**A Psychologistic Theory of Metaphysical Explanation**

**Abstract**

Many think that sentences about what metaphysically explains what are true iff there exist *grounding relations*. This suggests that sceptics about grounding should be error theorists about metaphysical explanation. We think there is a better option: a theory of metaphysical explanation which offers truth conditions for claims about what metaphysically explains what that are not couched in terms of grounding relations, but are instead couched in terms of, *inter alia,* psychological facts. We do not argue that our account is superior to grounding-based accounts. Rather, we offer it to those already ill-disposed towards grounding.

**1. Introduction**

Consider the following claims:

1. The flower is red *because* the flower is scarlet.
2. The tricycle exists *because* the wheels, spokes, seat, etc. exist and are arranged a certain way.
3. The proposition <Darwin exists>[[1]](#footnote-1) is true *because* Darwin exists.
4. {Darwin} exists *because* Darwin exists.
5. God loves X *because* X is good.

(A) through (E) appear to be true,[[2]](#footnote-2) and to be *explanatory*. These are not, however, causal explanations. So we appear to have identified a class of true, non-causal explanatory claims. Moreover, these claims, as with explanatory claims generally, exhibit an *asymmetry*: if we switch the expressions flanking the ‘*because*’ in any of these cases, the resulting claim strikes us as false. Call non-diachronic[[3]](#footnote-3) explanations of this kind *metaphysical explanations.*

There has been a recent surge of interest in the notions of metaphysical explanation and *grounding*. The nature of grounding, and its connection to metaphysical explanation, is contentious. Here, we understand grounding relations to be primitive, mind-independent metaphysical connections that putatively underlie true metaphysical explanations (following Schaffer, 2009, Audi, 2012, and Rodriguez-Pereyra, 2005).[[4]](#footnote-4) If there are grounding relations, it is common to suppose that truths about grounding should be expressed via a relational predicate like ‘grounds’ flanked by names for two distinct facts, so that [y] grounds [x] (read: the fact that y grounds the fact that x).[[5]](#footnote-5)[[6]](#footnote-6)

In what follows we develop truth conditions for metaphysical explanations that make no mention of grounding relations, so understood. We *express* metaphysically explanatory claims by instances of the schema ⌜x *because* y⌝.[[7]](#footnote-7) In so doing, we adopt a sentential operator view of metaphysical explanation, according to which claims about metaphysical explanation are best expressed in terms of an operator—typically *because—*flanked by sentences (x, and y).

We also suppose that for any sentences ⌜x⌝ and ⌜y⌝[[8]](#footnote-8) that appear in claims of the form ⌜x *because* y⌝ there is some fact, [x], and some fact, [y], corresponding to each sentence—*the corresponding facts*—such that the sentence is true iff the fact obtains. So in the case of ‘the chair exists *because* the chair-parts exist and are arranged chair-wise’ we suppose there is a fact, [C]—the fact that the chair exists—and a fact, [C\*]—the fact that the chair-parts exist and are arranged chair-wise. Further, we suppose ‘the chair exists’ is true iff [C] obtains (likewise for ‘the chair-parts exist and are arranged chair-wise’ and [C\*]).

One natural story about the truth conditions for ⌜x *because* y⌝ is that ⌜x *because* y⌝ is true iff [y] grounds [x]. We call this the grounding-based theory of metaphysical explanation. On this view, once we establish between which entities grounding relations obtain, we know what metaphysically explains what.[[9]](#footnote-9)

But grounding is not without its detractors. Wilson (2014) and Koslicki (2015) have argued that there is no call to posit grounding in addition to relations Wilson calls ‘small-g grounding relations’, and elsewhere we have argued (Miller and Norton, 2016) that we can explain all of our tendencies to talk as if there are grounding relations, by appealing to nothing more than certain evolved cognitive mechanisms. More aggressively, Daly (2012) and Hofweber (2009) have argued that the notion of grounding is unintelligible. It is not our aim to press these concerns. We merely note that there is some scepticism about grounding, and it is to these sceptics that our theory is pitched. For if the grounding-based theory is the only game in town then it looks like grounding sceptics should embrace an error theory about metaphysical explanation: instances of ⌜x *because* y⌝ are never true because their truth conditions never obtain. In what follows we offer alternative truth conditions for ⌜x *because* y⌝, truth conditions that appeal to, *inter alia*, psychological facts about the agents who evaluate said sentences.[[10]](#footnote-10) We argue that the truth conditions for claims of the form ⌜x *because* y⌝ are the obtaining of an entailment relation between ⌜y⌝ and ⌜x⌝, (and thus a necessitation relation between [y] and [x])[[11]](#footnote-11) alongside dispositions to have certain mental states. Since these mental states can be expected to vary between individuals, on our view claims about what metaphysically explains what are not true or false *simpliciter*, but rather, relative to a context of assessment.

So that is where we will end up. Here is how we will get there. §2 makes a general case for the plausibility of including psychological facts in the truth conditions for sentences about what metaphysically explains what. §3 lays out the specifics of our account, then in §4 we defend that account, arguing that it provides plausible truth conditions for claims of the form ⌜x *because* y⌝, and that it is superior to error theory.

**2. Motivating a Psychologistic Theory**

Our view of metaphysical explanation places it squarely amongst similarly subjectivist theories of taste, aesthetics, epistemic modals and ethics. In each, some form of realism[[12]](#footnote-12) is defended, but the truth conditions for the relevant claims appeal to psychological facts (broadly construed).

There are three classes of intuition that may lead one to endorse such views. First, one thinks it plausible that the truth conditions for utterances in the relevant discourse appeal to something subjective, or psychologically dependent. Second, one thinks that the relevant sentences are truth-apt, and one thinks that if the truth conditions for such sentences were spelled out in terms of entirely mind-independent facts, then the lack of said facts would render those sentences false. Yet one thinks that those sentences are at least sometimes true. Third, one finds it plausible that there are sometimes faultless disagreements between parties, both of whom are speaking truly.

Not everyone will share these three classes of intuition as they pertain to the domain of metaphysical explanation, and our aim is not to try and convince those who do not, that they ought. Our aim is to present our view as a live option to those who *do* share these intuitions. Someone antecedently committed to the existence of grounding relations will likely think that ⌜x *because* y⌝ is true iff [y] grounds [x]. They will likely find it counterintuitive that there are faultless disagreements about the truth of ⌜x *because* y⌝.

Moreover, one could think that the truth conditions for ⌜x *because* y⌝ will appeal, at least in part, to psychological facts, and reject our account. Those Raven (2015) dubs *separatists* think that there exist relations of ground, but allow that what grounds what might come apart from what metaphysically explains what. A separatist might think that the truth conditions for ⌜x *because* y⌝ include both [x] being grounded by [y] and some further psychological or epistemic element. Thus, a separatist might take much of what we say and use it as some *part* of the truth conditions for ⌜x *because* y⌝: that part that appeals to psychological facts. Our view will prove more attractive than that view only if one is already a grounding sceptic.

At this point it might be suggested that one could reject grounding, but still have reason to reject anything like our account. First, one might think that there are no substantial truth conditions to be offered; instead, ⌜x *because* y⌝ is true iff x *because* y. Minimalists about truth will say just this. Perhaps some non-minimalists will take *because* as primitive and admitting of no further analysis, and hence also take ⌜x *because* y⌝ to admit of no substantive truth conditions. We hope something more can be said about the truth conditions for ⌜x *because* y⌝, but we cannot hope to convince those who do not feel the force of that thought. Henceforth we only consider non-minimalist accounts of the truth conditions for ⌜x *because* y⌝.

Second, one might think that truth conditions for ⌜x *because* y⌝ will mention only mind-independent facts, but will not mention facts about grounding. We think defenders of grounding have made a good case that this is not so. Consider the only candidate for a mind-independent grounding-free account of the truth conditions for ⌜x *because* y⌝. We call it *the modal relations theory.* The theory comes in two versions (though each will come to the same verdict regarding an instance of ⌜x *because* y⌝). According to the necessitation theory, ⌜x *because* y⌝ is true iff [y] necessitates [x]. According to the entailment theory, ⌜x *because* y⌝ is true iff ⌜y⌝ entails ⌜x⌝. Any plausible account of the truth conditions for ⌜x *because* y⌝ needs to correctly assign truth-values to instances of the schema. But the modal relations theory fails in this regard, for modal relations obtain even when the relevant instance of ⌜x *because* y⌝ strikes us as false.[[13]](#footnote-13) Both modal relations are reflexive, and sometimes hold symmetrically, even in cases where we intuit that there is an asymmetric explanatory relation present.[[14]](#footnote-14) In addition to the reflexive and symmetrical instances, consider that, for example, [my neighbour Bill exists] necessitates [2 exists],[[15]](#footnote-15) yet we are disinclined to think that ‘2 exists *because* Bill exists’ is true.

