Accounting for Mixed Principles

The pure transitivity and asymmetry principles say that metaphysical, normative, and natural (partial) grounding are each transitive and asymmetric. Let us assume that these

³Berker contrasts Fine’s moderate pluralism with the *extreme* pluralism defended by Wilson (2014, 2016) and Koslicki (2015). Part of the difference is in the sheer number of small-“g” grounding relations countenanced by Wilson (see e.g., Wilson 2014, p. 539). But the more important difference is that the moderate’s three relations are all *explanatory* relations: if ϕ grounds ψ , then ϕ provides an explanation of ψ . In this sense the three relations are unified, whereas Wilson’s are not so unified—indeed, the relata of the small-“g” relations are mostly of the wrong type for them to be explanatory.

⁴The following paragraph is based on Fine 2012, pp. 77–78. Bader (2017) develops a quite different argument for pluralism. I hasten to add that accepting a fundamental normative grounding relation is not the only way of being a non-reductive realist. Rosen (2017) gives a useful survey of the options; see also Berker forthcoming(a).

⁵For a careful formulation of what this comes to see Fine 2012, pp. 74–76. Audi (2012), Dasgupta (2014), Rosen (2010), and Trogdon (2013) accept related principles.

⁶Thanks to an anonymous referee for discussion on this point.

principles are correct.⁷ Berker directs our attention to the following mixed principles.

- (Trans_{Met/Nor}) If ϕ metaphysically grounds ψ and ψ normatively grounds θ then ϕ grounds (in some non-rigged up sense) θ
- (Trans_{Nor/Met}) If ϕ normatively grounds ψ and ψ metaphysically grounds θ then ϕ grounds (in some non-rigged up sense) θ
- (Asym_{met/nor}) If ϕ metaphysically grounds ψ , then ψ does not normatively ground ϕ

Berker finds the mixed principles almost as compelling as the pure principles. Let us provisionally grant him this. He challenges the pluralist to account for the truth of instances of the mixed transitivity principles.

We begin with the challenge of accounting for (Asym_{met/nor})—what I, appropriating Berker’s nice phrase, call the challenge of Asymmetric Dovetailing. (I return to the transitivity principles in § 5.) For the pure asymmetry principles we can say that it is in the nature of metaphysical (normative, natural) grounding that it be transitive and asymmetric. But such a line does not work for the mixed principles. Since metaphysical and normative grounding are fundamentally distinct there are no grounding relations from which they both are definable; and so (Asym_{met/nor}) cannot follow from the respective definitions of normative and metaphysical grounding. But if there is no definitional link between metaphysical and normative grounding, is it not a miracle that the normative and metaphysical grounding relations “get out of each other’s way” in the way required by (Asym_{met/nor})?⁸

3 A Counterexample to Mixed Asymmetry

Maybe they fail to get out of each other’s way? Here is a putative counterexample to (Asym_{met/nor}).

Suppose we accept a truth-norm for assertion, formulated as a principle of normative grounding:⁹

- (T-Norm) If it is the case that ϕ , its being the case that ϕ partially normatively grounds that it is proper to assert that ϕ .

⁷This is not uncontested: Schaffer (2012) has denied transitivity; Bliss (2014) and Thompson (2016) have denied asymmetry and Jenkins (2011) has denied irreflexivity. Later we will see that the *basic* grounding relations are not asymmetric.

⁸The monist, too, must account for the truth of the mixed principles. How the monist should do this depends on how basic grounding relates to metaphysical and normative grounding: but on both the *identity* and *suppression* proposals discussed by Berker (forthcoming[b], p. 27) this is easily done.

⁹Typically, a norm of assertion is formulated simply as a biconditional. (“It is proper to assert that ϕ iff ϕ ”) But it is very natural to think it is partly *because* it is the case that ϕ that it is proper to assert that ϕ .