So the grounding sceptic should be sceptical that *any* plausible truth conditions for ⌜x *because* y⌝ can be spelled out by appealing only to mind-independent facts. So such folk ought either to embrace the error theory about metaphysical explanation, or to embrace something like our account. The error theory will be attractive to those who do not find it plausible that the truth of metaphysical explanations could depend on psychology, or who think it implausible that there could be faultless disagreements about matters of metaphysical explanation. We return to consider the error theory in §4. For our part, we find both intuitive.

The truth of ⌜x *because* y⌝ strikes us as psychologically dependent. Plausibly, part of what it is for one thing to explain another is for some (relevant) agent to find the explanans to increase her understanding of the explanandum. We also find it plausible that ⌜x *because* y⌝ is like ⌜x is tasty⌝ or ⌜x is beautiful⌝ or ⌜x is wrong⌝ in that in each case there appear to be faultless disagreements between parties. We think agents with significantly different psychologies and interests may faultlessly disagree about what metaphysically explains what, since what counts as a metaphysical explanation for one agent may not count as such for another. Moreover, we can explain why it might sometimes *seem* as though there are no faultless disagreements. We should expect a certain amount of agreement between creatures like us, regarding what metaphysically explains what, because the relevant psychological features at play are similar. Something like this must be so if anything like the proposal we suggest in Miller and Norton (2016) is right. Indeed, the proposal we offer in what follows is an optional addition to that picture: there, we offer a psychological account of why we are inclined to make certain judgements, and why we would make those judgements in the absence of grounding relations. Here we add to this an account of the truth conditions for ⌜x *because* y⌝ on the assumption that we are roughly right about the psychological picture and on the assumption that those who accept something like that picture do not wish to become error theorists about metaphysical explanation (in §4 we will consider why one might prefer our account over eliminativism).

Here is our view. Recall that the modal relations theory incorrectly assigns truth to some instances of ⌜x *because* y⌝. But it does not render any intuitively true metaphysical explanations false, for every metaphysical explanans necessitates its explanandum. For this reason we build the obtaining of a relevant modal relation as a necessary, but not sufficient, condition for the truth of ⌜x *because* y⌝. Then, roughly for now, our account is one according to which ⌜x *because* y⌝ is true at a context of assessment iff, at that context, ⌜y⌝ is true, and ⌜y⌝ entails ⌜x⌝ and the community in which the assessor is embedded is disposed, after equilibration, to believe that (the relevant instance of ) ⌜x *because* y⌝ is an instance of a particular kind of metaphysical explanation (KME), KMEj and the community is disposed, after equilibration, to believe that KMEj.[[16]](#footnote-16) The devil is, however, in the details, to which we now turn.

**3. The Devil is in the Details**

There are many moving parts in the rough account to which we just gestured. First is the question of what counts as having a belief that x *because* y, and further, what counts as being disposed to have said belief. Second, what does it mean to say that a community is disposed, *after equilibration,* to believe that an instance of ⌜x *because* y⌝ is an instance of a particular KME, (KMEj) or is disposed, after equilibration, to believe that KMEj? And third, *whose* beliefs are relevant in determining the truth of an instance of ⌜x *because* y⌝: which community is the relevant one? To answer these questions we consider a few different accounts, which will be instructive in developing some constraints for a plausible account of the truth conditions for sentences about metaphysical explanation, constraints that our preferred account meets.

We articulate our view in terms of a relativist semantics. According to relativism we distinguish a context of utterance from a context of assessment. Contexts of utterance determine *which* proposition is expressed. Jim’s utterance of ‘I am tall’ and John’s utterance of ‘I am tall’ each express a different proposition: (that Jim is tall, and that John is tall, respectively). If one is a relativist about ascriptions of tallness one will think that when we assess the truth of those propositions, thus uttered, we assess them relative to a context of assessment. Suppose John is a basketballer, and he is assessing Jim’s utterance of ‘I am tall’. Then John is assessing the truth of <Jim is tall>. According to relativists, it might be that given John’s standards of what counts as tall, Jim’s utterance, assessed at John’s context of assessment, comes out as false, while Jim’s utterance, assessed at Jim’s context of assessment, comes out as true.

Some sentences (namely, non-indexical ones) are such that an utterance of that sentence expresses the *same* proposition in *any* context (at least, so the relativist maintains). So, for instance, consider Jeff and Mary. Jeff utters ‘vegemite is tasty’ and Mary utters ‘vegemite is not tasty’. One could think that by ‘vegemite is tasty’ each of Jeff and Mary express a different proposition: Jeff expresses <vegemite is tasty for Jeff> and Mary expresses <vegemite is tasty for Mary>. Then when Mary says that vegemite is *not* tasty, she does not express a proposition that is the negation of that expressed by Jeff when he says that vegemite *is* tasty. According to relativists, though, the proposition expressed by ‘vegemite is tasty’ is the same in both contexts of *utterance*. However, that proposition takes different truth-values relative to different contexts of *assessment*. Jeff’s utterance of ‘vegemite is tasty’ expresses the proposition <vegemite is tasty>. That proposition is true when assessed at Jeff’s context of assessment (the world centred on Jeff) but when Mary assesses that proposition she will, rightly, say that it is false. Assessed at Mary’s context of assessment (the world centred on Mary), that proposition is false. That’s because relative to Jeff’s standards for tastiness, the proposition is true, and relative to Mary’s, it is false.

We assume that utterances of the form ⌜x *because* y⌝ (appropriately filled out) express the same proposition in every context of utterance. So, when Jeff says ‘Polly is red *because* Polly is Scarlet’ he does *not* express something like <according to Jeff, Polly is red *because* Polly is Scarlet>. He expresses <Polly is red *because* Polly is Scarlet>, which is what anyone else, at any other context, would express by that utterance. So we leave out any index for the context of utterance, and focus entirely on the context of assessment. So an instance of ⌜x *because* y⌝ expresses the same proposition in every context, and that proposition determines a truth-value relative to a <w, t, i> triple. Our aim is to give truth conditions for determining the truth-value of such a proposition relative to a context of assessment: a <w, t, i > triple (which may or may not also be the context of utterance).

We begin by considering a fairly simple view, Radical Individualism, and build on that view.

**3.1 Individualism**

**Radical Individualism:**

 ⌜x *because* y⌝ is true relative to a centred world <w, t, i> iff:

(1) i is disposed to believe that x *because* y, *and*

(2) ⌜y⌝ entails ⌜x⌝.[[17]](#footnote-17)

To understand (1) we need to know what it is to be disposed to believe that x *because* y, and hence what it is to believe that x *because* y. We want to be appropriately liberal about this. We take beliefs to be complex functional states defined by their inputs and outputs. While believing that P is bearing some attitude—belief—toward some proposition—P—it need not be that the individual who believes P explicitly tokens to herself the sentence expressing P. An individual can count as having a belief that P by having a mental state which is caused by certain inputs (environmental and cognitive) and which causes certain outputs (cognitive and behavioural). Here, borrowing from the account we offer in Miller and Norton (2016) we say that a mental state counts as a belief that x *because* y, iff (a) that mental state is the output of a particular cognitive mechanism—the causal detection mechanism—such that what it is to be the output of that mechanism is to be a state that causes a range of cognitive states and behavioural outputs including seeking out [y] in order to increase understanding of [x], attempting to use [y] to manipulate [x], explaining to others, [x] in terms of [y] often by uttering instances of ⌜x *because* y⌝ and so on, and, (b) the environmental inputs to that mechanism include the obtaining of non-diachronically correlated facts, [x] and [y]. What unites the belief that x because y, (the belief about causal explanation) and the belief that x *because* y, (the belief about metaphysical explanation) is their *outputs*—the behavioural tendencies in which they issue—as well as the mechanism that produces those outputs—the causal detection mechanism. What distinguishes them is their *input*s. A belief counts as being a belief about *metaphysical* explanation if the inputs to which it is sensitive are *non-diachronically* correlated facts.[[18]](#footnote-18) Since our aim is to provide truth conditions for ⌜x *because* y⌝, not to provide a reductive account of metaphysical explanation that does not appeal to notion of explanation more broadly, we assume that there are beliefs of the form x *because* y. Then we say that an individual is *disposed* to believe that x *because* y, iff, were that individual to entertain the question of whether x *because* y, she would come to believe that x *because* y.

Moving on, (2) specifies that there must be a modal connection—entailment—between ⌜x⌝ and ⌜y⌝. Hence even if i is disposed to believe that, say, Socrates exists *because* {Bert} exists, since there is no entailment between ‘Socrates exists’ and ‘{Bert} exists’, (2) does not hold and ‘Socrates exists *because* {Bert} exists’ is not true at that centred world (or indeed, any other). Similarly, consider ‘the flower is scarlet *because* it is red’ assessed at a world centred on an individual who is disposed to believe that the flower is scarlet *because* it is red. ‘The flower is red’ entails ‘the flower is scarlet’ but not *vice versa*. So (2) is not met, and ‘the flower is scarlet *because* it is red’ does not come out as true when assessed at *any* centred world.

Nevertheless, Radical Individualism is problematic. First, it is too radically individualistic. Given (1), ⌜x *because* y⌝ is true when assessed at some centred world, as long as the appropriate entailment obtains between ⌜x⌝ and ⌜y⌝, and the individual at the centre is disposed to believe that x *because* y. We think it unlikely that this assigns truth-values to ⌜x *because* y⌝ that accord with our post-reflection judgements. For instance, suppose Bill utters ‘Socrates exists *because* {Socrates} exists’. At Bill’s context of assessment, his utterance comes out as true given that Bill is, indeed, disposed to believe that Socrates exists *because* {Socrates} exists. By contrast, let’s suppose that no one else in Bill’s community is disposed to have that belief. So at each of their contexts of assessment, the proposition Bill uttered is false. Suppose Bill has a brain tumour, and we strongly suspect that in the absence of the tumour he would not be thus disposed. One might be inclined to say that his utterance ought be false *even at his own context of assessment*.

Here is something we take to be a plausible constraint on the truth conditions for ⌜x *because* y⌝.

**Communitarian Constraint:** The truth conditions for instances of ⌜x *because* y⌝ at a centred world must appeal to the mental states of the community in which the individual at that centre is embedded.[[19]](#footnote-19)

The Communitarian Constraint says nothing about *how* the relevant community’s mental states (partially) determine the truth of ⌜x *because* y⌝ at a context of assessment, leaving open various proposals we consider in what follows. Henceforth, though, we accept the Communitarian Constraint (though clearly if one does not share our intuitions then one might find something closer to Radical Individualism appealing).

There is a second problem for Radical Individualism. Suppose that ‘Polly is red’ entails ‘Polly is coloured’. Now consider ‘Polly is coloured *because* Polly is red’. Suppose we assess ‘Polly is coloured *because* Polly is red’ at the triple <w, t, i>, where w is a world at which Polly is neither red nor coloured. But suppose that i is nevertheless disposed to believe that Polly is coloured *because* Polly is red. Then clauses (1) and (2) are met, and, according to Radical Individualism, ‘Polly is coloured *because* Polly is red’ is true at <w, t, i> despite the fact that Polly is neither coloured nor red.[[20]](#footnote-20) This suggests a further constraint:

**Factivity Constraint**: The truth-conditions for ⌜x *because* y⌝ must be such that ⌜x *because* y⌝ is true at a centred world only if the sentence x, and the sentence y, are true.

Finally, the last problem with Radical Individualism is that it fails to require that the mental states of the individual at the centred world at which we assess ⌜x *because* y⌝ are consistent or coherent. Consider consistency. In addition to particular instances of ⌜x *because* y⌝, at the heart of discussion about metaphysical explanation lie principles about the logic of metaphysical explanation. For instance, many metaphysicians argue that metaphysical explanation must be irreflexive, asymmetric and transitive (though not everyone agrees that they must be all three). We call principles such as these, Principles of Metaphysical Explanation: PMEs. We will say that, for any particular PME, PMEj, an individual is disposed to believe PMEj iff, were the individual to consider whether PMEj, she would come to believe that PMEj. Then, in line with Radical Individualism, one might be inclined to say that for any PMEj, ⌜PMEj⌝ is true at a centred world iff the individual at that centre is disposed to believe that PMEj. Hence:

**Radical Individualism:**

⌜PMEj⌝ is true relative to a centred world <w, t, i> iff:

(1) i is disposed to believe that PMEj.

Now we can see why Radical Individualism can result in inconsistent propositions being true at some centred world. Consider PMETRANSITIVITY. An individual might be disposed to believe PMETRANSITIVITY whilst also being disposed, (where A, B and C name specific sentences) to believe that ‘A *because* B’ and that ‘B *because* C’ but not that ‘A *because* C’. In that case, assuming clause (2) is met, a set of inconsistent propositions will be true at the relevant centred world.

In addition, Radical Individualism offers no constraints on *coherence*. For instance, if an individual is disposed to believe that the chair exists *because* its parts exist arranged thusly, but is not disposed to believe that the table exists *because* its parts exist arranged thusly, (despite believing that both the chair and table exist) then at the relevant centred world the former will come out as true, and the latter will not, though *prima facie* if one is true, so is the other. This suggests another constraint: coherence. When we say that an individual’s beliefs about metaphysical explanation are coherent, we mean that their beliefs cohere in a plausible manner. We return to consider what might be involved in coherence shortly. For now, we want to leave just a general gloss on the idea. Jointly, these yield the Consistency and Coherence constraint.

**Consistency and Coherence Constraint:** The truth conditions for claims about metaphysical explanation need to be such that the set of claims that are true at a centred world are consistent and coherent.

Radical Individualism fails to meet any of the three constraints. As such, we think it is unacceptable. But it is a useful place to start. We can relatively easily amend the view, as follows, to meet two of the three constraints:

**Complex Individualism:**

An instance of ⌜x *because* y⌝ is true relative to a centred world <w, t, i> iff:

(1) i is post-equilibratively disposed to believe that that instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation, ⌜KMEj⌝, *and*

(2) iis post-equilibratively disposed to believe that KMEj, *and*

(3) ⌜y⌝ entails ⌜x⌝ *and*

(4) ⌜y⌝ is true.

The addition of clauses (3) and (4) means that Complex Individualism meets the Factivity Constraint. They jointly ensure that ⌜x *because* y⌝ cannot be true if either ⌜y⌝ or ⌜x⌝ fail to be true.

Now let’s consider (1). We previously introduced the idea that there are beliefs an individual is disposed to have: namely those that she would have, were she to entertain the relevant proposition. Call these dispositions *pre-equilibrated dispositions*. An individual has a *post-equilibrated* disposition to believe that P iff she is disposed, after due equilibration and reflection over other things that she believes, to believe that P.

To understand what it is for an individual to be post-equilibratively disposed to believe that an instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation (KMEj), we must introduce the notion of a Kind of Metaphysical Explanation (a KME). KMEs will take the same form as particular instances of ⌜x *because* y⌝. So, for instance, ‘wholes exist *because* their parts exist and are appropriately arranged’ or ‘sets exist *because* their members exist’ are examples of particular KMEs. In turn, ‘chairs exist *because* their parts exist and are appropriately arranged’ is an instance of the former KME, and ‘{Socrates exists} because Socrates exists’ is an instance of the latter KME. But to avoid confusion, we will talk of particular KMEs using KMEj. Then ‘chairs exist *because* their parts are appropriately arranged’ is an instance of the schema ⌜x *because* y⌝ and an instance of a particular KME, KMEj, (namely ‘wholes exist *because* their parts exist and appropriately arranged).

KMEs are a staple of the existing literature about metaphysical explanation. We remain neutral on what makes it the case that there are the KMEs there are. It might be an objective matter that there are KMEs about parts and wholes; about determinates and determinables; about sets and members, and so on. Alternatively, it could be that what KMEs there are depends on how individuals are disposed to sort instances of ⌜x *because* y⌝ into kinds. If the latter is true, we think it very plausible that there is high degree of convergence among community members regarding which KMEs there are, and what their instances are. So we will simply talk about the candidate KMEs given attention in the recent literature.

So what does an individual need to consider, during equilibration, in order for it to be the case that she is disposed, post-equilibration, to believe that an instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝? Certainly not all instances of ⌜x *because* y⌝! We think it sufficient that said individual reflects on a range of instances of ⌜x *because* y⌝: enough instances that she feels confident in forming a view about whether a particular instance of ⌜x *because* y⌝ is an instance of a particular KME. This seems to us plausible, in part because there is so much actual convergence about which instances are members of which kind that sufficient equilibration can be expected to occur if some reasonable number and range of cases are considered. If, having done so, the individual at the centre believes that some instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝ then (1) obtains.

(2) obtains iff that individual is post-equilibratively disposed to believe that KMEj. The idea is that the individual is post-equilibratively disposed to have this belief iff having considered her pre-equilibrated dispositions with respect to what we call the *Explanatorily Relevant Propositions,* then, after equilibrating over all of these pre-equilibrated dispositions, she would, post-equilibration, believe that KMEj.