To get a counterexample to ($\text{Asym}_{\text{met/nor}}$) consider:

(S) $0=0$ or it is proper to assert that the sentence with label (S) is true

Since $0 = 0$ the sentence with label (S) is true.¹⁰ Since the sentence with label (S) is true, it follows by (T-Norm) that its being the case that the sentence with label (S) is true normatively grounds that it is proper to assert that the sentence with label (S) is true.

But “it is proper to assert that the sentence with label (S) is true” is a disjunct of the sentence (S). And so by the principle that true disjuncts metaphysically ground disjunctions, that it is proper to assert that the sentence with label (S) is true metaphysically grounds that ($0=0$ or it is proper to assert that the sentence with label (S) is true). It is widely accepted that for any p , the truth of a sentence that says that p is partly grounded in its being the case that p .¹¹ An instance is that its being the case that ($0=0$ or it is proper to assert that (S) is true) partially metaphysically grounds that the sentence with label (S) is true. It follows that its being proper to assert that the sentence with label (S) is true partially metaphysically grounds that the sentence with label (S) is true. This is a failure of ($\text{Asym}_{\text{met/nor}}$). That the sentence with label (S) is true partially normatively grounds that it is proper to assert that the sentence with label (S) is true; that it is proper to assert that the sentence with label (S) is true partially metaphysically grounds that the sentence with label (S) is true.

One response is to reject (T-Norm).¹² But since we only require that S ’s being true is a partial ground for its being proper to assert that S is true this response will not work. Suppose instead one opts for a knowledge norm:

(K-Norm) If one knows that ψ , one’s knowing that ψ partially normatively grounds that it is proper for one to assert ψ

Imagine someone—call her Abby—who understands (S) and knows that (S) is the only sentence with label (S). Abby is clearly in a position to know that (S) is true. If Abby knows that (S) is true, and the truth of (S) is part of the (metaphysical) grounds for Abby’s knowing that (S) is true, we can run essentially the same argument as above to generate a failure of ($\text{Asym}_{\text{met/nor}}$).

Reflection on the case of Abby also shows that we do not need (K-Norm) (or (T-

¹⁰If one thought that the weak Kleene truth tables were correct, this would not follow; I assume—as is common—that weak Kleene is unduly restrictive.

¹¹This principle can be rejected on predicativist grounds—for a detailed development see Korbacher forthcoming(a),(b); discussing this further will take us too far afield.

¹²For some reasons see Williamson 1996; for reasons for rejecting (T-Norm) having to do with self-reference see Pelling 2011.

Norm)) to be universally true. All we need for the counterexample is (i) that in the case at hand it is proper for Abby to assert that the sentence with label (S) is true; and (ii) that her knowledge that the sentence with label (S) is true partially normatively grounds that it is proper for her to assert that the sentence with label (S) is true.

A more promising response is to reject that disjunctions are always grounded in their disjuncts. That is, one would reject

$$\frac{\phi}{\phi \text{ grounds } \phi \vee \psi} \text{ } \vee\text{-grounding}$$

At least since Fine 2010 we have known that there are cases in which $\vee$ -grounding must be rejected. Indeed, if monism is correct and (T-Norm) (or (K-Norm)) is a (correct) principle about metaphysical grounding (S) is itself a counterexample to $\vee$ -grounding. For if we do not reject $\vee$ -grounding we must reject one of the following pure principles:

(Non-circularity_{met}) For no ψ do we have ψ partially metaphysically grounding ψ

or

(Trans_{Met}) For all ϕ, ψ, θ : if ϕ partially metaphysically grounds ψ and ψ partially metaphysically grounds θ then ϕ partially metaphysically grounds θ

While we can block the counterexample to (Asym_{met/nor}) by rejecting this application of $\vee$ -grounding this is not—by itself—satisfactory: we want a theory that tells us which applications of $\vee$ -grounding must be rejected and why. Such theories have been developed—for metaphysical grounding—by Litland (2015) and Fine (2010). The problem for Berker is that once we extend these theories to deal with combinations of normative and metaphysical grounding, the resulting theories block not just the above counterexample to (Asym_{met/nor}), they also give a satisfactory explanation of the truth of (Asym_{met/nor}) thus allowing the pluralist to meet the challenge of Asymmetric Dovetailing.