What are the Explanatorily Relevant Propositions? They are (a) some reasonable number and breadth of *instances* of *each* KME and (b) all the KMEs and (c) all the PMEs and (d) any empirical proposition whose truth or falsity is inconsistent with any consistent set of propositions in the union of (b) and (c), and (e) any logically complex proposition built from any combination of (b), (c) and (d).

(a) requires only that during equilibration the individual consider some reasonable *number* and *breadth* of instances of *each* KME. There is no expectation that all instances are considered. We will have more to say about this when we consider more complex versions of our story. The instances considered should be broad, so as to rule out that the instances considered all confirm KMEj, but other instances would be incompatible with KMEj. For example, if one considered only living room furniture when considering instances of ‘wholes exist because their parts exist and are appropriately arranged’, then one would leave it open that when one considers kitchen equipment one might be inclined to believe that toaster parts exist *because* toasters exist, which is incompatible with believing that wholes exist because their parts exist and are appropriately arranged.

 (b) requires that the individual equilibrate over her pre-equilibrated dispositions with respect to all the KMEs. (c) is self explanatory. (d) is more complicated. Here, we intend to include propositions about empirical matters of fact (which for all one knows *a priori*, might or might not obtain) such that for some consistent set of propositions containing only propositions from (b) and (c), the truth (or falsity) of that empirical matter is inconsistent with that consistent set. Paradigm examples will be empirical claims such as ‘there exist gunky objects’ or ‘there exists hunk’. There will be some consistent set of propositions in the union of (b) and (c) such that ‘there exist gunky objects’ is inconsistent with that set. So that empirical proposition will be included in the set of propositions over which individuals equilibrate. By contrast ‘there exist tables’ (and its negation) is consistent with any consistent set of propositions from (b) and (c) and hence will not be included in (d). (That’s because whether or not there exist tables is irrelevant to whether wholes exist because their parts do or *vice versa).*

Equilibration, then, is a process of rational reflection that involves considering all of one’s pre-equilibrated dispositions with respect to the Explanatorily Relevant Propositions. Where they are inconsistent, or incoherent, one must decide which of the beliefs one is pre-equilibratively disposed to have, one ought, post-equilibration, to reject, given the strength of one’s pre-equilibrated dispositions. This process is highly non-trivial. For instance, an individual might find that she has a pre-equilibrated disposition to believe PMEASYMMETRY and also that she is disposed to believe that chairs exist *because* their parts exist and are appropriately arranged and that toaster parts exist *because* toasters exist whilst also being post-equilibratively disposed to think that both of these instances of ⌜x *because* y⌝ are instances of the same KME. Since these beliefs are inconsistent, the inconsistency must be resolved either by rejecting PMEASYMMETRY or by rejecting one of those instances of ⌜x *because* y⌝.

We take it to be analytic that any process counts as equilibration only if, at the end of it, the set of beliefs the individual has are *consistent*. This is not always straightforward. Consider the following set of beliefs.

PROBLEM SET

1. Metaphysical explanation is well-founded.

2. Wholes exist *because* their parts exist and are appropriately arranged.

3. Gunk does not exist.

Assuming (3) cannot be known to be true (or false) *a priori*, then given that if (3) is false then (1) and (2) are inconsistent, this represents a problem set of beliefs. The process of equilibration needs to rule out sets of beliefs such as this. The set of beliefs that an individual has, post-equilibration, needs to be such that no matter how things turn out to be, empirically speaking, the belief set is consistent. This means that frequently the set of beliefs that an individual is post-equilibratively disposed to have, will include conditional claims. Consider the following two partial belief sets.

SET A

1. Necessarily, metaphysical explanation is well-founded.

2. If there is gunk, then parts exist *because* the wholes that have them as parts exist.

3. If there is no gunk, then wholes exist *because* their parts exist.

4. If there is junk, then wholes exist *because* their parts exist.

SET B

i. Wholes exist *because* their parts exist.

ii. If there is gunk, then explanation is not well-founded.

Each of these sets is consistent (for simplicity, we ignore hunk). Suppose that Fred is post-equilibratively disposed to believe the members of set A. It might be that, pre-equilibration, Fred was disposed to believe that wholes exist *because* their parts exist. However, Fred is most strongly disposed to believe that necessarily, metaphysical explanation is well-founded, so Fred *cannot* simply unconditionally believe that wholes exist *because* their parts exist (since it might turn out that actually, there is gunk). Instead, what Fred will realise, through equilibration, is that he believes some conditional claims: if there is gunk, then parts exist *because* the wholes that have them as parts exist; if there is no gunk, then wholes exist *because* their parts exist (and so on for junk).

Likewise, suppose that Annie believes the members of set B. Suppose that Annie was also pre-equilibratively disposed to believe that explanation is well-founded. Nevertheless, upon reflection she is more strongly disposed to believe that wholes exist *because* their parts exist. Then she can consistently retain that unconditional belief only if she comes, post-equilibration, to believe the conditional claim that if there is gunk, then explanation is not well-founded. In both cases Annie and Freddie end up with conditional beliefs because there are empirical facts about the world that *a priori* reflection cannot reveal. So for their beliefs to be consistent some of those beliefs must be conditional.

Complex Individualism only offers truth conditions for unconditional instances of ⌜x *because* y⌝, so we need to add to the account.

**Revised Complex Individualism**

An instance of ⌜x *because* y⌝ is true relative to a centred world <w, t, i> iff:

either

(1) i is post-equilibratively disposed to believe that that instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation, ⌜KMEj⌝, *and*

(2) iis post-equilibratively disposed to believe that KMEj, *and*

(3) ⌜y⌝ entails ⌜x⌝ *and*

(4) ⌜y⌝ is true.

or

(5) i is post-equilibratively disposed to believe that that instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation ⌜KMEj⌝, *and*

(6) iis post-equilibratively disposed to believe that if P, then KMEj, *and*

(7) ⌜P⌝, is true *and*

(8) ⌜y⌝ entails ⌜x⌝ *and*

(9) ⌜y⌝ is true.

Then an instance of ⌜x *because* y⌝ can be true at <w, t, i> even if the individual at that centre only believes a conditional claim, so long as the relevant remaining clauses are met.

It is important to note that there is no suggestion that actual individuals equilibrate in this way. The claim is simply that an individual counts as *having* a post-equilibrated disposition to believe KMEj, just in case *were* that individual to reflect and equilibrate over all the Explanatorily Relevant Propositions, she would come to believe that KMEj.

Given (1), (2), (5) and (6) of Revised Complex Individualism, relative to any centred world only a consistent set of propositions can be true. Thus, one aspect of the Consistency and Coherence constraint is met: consistency. Coherence is also met, since all instances of any KME (at least, according to i) will be treated in the same way if they are empirically on a par. If both tables and chairs exist, then it cannot be that ‘the chair exists *because* its parts exists arranged chair-wise’ is true, but ‘the table exists *because* its parts exist arranged table-wise’ is false at some context of assessment, unless at that context the individual is post-equilibratively disposed to think that each of those is an instance of a different KME. We think this is coherence enough, so we think that Revised Complex Individualism meets the Consistency and Coherence constraint.

Clearly, however, the account does not meet the Communitarian Constraint. This suggests that we ought to amend the account to incorporate the beliefs of the (relevant) broader community. The question is how to do that. It is to this issue that we now turn.

**3.2 Communitarianism**

One natural suggestion is that we move to talking about the beliefs that the community *collectively* is disposed to have. Then we might say something like the following:

**Community Relativism**

An instance of ⌜x *because* y⌝ is true relative to a centred world <w, t, i> iff:

either

(1) The community in which i is embedded is collectively disposed to believe that that instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation ⌜KMEj⌝, *and*

(2) The community in which i is embedded is collectively disposed to believe thatKMEj, *and*

(3) ⌜y⌝ entails ⌜x⌝ *and*

(4) ⌜y⌝ is true.

or

(5) The community in which i is embedded is collectively disposed to believe that that instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation ⌜KMEj⌝, *and*

(6) The community in which i is embedded is collectively disposed to believe that if P, KMEj,*and*

(7) ⌜P⌝ is true *and*

(8) ⌜y⌝ entails ⌜x⌝ *and*

(9) ⌜y⌝ is true.

Now, one might baulk at the idea that the community has, or is disposed to have, beliefs While there are defences of the claim that groups have mental states,[[21]](#footnote-21) for our purposes one can suppose that talk about what a community believes is shorthand for talk about the output of some appropriate judgement aggregation process over the beliefs of the individuals in that community.