4 Metaphysical Decycling

As Fine's theory only deals with partial ground, I present Litland's theory.¹³ To motivate the theory consider one of the simplest cases where cycles arise (Fine 2010, p. 117n15). Let U be the sentence:

¹³I should stress that there is no problem extending Fine's theory to deal with mixed cases. I also present a slightly simplified version of Litland's theory. There is no technical problem in extending the full theory, and any philosophical problems caused by mixed grounding arise already for the simplified theory.

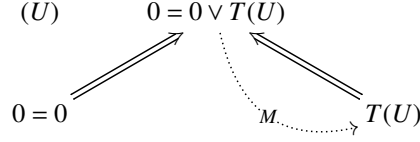


Figure 1: Disjunctions grounding disjuncts

$$(U) \quad 0 = 0 \vee T(U)$$

Since $0 = 0$, it is the case that $0 = 0 \vee T(U)$. Since (U) just is $0 = 0 \vee T(U)$, it is the case that $0 = 0 \vee T(U)$ partially grounds $T(U)$. If $T(U)$ grounded $0 = 0 \vee T(U)$ we would have a cycle of ground. The structure of this situation is depicted in figure 1. The double arrows represent putative immediate full grounding and the dotted arrows represent putative (immediate) partial grounding. “ M ” is meant to signify the proposition that U means that $0 = 0 \vee T(U)$; and the meaning of the “ M ” inside the dotted arrow is that $0 = 0 \vee T(U)$ together with M are the immediate full grounds for $T(U)$. Moreover, we take the figure to represent *all* the putative immediate grounds for the propositions occurring in the figure.¹⁴

Figure 1 depicts a *cycle-tolerant* grounding relation. The *Problem of Decycling* is how, systematically, to extract an asymmetric grounding relation from the cycle-tolerant one.

It is convenient to follow Litland in representing steps of putative immediate grounding as (*explanatory*) *inferences* from the grounds to the grounded. The inference $\frac{\phi_0, \phi_1, \dots}{\phi}$, e.g., represents that ϕ is putatively immediately grounded in $\phi_0, \phi_1, \dots$ (taken together). How a proposition ϕ is mediately putatively grounded in some propositions Γ can then be represented by an *argument* from Γ to ϕ .¹⁵

The crucial assumptions in Litland’s theory of decycling is (i) that some propositions do not stand in need of explanation;¹⁶ and (ii) that every other proposition is the conclusion of an argument the premisses of which do not stand in need of explanation. This allows us to introduce the notion of a *completely satisfactory explanation*. A completely satisfactory explanation of ϕ is an argument to ϕ from some propositions

¹⁴Figures like these are graphical representations of the hypergraphs that deRosset (2015) and Litland (2015) take to play an important role in theory of grounding.

¹⁵This “inferentialist” formulation is purely for convenience; we need not take a stand on whether it is possible to give an account of grounding in terms of explanatory inference.

¹⁶For simplicity, I assume that these are the propositions which, if true, are ungrounded. The theory can be developed without this assumption.

that do not stand in need of explanation and where the argument does not involve any cycles.¹⁷ (If ϕ does not stand in need of explanation, we consider the one-step argument ϕ to be completely satisfactory.)

We now define immediate full grounding. Let $\mathcal{E}_0, \mathcal{E}_1, \dots$ be variables ranging over completely satisfactory explanations.

Definition 4.1. $\phi_0, \phi_1, \dots$ immediately fully ground ϕ iff there is an explanatory inference $\frac{\phi_0, \phi_1, \dots}{\phi}$ such that for all completely satisfactory explanations $\mathcal{E}_0, \mathcal{E}_1, \dots$ of $\phi_0, \phi_1, \dots$ the argument

$$\frac{\begin{array}{ccc} \mathcal{E}_0 & \mathcal{E}_1 & \\ \phi_0 & \phi_1 & \dots \end{array}}{\phi}$$

is itself completely satisfactory.

Having defined immediate grounding in this way we define mediate grounding as the closure of immediate grounding under Cut.¹⁸ If grounding is defined this way it is clear that $T(U)$ does not ground $0 = 0 \vee T(U)$. Any completely satisfactory explanation of $T(U)$ will pass through $0 = 0 \vee T(U)$; there is therefore no way of getting a non-cyclical extension of such an argument to end in $0 = 0 \vee T(U)$. (Note that we here use the assumption that figure 1 depicts all the putative immediate grounds for the propositions depicted in it.) More generally, one can prove that the mediate grounding relation that is defined in this way is both transitive and asymmetric. If the theory of decycling is correct there are no counterexamples to the asymmetry of metaphysical grounding.

5 Mixed Decycling and the Problem of Transitive Links

If (T-Norm) were a principle about metaphysical grounding the above would show why (S) is not a counterexample to the asymmetry of metaphysical grounding. (T-Norm), however, is a principle of normative grounding. Since completely satisfactory explanations are composed of inferences tracking putative metaphysical grounding (“metaphysical inferences”, for short), the theory of decycling does not block the counterexample to (Asym_{met/nor}).

¹⁷Somewhat more precisely: if we model arguments as labeled trees, a cycle is a path in the argument tree where two distinct nodes have the same label. For more details see Litland 2015. The notion of a completely satisfactory explanation originates in Fine 2010, p. 105.

¹⁸Cut is the principle:

$$\frac{\Delta_0 < \phi_0 \quad \Delta_1 < \phi_1 \quad \dots \quad \phi_0, \phi_1, \dots, \Sigma < \psi}{\Delta_0, \Delta_1, \dots, \Sigma < \psi} \text{Cut}$$

Technically, the fix is straightforward. First, allow completely satisfactory explanations to contain “normative inferences”—that is, inferences tracking putative immediate normative grounding. Second, take the propositions not standing in need of explanation to be those that are *both* metaphysically and normatively ungrounded. If we amend the theory in this way we validate (Asym_{met/nor}).¹⁹

While technically straightforward these two changes can be challenged on philosophical grounds. The change in the definition of what it is for a proposition not to stand in need of explanation seems unproblematic. But by allowing the completely satisfactory explanations to “interleave” metaphysical and normative inferences we run into Berker’s other argument against the pluralist—his *Argument from Transitive Links*.

By allowing the completely satisfactory explanations freely to alternate between metaphysical and normative inferences we, in effect, take the (joint) transitive closure of metaphysical and normative grounding.²⁰ Let us call this *chained* grounding. Berker is, of course, aware that by taking such transitive closures we end up with a “grounding” relation that satisfies the mixed transitivity principles. Berker’s objection is that chained grounding is merely “rigged up”. I think he is wrong.

The sense in which it is not (just) rigged up is the following. For the pluralist each grounding relation is *explanatory*.²¹ If ϕ is a *metaphysical* explanation of ψ , then ϕ is an *explanation* of ψ ; and if ψ is a *normative* explanation of θ , then ψ is, likewise, an *explanation* of θ . It then seems reasonable to hold that ϕ is an explanation of θ . So the sense in which chained grounding is not just rigged up is that if ϕ stands in the relation of chained grounding to θ , then ϕ provides an explanation of θ .²²

One might object that the result of chaining together explanatory relations is not always an explanatory relation. By way of analogy, Berker points out that there are two larger-than relations for cities: larger-in-population and larger-in-area. The result of chaining these relations is not a larger-than relation. Could the result of chaining

¹⁹We also validate a stronger asymmetry principle. For each n and for each $0 \leq i \leq n$ let $<_i$ indicate either normative or metaphysical grounding; then the following principle holds:

(Asym_{met/nor+}) For no $\phi_0, \phi_1, \dots, \phi_n$ do we have

$$\phi_0 <_0 \phi_1 <_1 \phi_2 <_2 \dots <_{n-1} \phi_n <_n \phi_0$$

²⁰The least transitive relation extending both normative and metaphysical grounding.