Before we get to the details, there are two things to notice. First, the community in question (whatever exactly it is) is the community of the individual at the centred world at which the utterance is assessed. Suppose Jim utters ‘the phone is red *because* it is scarlet’, and Mary assesses the proposition thus expressed. Suppose that Jim is from Pluto, and Mary is from Canberra. All that matters with respect to whether Jim’s utterance is true *at Mary’s context of assessment* are the features of Mary’s community, not Jim’s. Second, let’s return to Bill, my neighbour with the brain tumour. Consider a case in which all of Bill’s community has brain tumours (there has been massive dumping of radioactive materials by the Terribly Radioactive Unhealthy and Malicious Partnership (inc.), after the EPA was mysteriously disbanded) and in virtue of this, all community members are disposed to believe that Socrates exists *because* {Socrates} exists. One might be inclined to think that this still ought not make ‘Socrates exists *because* {Socrates} exists’ true when assessed at the context of a member of Bill’s community. For our part, we are inclined to bite the bullet here. But it is worth noting that one could build into (1) and (5) of Community Relativism the requirement that the beliefs in question be the result of some properly functioning cognitive system (à la evolutionary biology). We leave it to the interested reader to see how to spell this out in more detail.

Two questions then arise: which community is the relevant one, and which belief aggregation procedure ought we use to determine what beliefs that community, collectively, is disposed to have? There is obvious room for disagreement about how to delineate communities, and about which community is the right one. At the end of this section we have more to say about the former issue. As to the latter issue: we are thinking of communities in a fairly broad way, so as to include, roughly, culturally similar contemporaries (though for certain purposes one might want to consider sub-communities, such as the metaphysics community). We are not thinking of communities as being as fine-grained as, say, clubs, or co-workers, or as broad as members of the same species. But one could, of course, accept our semantic picture and disagree about what constitutes a relevant community for these purposes.

We can now consider how to determine a community’s beliefs. First we need to introduce some terminology. Let N be a finite and non-empty set of individuals: these are the individuals in the community in which i is embedded (for each i). Then there is a set of propositions (and their negations) on which individuals are called to express a yes/no judgment: this is known as an agenda, and denoted by X. Then an individual judgement set, J, is the set of propositions an individual accepts. J ⊆ X. Ji denotes the judgement set of a particular individual, i. In judgement aggregation, individual judgement sets are assumed to be both consistent (have a model) and complete (for any proposition in the agenda, they contain either the proposition or its negation). (Let’s set aside the worry that even post-equilibration, individuals might not either believe, or believe the negation of, every proposition in the agenda; we return to this issue shortly). The set of all judgement sets is denoted by J. A profile, P, is an n-tuple of individual judgements about some particular proposition, φ, in X. So, for each individual in N, and for some proposition, φ in X, a profile specifies what each individual in N, judges with regard to φ. The set of all profiles is denoted by P. The set of all profiles specifies, for every individual in N, and every proposition, φ1…φn in X, what each individual judges with respect to φ1…φn. Then an aggregation rule is a function f: P → J. It assigns to every profile, a collective judgement. So the aggregation function tells us, for each proposition in X, what the collective judgement of the members of N is, with respect to that proposition.

The obvious thought is that a community is disposed to believe that proposition iff, post-equilibration, a majority of individuals believe the proposition. In general, however, that proposal fails in cases where the community is voting on multiple logically connected propositions. We turn to this case shortly, since this is exactly what we see in (2). But first, let’s consider (1). Here there is only one matter to determine: whether some particular metaphysical explanation is an instance of some particular KME. Thus we think (1) can be determined by majority vote.

Still, a simple majority vote fails to take into account any process of giving and asking for reasons; it lacks a process of group discussion whereby individuals might alter their views in the light of information about the views of others. Just as we want to know what an appropriately reflective individual is disposed to believe, so too we want to know what an appropriately reflective community is disposed to believe. Here is a desideratum on an account of the truth conditions for claims about metaphysical explanation.

**Group Deliberative Desideratum**: It is a desideratum that the truth conditions for claims about metaphysical explanation appeal to the beliefs of the (relevant) community after group deliberation and discussion.

We suggest that after individuals have equilibrated, then begins a phase of *group discussion*. This involves sharing of evidence and discussion of why individuals think that some instance of ⌜x *because* y⌝ is, or is not, an instance of ⌜KMEj⌝. This phase continues until the group reaches *reflective equilibrium*: when no individual will change his or her view about whether the instance in question is an instance of the kind in question. After group discussion, the group will vote on the single proposition in the agenda: the question of whether that instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝. If a majority of the group vote that it is, then the group counts as believing that said instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝. (If not, and there is another plausible candidate kind of KME, then a further vote can be taken regarding whether the instance is an instance of, say, ⌜KMEk⌝.

Nothing so straightforward will work in determining the community’s disposition to believe that KMEj. As in the case of individual equilibration, in this case we want the group to equilibrate across a wide range of pre-equilibrated (pre-equilibrated relative to the group) beliefs. So here, the agenda will include all of the KMEs, PMEs, and any logical combination of all of these, as well as any logical combination of these with any empirical claim that is inconsistent with any consistent combination of KMEs and PMEs. Given this, majority voting as a judgement aggregation method will be problematic. Although each individual has a consistent and complete set of judgements on a set of logically interconnected propositions, a majority vote can result in the group collectively having inconsistent judgements. Consider A *because* B, B *because* A, and PMEASYMMETRY. Even though no individual has all these propositions in her judgement set, a majority vote could result in the group judging all three propositions to be true, despite them being jointly inconsistent. [[22]](#footnote-22) In fact, List and Pettit (2002) show that there is no aggregation procedure that is guaranteed to yield consistent collective beliefs that satisfies the following three conditions:

**Universal domain:** The procedure accepts as admissible input any logically possible combinations of complete and consistent individual judgments on the propositions.

**Anonymity:** The judgments of all individuals have equal weight in determining the

collective judgments.

**Systematicity:** The collective judgment on each proposition depends only on the

individual judgments on that proposition, and the same pattern of dependence holds for all propositions.

In order to be certain that an aggregation method will yield consistent group judgements, one needs to give up on (at least) one of the above. One option is to give up Systematicity. So-called premise-based and conclusion-based rules do this by partitioning the agenda into two distinct subsets: the premises and the conclusions. Then an aggregation method of majority voting can be performed on either of these sets. Since the two sets are logically connected, the judgements about the conclusion will constrain judgements about the premises, and *vice versa*. The problem is that what the group ends up believing will depend on whether one performs judgement aggregation on the premises, or on the conclusions (and will depend on how one partitions premises and conclusions into said sets).[[23]](#footnote-23) This will be problematic in our case, since it might be up for grabs whether, for instance, dispositions regarding PMEs such as PMEASYMMETRY ought to trump dispositions regarding KMEs or *vice versa*. Designating the former as, say, premises (and performing aggregation on said judgements) resolves that question in favour of principles, and *mutatis mutandis* for the converse.[[24]](#footnote-24)

A related proposal has it that voting should occur in *sequence*, so that the outcome of earlier votes constrains later voting.[[25]](#footnote-25) Thus, if a group votes on proposition P, and votes on proposition Q, and votes yes to both, then this determines that the group votes yes to the conjunction of P and Q. So if the group votes yes to PMEASYMMETRY and then votes yes to A *because* B, they cannot vote yes to B *because* A, because B *because* A automatically gets a ‘no’ vote given the two previous ‘yes’ votes. Sequential voting is one way to prevent inconsistent group judgements. Of concern, however, is that the output of such a judgement aggregation procedure will be highly contingent on the particular sequence in which the group votes. What we need is a reason—a reason the group can agree to—to vote in a particular sequence.

Here, we think, is where the Group Deliberative Desideratum can play an important role. Suppose the group could, through deliberation and formal methods, come to a consensus regarding the *credence* it attributes to each proposition in X. While this consensus credence function might not itself meet the Consistency and Coherence Constraint (it might give high credence to all of PMEASYMMETRY and A *because* B and B *because* A) nevertheless, that credence function could be used to determine the order in which propositions are voted on, so that propositions on which the group has the highest credence will be voted on before those on which the group has lower credence. For simplicity suppose that a group attributes a different credence to each proposition in X, and thus that we can totally order the propositions from highest to lowest credence. Then that total ordering determines the sequence in which the group votes on each proposition, yielding a consistent set of group judgements.

How do we determine a distribution of credences across the propositions in X, upon which the group can agree? We need a formal method for group consensus: a method for combining individual credences to determine the credences assigned by the group. In what follows we outline a particular consensus model, that of Lehrer and Wagner (1981)—but there are other models out there, and nothing we say hangs on use of this particular model.

Consensus models begin with a set of propositions (X) and individuals in a group (N), each of whom assigns to each proposition in X some credence between 0 and 1. The aim of consensus models is for individuals in the group to come to agree on which credence to assign to each proposition. The consensus process begins with a phase of group discussion just like the one we already articulated. This involves sharing of evidence and discussion of why individuals assign to propositions the credences they do. This phase is concerned with assigning credences to the propositions in the agenda, and so is not concerned with assigning credences to particular instances of each KME. Nevertheless, we can expect that during this phase discussion of a broad range of instances of each KME will be considered. Recall that each individual, during her equilibration, needs to consider some relatively broad range of instances of each KME. This process is repeated at the group level, but in this case we can expect different individuals to bring different instances into consideration. In particular, where group members disagree about the credence to assign some KME, we can expect discussion to appeal to (amongst other things) disagreements about whether the KME is true, given what seem, to some member of the group, to be false instances of the kind.

This phase continues until the group reaches *reflective equilibrium*: when no individual will change his or her credence function any further in light of what other individuals in the group have to say. Once reflective equilibrium is reached, each individual not only assigns a credence to each proposition in X, but also a weighting of respect for the other members of the group. If the credence assignments differ across individuals then each individual computes a revised assignment that is the weighted average of the assignments of all members of the group (weighted in terms of that individual’s weighting of respect for the other members of the group). If there is still disagreement, then the procedure is repeated with the new credences as inputs. The procedure continues until all members converge on a common distribution of credences across the set of propositions. It is that distribution we then use to determine the order in which individuals vote on those propositions.

This consensus model does not require that each individual believes, or believes the negation of, each proposition in the agenda set. All that is required is that she can distribute her credences over those propositions. Once consensus is reached, however, each individual needs to vote on each proposition in the agenda. In this sense she has to either believe, or believe the negation of, each of the propositions in the agenda. She has to take a stand: it’s a forced choice. That doesn't mean that her internal states need to be such that she gives credence 1, or 0, to each of those propositions. Just as I can vote for one candidate or another in an election without being sure I know who is best, in this case we use the agreed-on credence function to determine the order in which propositions are voted on, but once those propositions come up for a vote, each individual has to *vote* one way or the other.

We have so far assumed that the group’s credence function will yield a unique total ordering of propositions that can then be voted on in said order. That will not be the case if some propositions are assigned the same credence by the group. In such cases there will be a number of equally good ways of ordering the propositions, and we suggest that for each of these equally good ways we run a sequential majority voting judgement aggregation procedure. If each ordering yields the same result—the same group judgement set—then that judgement set is the group’s judgement set. If different orderings yield different judgement sets, then only those judgements that are members of every set are attributed to the group. With respect to all the other judgements there is no fact of the matter whether the group has that judgement or its negation. This seems to us to be right. If small differences in the order in which the group votes result in us attributing to the group different judgement sets, then so long as a judgement is in every such set, we can safely say that it is in the group's judgement set. But if some judgements are in some sets but not others, then there really is a sense in which the group neither accepts, nor does not accept, that judgement.

Let us call this entire process, that begins with the individual’s equilibration, proceeds through group discussion and consensus through to a vote that determines both what the community believes with regard to whether a particular instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝, and with regard to the truth of ⌜KMEj⌝, THE PROCEDURE. Our account does not require that any actual group engage in THE PROCEDURE. Remember, clause (1) and (2) of Community Relativism says that the community in which i is embedded is collectively *disposed* to have certain beliefs. We will say that a community is disposed to believe some relevant P, iff, were the community to undergo those relevant components of THE PROCEDURE (as detailed above) the community would come to believe P.

At this point it is worth reiterating that as the output of individual equilibration will often include conditional beliefs, some of the propositions in the agenda will be conditional propositions. Thus it will sometimes be the case that the community believes a conditional sentence of the form ⌜if P, then KMEj⌝to be true. In such a case the relevant instance of ⌜x *because* y⌝ can nevertheless straightforwardly be true at some context of assessment. It will be true at a centred world just in case the community of the individual at that centre is disposed to believe that the relevant instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝, and is disposed to believe that if P, then KMEj, and ⌜P⌝ and ⌜y⌝ are true, and ⌜y⌝ entails ⌜x⌝. Thus even if the community ends up having a good many conditional beliefs, it can still be that unconditional instances of ⌜x *because* y⌝ are true at centres in that community.

We have already seen that, if different (permissible, given the group’s credence function) voting sequences would yield judgement sets with different members, there will be propositions in the agenda that a community is neither disposed to believe, nor to believe their negation. Given this, we can now offer *falseness* conditions for claims of the form ⌜x *because* y⌝ as follows:

**Community Relativism**

 An instance of ⌜x *because* y⌝ is false relative to a centred world <w, t, i> iff:

(1\*) The community in which i is embedded is collectively disposed to believe that that instance of ⌜x *because* y⌝ is an instance of a kind of metaphysical explanation ⌜KMEj⌝, *and*

(2\*) The community in which i is embedded is collectively disposed to believe that it is not the case that KMEj, *or*

(3\*) It is not the case that ⌜y⌝ entails ⌜x⌝ *or*

(4\*) ⌜y⌝ is false.

Then instances of ⌜x *because* y⌝ are false if (*inter alia*) the relevant community is disposed to believe the negation of ⌜KMEj⌝ and to believe that said instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝. What this means is that relative to some centred worlds, ⌜x *because* y⌝ will come out as neither true nor false, namely in cases in which the relevant entailment obtains, and the relevant sentences are true, but the community is collectively neither disposed to believe that KMEj, nor disposed to believe its negation. Again, this seems to us to be the right outcome.

This brings us to one final devil and detail. So far we have supposed that there is a clear delineation of the borders of the relevant community. But it will surely often be vague exactly which individuals are members of the relevant community. We suggest that in such cases there will be a number of precise communities, each of which is a candidate to be the community in which i is embedded, and with respect to each precise community there will be a determinate answer to the question of whether an instance of ⌜x *because* y⌝ is true at the relevant centred world. Let’s set aside the more complex case in which the community is disposed (or fails to be disposed) to believe some conditional claim about KMEj such as if P, then KMEj. It ought be clear from what we say, below, how to extend what we say here, to include those cases. So we focus only on clauses (1)—(4) of our truth conditions. Then if all the candidate precise communities are disposed to believe that KMEj, and disposed to believe that the relevant instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝, then, if the remaining clauses are met, it is super-true, at the relevant centred world, that said instance of ⌜x *because* y⌝ is true. Likewise, if all precise candidate communities are disposed to judge that ⌜KMEj⌝ is not true, and that the relevant instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝ then said instance of ⌜x *because* y⌝ is super-false at the relevant centred world. By contrast, if all the clauses but (2) are met, and if all precise candidate communities are disposed to believe neither that KMEj nor its negation, then it is *super true* that the community is disposed to believe neither said instance of ⌜x *because* y⌝ nor its negation, and thus it is determinately the case that said instance of ⌜x *because* y⌝ is neither true, nor false, at the relevant centred world. Finally, if some precise communities are disposed to believe that ⌜KMEj⌝ is true, and others are disposed to believe that it is not true, then it is neither *super true* nor *super false* that the community in which i is embedded is disposed to believe that KMEj. Then, assuming all other clauses but (2) are met, it is simply *indeterminate* whether the relevant instance of ⌜x *because* y⌝ is true at that centred world.

That is our account. In what follows we argue that these truth conditions are good enough: one should embrace them rather than becoming an error theorist about metaphysical explanation.

**4. Error Theory vs Community Relativism**

At this point one might think: if that is all there is, why not just endorse an error theory about metaphysical explanation?[[26]](#footnote-26) We think there are a number of points in favour of our theory over an error theory. First of all, given some further plausible assumptions we have some confidence that Community Relativism will vindicate some (but perhaps not all) instances of ⌜x *because* y⌝ made by contemporary metaphysicians (and here we include those who are sceptical about grounding). For notice that even if there are some grounding sceptics, this is not reason to think that intuitions about what *because* what, vary significantly. We count ourselves amongst the grounding sceptics, but we do not significantly disagree with, say, Schaffer, about what explains what, or about whether explanation is asymmetric, or transitive. And we think it plausible that broader members of our community will be disposed to have similar beliefs.

Of course, that is an empirical punt that relies on it being true that said metaphysicians are embedded in a community that is collectively disposed to believe that KMEj in cases in which metaphysicians are typically disposed to believe that KMEj and it is very difficult to obtain evidence for such a claim. To do so we would need to have evidence that, were the community to undergo THE PROCEDURE it would collectively come to believe that KMEj. Since THE PROCEDURE involves multiple stages, it is difficult to see how we could have much assurance that the relevant counterfactual holds. Of course, this difficulty is a double-edged sword. It also means that the mere fact that the average man on the street might not initially be inclined to assent to the truth of ⌜KMEj⌝ is not good evidence that he does not have the post-equilibrated disposition to so believe, and certainly not good evidence that the community in which he is embedded does not have that disposition.