²¹How is grounding related to explanation? Dasgupta (2014, 2016) and Litland (2017) hold that (metaphysical) grounding just is metaphysical explanation whereas Schaffer (2012), Schaffer (2016), and Audi (2012) hold that grounding “backs” or “underwrites” this distinctive sort of explanation. Both views are compatible with pluralism. If one holds the latter—“backing”—view one should say that mixed grounding explanations are backed by the holding of *some* grounding relations. If one holds the former view one should think that general grounding explanations are generated from the three basic types of grounding explanation.

²²A similar point is made by Schaffer (2016) when he points out how explanations are often backed by alternating sequences of grounding and causation.

together distinct grounding relations be like that?

I have two responses. First, chained grounding has the right connection to necessity. Fine (2012, pp. 38–39) holds that if ϕ metaphysically grounds ψ then it is metaphysically necessary that if ϕ obtains then ψ obtains; if ϕ normatively grounds ψ then it is normatively necessary that if ϕ obtains then ψ obtains. If chained grounding is not rigged up we should expect there to be an interesting sense of necessity in which the grounds necessitate the grounded. And if we can find such a notion of necessity this would provide some evidence for chained grounding's not being rigged up. Fortunately, there is a such a notion of necessity.²³

Since the normative laws may be metaphysically contingent it is not true that if ϕ metaphysically grounds ψ and ψ normatively grounds θ then it is metaphysically necessary that it is normatively necessary that (if ϕ then θ). What is true, however, is that it is metaphysically necessary that if everything that is *actually* normatively necessary is normatively necessary, then (if ϕ then θ .) Generalizing, say that ϕ is *m/n* necessary if ϕ is true in all metaphysically possible worlds that agree with the actual world on what is normatively necessary. So what we should say in a mixed case where ϕ metaphysically grounds ψ and ψ normatively grounds θ is that ϕ *m/n*-necessitates θ .

Second, let me sketch a positive view that accounts for how chaining together metaphysical and normative grounding gives rise to explanation. The idea is that particular instances of grounding can be derived from general laws of grounding. On this view if ϕ metaphysically grounds ψ then ψ can be derived from ϕ via the metaphysical laws.²⁴ This view naturally extends to normative grounding: for ϕ to normatively ground ψ is for ψ to be derivable from ϕ via the normative laws.

²³Skiles (2015) and Leuenberger (2013) have argued that the grounds do not necessitate the grounded. However, they believe that the totality of the grounded globally supervene on the totality of grounds. The considerations in the next paragraph can be rephrased in terms of global supervenience.

²⁴Many authors have toyed with this idea. The best worked out account is perhaps the deductive-nomological theory proposed by Wilsch (2015a,b). (He intends it as a reductive account of grounding.) For Wilsch laws are certain metaphysically necessary universally quantified conditionals. And for him what it is for the grounded to be derived from the grounds via the laws is for the grounded to be a logical consequence (in a restricted sense of consequence) of the grounds and the laws. I do not want to commit to all the features of Wilsch's account. In particular, the idea that the laws are associated with "construction operations" is not plausible for normative (or natural) grounding. (Thanks to Selim Berker on this point.)

It is therefore worth noting that other recent approaches to grounding also can accommodate the idea that particular instances of grounding can be derived from general grounding laws; I give two examples. Litland (2017) proposed a connection between grounding and explanatory arguments. In such a framework one could identify laws with schematic *rules* of explanatory inference. One could then say that what it is for the grounded to be derived from the grounds via the laws is for the grounded to follow by some number of applications of the rules of explanatory inference from the grounds. Schaffer (2016) and Wilson (2017) have proposed that grounding can be modeled using "structural equation" models. In such a framework one may identify the laws with the structural equations themselves. We could then say that what it is for the grounded to be derived from the grounds via the laws is for the grounded to be the value of a dependent variable x on an assignment of the grounds as the values of the variables on which x depends.

Chained grounding arises naturally: ϕ metaphysically/normatively grounds ψ if ψ is derivable from ϕ via metaphysical *and* normative laws. On this view of explanation chained grounding seems explanatory: if explanation is subsumption under law, then the type of law should not matter for whether we have an explanation, and nor should the mixing and matching of different types of law. Indeed, such mixing of laws is arguably quite common. Schaffer (2016) argues—convincingly in my opinion—that there are explanations that mix grounding and causation: if explanation is subsumption under law then this is a case of mixing laws.²⁵

Moreover, chained grounding is arguably no more problematic than mediate metaphysical grounding. That a is crimson grounds that a is red—this, we may suppose, falls under a law about determinates and determinables. That a is red grounds that a is red or Nixon was impeached—this falls under a law governing disjunction. But to get that a 's being crimson grounds that a is red or Nixon was impeached we need two laws. Mixing laws is not a problem when both laws are metaphysical laws: why should it make a difference if one is metaphysical and the other is normative?

I take considerations like this to show that the pluralist can meet the challenge of Transitive Links. But suppose one is not convinced: at the very least we have reduced the pluralist's problem. As Berker points out, there is more to the challenge posed by Transitive Links and Asymmetric Dovetailing than the challenges posed individually. The real difficulty is simultaneously to meet both challenges: by meeting one challenge one might make it harder to meet the other. But if the theory of decycling is correct, this risk is merely apparent. For the theory of decycling takes *any* solution to the problem of Transitive Links and automatically gives us a solution to the problem of Asymmetric Dovetailing.²⁶

6 Pluralism About What?

It follows from the above that the asymmetric relations of normative and metaphysical grounding are not fundamentally distinct. For the theory of mixed decycling in effect defines asymmetric metaphysical and normative grounding in terms of cycle-tolerant metaphysical and normative grounding (together with the notion of a proposition's not

²⁵I believe that by developing this view one can address the worries for, in effect, the transitivity of mixed ground pointed out by Väyrynen (2009). But that has to await another occasion. I am grateful to a referee for making me aware of Väyrynen's paper.

²⁶It is worth noting that nothing in this solution requires that there are just the three notions of metaphysical, normative, and natural grounding. As long as each notion of grounding is explanatory and the notion of a proposition's not standing in need of explanation is in good standing we have an answer to the problem of Transitive Links and Asymmetric Dovetailing.

standing in need of explanation). This is not a problem for pluralism as long as the most basic normative and metaphysical grounding relations are fundamentally distinct. Nothing that has been said in this paper threatens that. Moreover, Fine's motivations for pluralism (§ 1) does not require that the basic grounding relations be asymmetric.

It might appear surprising that pluralism cannot be defended for asymmetric grounding. But it would be a mistake for the monist to object to pluralism on account of this. The sentence (U) is a putative counterexample to the asymmetry of the monist's basic grounding relation. If we use the theory of decycling to avoid the counterexample what we do is define asymmetric grounding in terms of cycle-tolerant basic grounding. For the monist, too, basic grounding tolerates cycles.²⁷

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²⁷One might of course reject the theory of decycling and deal with puzzles of grounding like the one presented by (U) in some other way. While this is not the place to argue for this in detail, it is noteworthy that the otherwise quite different approaches to the puzzles of grounding proposed by Litland (2015), Fine (2010), Woods (forthcoming), and deRosset (n.d.) all agree on taking a cycle-tolerant relation as basic.

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