If, however, the account provided in Miller and Norton (2016) is even roughly right about the mechanisms by which individuals come to believe that KMEj….n then given that the mechanisms are relatively hard-wired, and have been evolutionarily selected for, one would predict that there would be a fair degree of convergence in the pre-equilibrated dispositions of individuals to believe particular KMEs.

To be sure, even if we are right to expect reasonable convergence in pre-equilibrated judgements, it doesn’t follow that the community-level judgements revealed by THE PROCEDURE will align with these pre-equilibrated dispositions. Still, we think that the early stages of THE PROCEDURE—in particular, the reporting of individual credences in the propositions in X, alongside the reasons for those credences—closely resembles the actual discussion that takes place in the literature on metaphysical explanation. It is noteworthy that although that process has not, in itself, resulted in consensus, there is a fair degree of agreement between metaphysicians regarding what explains what, and about what Principles of Metaphysical Explanation obtain (even if there is not agreement on whether there exist grounding relations). This suggests that if we took metaphysicians as a group, the credence function that is the output of a formal consensus method would not be so very different than the post-equilibrated individual credence functions of each metaphysician. Given that we have some reason to suppose that metaphysicians will, roughly speaking, share the same pre-equilibrated dispositions as do the folk, then unless we have some reason to think that their post-equilibrated dispositions will be very different from those of the folk (perhaps because they equilibrate in a very different manner) then we have some, weak, evidence that the post-equilibrated dispositions of the members of the (relevant) community in which metaphysicians are embedded will be much like those of the metaphysicians themselves. Likewise, we will have some weak evidence that the agreed credence function reached by the relevant community in which metaphysicians are embedded will not be so very different than the agreed credence function reached by a group of metaphysicians.

Moreover, while it is controversial exactly how individuals ought to determine their measures of respect—whether it is should be based entirely on assessment of competence of the individual (as Lehrer and Wagner (1981) suggest) or based, in part, on similarity of opinion with oneself (as Regan, Colyvan, and Markovchick-Nicholls (2006) suggest)—there is agreement that assessments of competence play a significant role. It seems to us plausible that members of a community in which metaphysicians are embedded would, were they to undertake a formal consensus method, accord metaphysicians a high measure of respect (with respect to these issues) and therefore that the credence function that issues from the consensus method will more tightly track the credence function of said metaphysicians.

Finally, we take it that the friend of grounding also supposes that the community-level dispositions we describe will align with her own beliefs about metaphysical explanation. After all, she presumably doesn’t think that there is something special about her, and her metaphysician friends, which make them uniquely able to track grounding relations. She must think that if the general populace were appropriately tutored and reflective, intuitions about the cases would largely converge. If she is entitled to that assumption then so are we. Indeed, if that assumption turns out to be false, and there would in fact be very little post-equilibrative agreement about whether some particular KME is true, such that it is neither true, nor false, that the relevant community is disposed to believe that KME, then it seems to us that the grounding-based theory of metaphysical explanation is in a rather worse boat than we are. Not only would such divergence seem to undercut any reason to posit grounding relations, but it would thereby seem to lead us to an automatic error theory about metaphysical explanation. According to our account, however, there might still turn out to be true metaphysical explanations relative to other communities, even if there aren't any relative to ours.

On the assumption that the semantics we have outlined delivers truth-values that roughly align with those delivered by the grounding-based theory, this is one reason to suppose that our account is superior to the error theory. But it is one reason among many, the remainder of which we now outline.

First, let us consider a version of the error theory about metaphysical explanation that couples that view with eliminativism: claims about what metaphysically explains what are strictly speaking false and, as such, ought be eliminated from our discourse. One reason to prefer our account over error theoretic eliminativism is that one thinks that, in fact, were we to encounter compelling evidence that there is no grounding, our response, as a community, would not be to abandon talk of metaphysical explanation.

Notice that one might think that is true *even if* one is in fact very confident that there are grounding relations. If one believes that, as a community, we are disposed to continue to engage in the discourse of metaphysical explanation upon discovering there are no grounding relations, this provides us with some evidence that error theoretic eliminativism is false. We take it that this is evidence since what would *make* error theoretic eliminativism true is that were we to come to discover that there are no grounding relations we would come to be eliminativists about metaphysical explanation. That we think we would continue to engage in talk about what metaphysically explains what, upon discovering that there are no such relations is *defeasible* evidence that we are disposed to continue to engage in such talk upon making such a discovery.

At this point one might object that the same could be said about the causal use of ‘because’, (that we would continue to use causal talk even were we to discover that there are no causal relations) and that this undermines our contention that this is evidence in favour of non-elimination.[[27]](#footnote-27) We disagree. If we *are* disposed not to eliminate causal talk upon discovering that there are no causal relations in the world that ‘tie-together’ causes with effects then that *is* evidence that an instance of ⌜x causes y⌝ can be true in the absence of such relations. It does not provide any reason to think that there *aren’t* causal relations. It just tells us that if there are no causal relations, then the truth conditions for ⌜x causes y⌝ don't mention such relations. Indeed, one might think that if actually, some regularity theories turn out to be true, this is exactly the boat in which we will find ourselves. Our point is just this: if one thinks that some instances of ⌜x *because* y⌝ would (or might) be true even if there were no grounding relations, one should reject eliminativism in favour of something like our view.

Now, the error theorist could accommodate any disposition not to eliminate talk of metaphysical explanations by pairing error theory with an account of when claims of the form ⌜x *because* y⌝ are assertible (though false).[[28]](#footnote-28) Indeed, the error theorist could offer our truth conditions as assertibility conditions. We are not strongly averse to such a view; it is not clear how much really hangs on the difference, and we are happy to offer our semantics to the error theorist. We just note that *prima facie,* if something is good enough to be an assertibility condition, and if ⌜x *because* y⌝ really is assertible, then we see no reason to say that it is false (but assertible) rather than simply true.

At this point, though, the error theorist might demur. Any plausible account of truth conditions for ⌜x *because* y⌝ needs not only correctly to assign truth-values to instances of the schema, but those truth conditions need to be plausible as conditions *for truth.* Surely, though, when metaphysicians make claims of the form ⌜x *because* y⌝ and when they engage in debate with other metaphysicians regarding whether ⌜x *because* y⌝, they are doing so in the belief that there is something interesting and important about metaphysical explanation. Thus it might be a constraint on providing truth conditions for such sentences that they turn out to be true only if their truth tracks something interesting and important. But on our view these truths do not track anything interesting and important beyond particular contingent psychological facts about communities.

Suppose there would be nothing interesting or important at stake with regards to metaphysical explanation if our account were right. It is not obvious why it would be preferable to say that ⌜x *because* y⌝ is false, but assertible, than to say it is true, but uninteresting. In fact, though, we do not concede that if we are right, claims about what metaphysically explains what are uninteresting and unimportant even though they are, in the end, claims about the collective psychological dispositions of communities. Notice that on our view, determining whether some instance of ⌜x *because* y⌝ is true, is difficult. THE PROCEDURE is complex. Many aspects of THE PROCEDURE would be very intellectually taxing for many individuals. Yet metaphysicians *in fact* engage in a good many stages of THE PROCEDURE (not including sequential voting). One can think of much of the back and forth of the literature on metaphysical explanation as playing the role of equilibrating across a range of pre-equilibrated dispositions.[[29]](#footnote-29)

Moreover, given the complexities of THE PROCEDURE, it can come as a discovery that some instance of ⌜x *because* y⌝ is true. We can think of much of what metaphysicians are doing as providing the only real evidence we have (or could have) for the truth of such claims, because metaphysicians are ideally placed to engage in the kind of group discussion and equilibration that is a central component of THE PROCEDURE. Moreover, recall that we should expect at least *some* of what the community is disposed to believe to be *conditional* propositions. In order to evaluate whether an instance of ⌜x *because* y⌝ is true we sometimes need to know whether the antecedent of ⌜if P, then KMEj⌝ is true, (and to know whether the community is disposed to believe that the relevant instance of ⌜x *because* y⌝ is an instance of ⌜KMEj⌝). That, again, is something metaphysicians are ideally placed to engage with. Whether ‘wholes exist *because* their parts do’ is true, might well depend (*inter* *alia*) on whether there is actually gunk, since the community might be disposed to believe that if there is no gunk, then wholes exist *because* their parts do. So there are important mind-independent facts for metaphysicians to discover, where the obtaining, or not, of those facts will (partially) determine the truth, or not, of claims of the form ⌜x *because* y⌝ at contexts of assessment.

While, to be sure, on our account what metaphysicians are discovering are not deep facts about what grounds what, it does not follow that they are not making genuine and interesting discoveries. On our view discovering truths about metaphysical explanation turns out to involve discovering how things like us, with the evolved cognitive mechanisms we have, seeing the world from the perspective we do, would, after individual and group equilibration, collectively come to have beliefs about what explains what. That very different communities might be disposed to have different collective beliefs about what explains what does not undermine the interest or importance of our own metaphysical quest.

**5. Conclusion**

Metaphysical explanations play a substantial role in both philosophical and everyday discourse. Thinking about what metaphysically explains what is ubiquitous and productive. On the other hand, grounding—the supposed ontological correlate of these explanations—is considered by many to be a dubious ontological posit. Yet the legitimacy of metaphysical explanation need not be threatened by scepticism about grounding. By expounding a grounding-free, psychologistic theory of metaphysical explanation, we hope to have demonstrated that there is no need to throw the baby out with the bathwater. For grounding sceptics, a psychologistic theory such as ours is, we contend, preferable to an error theory.[[30]](#footnote-30)

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1. We use <> to pick out propositions. [↑](#footnote-ref-1)
2. This is the consensus amongst those who believe in the entities mentioned, though some believe (E\*): X is good *because* God loves X. [↑](#footnote-ref-2)
3. We use ‘non-diachronic’ rather than ‘synchronic’ because in some cases one or both relata are not associated with any time, as is the case with abstract objects like {Darwin}. [↑](#footnote-ref-3)
4. We follow these theorists in adopting what Raven (2015) calls *separatism*, the view that grounding and metaphysical explanation are distinct. Rodriguez-Pereyra, for example, claims that “Explanation is not and does not account for grounding – on the contrary, grounding is what makes possible and “grounds” explanation” (2005:28). There are other ways one could divide the conceptual terrain. If *unionism* is true (i.e. grounding *just is* a kind of metaphysical explanation), and grounding need not be mind-independent, what we offer could be parlayed into a psychologistic account of grounding. [↑](#footnote-ref-4)
5. According to this view the relata of grounding are facts, which are worldly entities comprised of objects, properties, and relations (Audi 2012; Raven 2012). This view is not universal; see, for instance, Schaffer (2009) for the view that the relata of grounding include a more liberal range of kinds of entities. See Trogdon (2013) for a useful overview of the various axes of the debate over the precise nature of grounding. [↑](#footnote-ref-5)
6. It is contentious whether sentences expressing truths about grounding are *hyperintensional*. See Duncan, Miller and Norton (2017) for discussion. [↑](#footnote-ref-6)
7. We use italicised ‘*because’* to indicate metaphysical explanation, as opposed to other uses of ‘because’. We use corner quotes to indicate that ⌜x *because* y⌝ is a *kind* of sentence, where x and y are variables that range over sentences. We will say ‘an instance of ⌜x *because* y⌝’ when we intend to talk about some instance or other of the schema. We will simply talk of ⌜x *because* y⌝ when we want to talk of all instances of the schema. For ease of exposition, we focus on singular-singular metaphysical explanation, but the account can be readily extended to cover plural-singular explanations. [↑](#footnote-ref-7)
8. We use corner quotes since which sentence x and y are, depends on which sentences feature in the relevant instance of ⌜x *because* y⌝. [↑](#footnote-ref-8)
9. There are possible separatist views whereby not all grounding relations have a corresponding explanation. On such views, that [y] grounds [x] is a necessary, but not sufficient condition, for the truth of ⌜x *because* y⌝. As we briefly discuss in §2, such views will not be attractive to grounding sceptics (those to whom our view is pitched). However, this kind of separatist might appeal to the machinery we offer as the ‘extra ingredient’, over and above grounding, that is required for ⌜x *because* y⌝ to be true. [↑](#footnote-ref-9)
10. Shaheen (2017) offers alternative grounding-free truth conditions for ⌜x *because* y⌝. On his view, the truth or falsity of metaphysical explanations is accounted for by metaphorical and conceptual connections with the causal ‘because’. [↑](#footnote-ref-10)
11. We suppose that x necessitates y iff in any world in which x exists, y exists. The necessitation relations with which we shall be concerned are those between facts. Entailment is the sentential correlate of necessitation: for two sentences, x and y, x entails y iff any world at which x is true is a world at which y is true. [↑](#footnote-ref-11)
12. Realism in that the relevant claims are taken to be truth-apt and sometimes true. [↑](#footnote-ref-12)
13. Moreover, modal relations are typically thought not to be explanatory unless they are, themselves, evidence for some further dependence relation. See, for instance, Kim (1993). [↑](#footnote-ref-13)
14. Some terminological clarification: R is a *symmetrical* relation if, for any x, y, if x R y, then y R x. R is *asymmetric* if, for any x, y, if x R y then ~ y R x. R is *non-symmetric* if, for some x, y, x R y and ~ y R x. Traditional modal relations are non-symmetric: they have symmetric instances where x R y and y R x and non-symmetric instances where x R y and ~ y R x. [↑](#footnote-ref-14)
15. We assume numbers exist necessarily. [↑](#footnote-ref-15)
16. A natural response to our proposal is to suggest that we are conflating two distinct senses of explanation. Following Achinstein (1983), we can distinguish explanation *qua* speech act and explanation *qua* explanatory product expressed by said act. The thought is that one can offer an explanatory speech act that is *correct* without being *good*, by giving a true answer to an explanatory question (having a true explanatory product) in a way that is insensitive to the interests, beliefs, etc. of one’s interlocutor (Achinstein, 2010:xi). Perhaps, then, a psychologistic theory of metaphysical explanation merely tells us whether a correct explanation will also be *good*, without telling us anything of which explanations are *correct*. This proposal makes sense, we think, for the separatist about grounding who makes use of our machinery as the ‘extra ingredient’ required for true metaphysical explanation. For on that view there are grounding relations that can determine the correctness of the explanation, and the psychologistic account we offer might determine whether it is also good. Our view, however, is more extreme: we are proposing that *whether the explanatory product is true* depends on what the community, after due reflection and equilibration, is disposed to believe. (With thanks to an anonymous referee.) [↑](#footnote-ref-16)
17. One might worry that there is a threat of circularity here (not ameliorated by our later amendments)

if the truth of ⌜x *because* y⌝ is explained by an individual’s belief that x *because* y, while the individual’s belief that x *because* y is (partially) explained by the truth of ⌜x *because* y⌝. Thanks to an anonymous referee for pointing this out. We deny that the truth of ⌜x *because* y⌝ explains the individual’s belief that x *because* y. Instead, we think that the belief is entirely explained by psychological mechanisms, in a way akin to the account offered in Miller and Norton (2016), on which we elaborate below. [↑](#footnote-ref-17)
18. Cases in which there are diachronic and non-diachronic elements will then be ones in which there are aspects of metaphysical, and aspects of causal, explanation at play. [↑](#footnote-ref-18)
19. Determining which individuals count as members of the community in which i is embedded is not a simple matter. We return to this issue later. [↑](#footnote-ref-19)
20. With thanks to a referee for pointing out this problem. [↑](#footnote-ref-20)
21. See Pettit (2003), Lackey (2016), Mathieson (2006). [↑](#footnote-ref-21)
22. See for instance List (2005; 2011; 2012), List and Pettit (2002), and Dietrich (2006). [↑](#footnote-ref-22)
23. See Kornhauser and Sager (1986), List and Pettit (2002), and Dietrich (2006). [↑](#footnote-ref-23)
24. See List (2005). [↑](#footnote-ref-24)
25. See List (2004), Dietrich and List (2007), and Nehring, Pivato and Puppe (2013). [↑](#footnote-ref-25)
26. An anonymous referee wondered why anyone should care about metaphysical explanations if the truth conditions are as we describe. [↑](#footnote-ref-26)
27. Thanks to an anonymous referee for pointing out this analogy. [↑](#footnote-ref-27)
28. Thanks to an anonymous referee for this suggestion. [↑](#footnote-ref-28)
29. Take Fine’s *Puzzles of Ground* (2010) as an example. He outlines a plausible PME, like irreflexivity, and then presents us with a compelling counterexample, thus hoping to stimulate debate about whether we are more committed to the truth of the PME or the truth of the particular ⌜x *because* y⌝ claim. This is paradigmatic of the kind of equilibration metaphysicians should be undertaking if the truth conditions we offer in terms of the output of THE PROCEDURE are roughly right. [↑](#footnote-ref-29)
30. With thanks to Sam Baron, Michael Duncan and three anonymous referees for their helpful comments and suggestions. [↑](#footnote-ref-30)