Kind-Dependent Grounding

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ABSTRACT: Are grounding claims fully general in character? If an object *a* is F in virtue of being G, does it follow that anything that's G is F for that reason? According to the thesis of **Weak Formality**, the answer is 'yes'. In this paper, however, I argue that there is philosophical utility in rejecting this thesis. More exactly, I argue that two currently unresolved problems in contemporary metaphysics can be dealt with if we hold that there can be cases of 'kind-dependent grounding', the key thought being that once we allow for such cases, we must also accept that **Weak Formality** is false.

> If somebody claims of something named or unnamed that it moves, or runs or is white, he is liable to be asked the question by which Aristotle sought to define the category of substance: *What is it that moves (or runs or is white)?* Perhaps one who makes the claim that something moves does not need to know the answer to this question in order to enter his claim. It is not hard to envisage circumstances in which he can know that it moves without knowing what the thing is. Yet it seems certain…that, for each thing that satisfies a predicate such as 'moves', 'runs' or 'white', there must exist some…kind to which the item belongs and by reference to which the 'what is it' question could be answered.
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> — Wiggins, D. (2001: 21)

> [C]ertain conditions may produce a background to other conditions having a determinative role even though they do not themselves have a determinative role.
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> — Fine (2016: 311)

1   Introduction

Suppose that *a* is F in virtue of being G. Does this mean *everything* that's G is F for that reason?

It would initially seem so. As Rosen (2010) writes:

> If Fred is handsome in virtue of his symmetrical features and deep green eyes, then anyone with a similar face would have to be handsome for the same reason. Particular grounding facts must always be subsumable under general laws, or so it seems. (2010: 132)

Audi (2012) delivers the same verdict:

> Let us suppose that you have a (defeasible) reason to believe that P in virtue of a certain sensory experience…It is not peculiar to you that when you have this experience, it grounds a reason of the relevant sort. Anyone with an experience of the same kind will have a reason of precisely the same kind. Grounding relations do not vary

> from instance to instance of the properties involved in the facts in question. Similarly, they do not vary from world to world. (2012: 103—104)

Following Rosen (2015), let us refer to the principle gestured towards here as **Weak Formality**.[1] This states that if some possible object, *a*, is F in virtue of being G, then, if any possible object, *b*, is G, *b* is F in virtue of being G.[2] In symbols:

Weak Formality: $\exists(x) \exists(F) \exists(G) [(Gx < Fx) \rightarrow \Box \forall(y) (Gy \rightarrow (Gy < Fy))]$

(Following Fine 2012a, one should read 'Gx < Fx' as *Gx grounds Fx*, that is, as *Fx holds in virtue of Gx*. As throughout, I have in mind the notion of full rather than partial ground—on that distinction see Rosen 2010. For more on grounding itself, see §2, though I assume here that reader has a basic familiarity with this notion.)

The principle of **Weak Formality** is certainly intuitive. However, I will argue in that there is philosophical utility in *rejecting* it, by claiming that there is something to be gained from allowing for cases of 'kind-dependent grounding', the idea being that if we allow for such cases, then we must say that **Weak Formality** is false.[3,4]

Plan. I begin by saying something more about the notion of grounding itself (§2). I then set out a crucial passage from Rosen (2015), discussion of which will help us work towards the key notion of kind-dependent grounding that this paper appeals to (§3). Along the way, we will encounter the idea that each object instantiates a fundamental kind, which can determine the properties it may have, plus the idea that grounding claims can hold conditionally. The following two sections then put the notion of kind-dependent grounding to work, in connection with two extant metaphysical problems (§4–5). The final section of the article concludes (§6).

2   Grounding

Many philosophers believe that, in addition to causation, we should recognise a further determinative relation that is constitutive in character, and which obtains between facts *at a time* rather than events *over time*.[5] This relation is widely referred to as 'grounding', claims of which are typically expressed in terms of the 'in virtue

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[1] For the stronger principle, **Formality**, see Rosen (2010: 131).

[2] Cf. Rosen (2015: 199), who notes that **Weak Formality** 'tells us that if some possible thing is green in virtue of having a certain spectral reflectance profile, then as a matter of necessity, anything with that profile is green in virtue of possessing it'.

[3] The debate regarding **Weak Formality** is analogous to the corresponding the debate between Davidson (1980) and Anscombe (1981) as to whether causation is general or singular. For helpful discussion regarding this latter debate see Hitchcock (1995).

[4] It is perhaps worth noting that whilst we are rejecting **Weak Formality**, we can nevertheless retain the following widely accepted necessitation principle, namely:

Necessitation: $\exists(\Delta) \exists(\Gamma) (\Delta < \Gamma) \rightarrow \Box (\Delta \rightarrow \Delta < \Gamma)$

(That is, if one fact grounds another, then necessarily, whenever the first fact obtains, it grounds the other.) For, even if only some things are F in virtue of being G, it might still be the case that if some particular thing *a* is F in virtue of being G, then necessarily, whenever *it* is G, it is F for that reason.

[5] I assume here, for ease of exposition, that causation relates events—but nothing of importance turns on this assumption. As for facts, I am thinking of these as worldly entities—along the lines of Fine (1982) and Audi (2012).

of' locution. Since there is already a vast literature on the topic of metaphysical grounding, my introductory remarks will be kept brief. (Some key literature here includes Audi 2012; Fine 2001, 2012a; Rosen 2010; Schaffer 2009, 2016.)

To say that a certain fact Γ grounds some other fact Δ is to say that Δ obtains in virtue of Γ. That is, it is to say that the latter fact constitutes the ontological basis of the former fact. So, if Γ grounds Δ, then Γ is the more fundamental of the two, and Δ is the less fundamental (and the more derivative).[6] Moreover, if Γ grounds Δ, then there is a non-causal, constitutive sense in which Δ holds *because* Γ does.

To borrow an image from Schaffer (2016), the relation between grounding and causation can be thought of as follows: whilst causation drives the world through time, grounding drives the world through levels. Causation takes us from one event occurring at a time to another event occurring at a later time. The former event is thus causally generative of the latter. In a similar way, the thought goes, grounding takes us from some more fundamental fact to another, less fundamental fact. The former fact is therefore ground-theoretically generative of the latter.

As this brings out, both causation and grounding are 'building' or 'generative' relations (cf. Bennett 2011), and, hence, relations of determination. Moreover, both relations back distinctive types of *explanation*. If event e1 causes event e2, then e2 occurs because e1 occurs—in a causal sense of 'because'. Likewise, if fact Γ grounds fact Δ, then Δ obtains because of Γ—in a constitutive sense of 'because'.[7]

That being said, and unlike some authors, I do not identify grounding with metaphysical explanation (although the latter relation can, it would appear, also be expressed with phrases like 'because' and 'in virtue of'.) Rather, in my view, just as we should distinguish the causal relation from the causal explanations that it backs, so too, we should distinguish grounding from the metaphysical explanations that it backs. Accordingly, just as 'causation' and 'causal explanation' are distinct, so 'grounding' and 'metaphysical explanation' are distinct (cf. Schaffer 2016.)

I have been writing as if grounding is a relation on facts, and I will continue to assume this in what follows. (However, I will also speak loosely of 'x's Gness grounding x's Fness'. This should be taken as an informal expression of the claim that the fact that x is F is grounded by the fact that x is G.) Note, however, that this assumption is contestable in various ways. Most of what I say here could probably be reformulated without the assumption that grounding is a relation between facts (were one to disagree with this idea). But I'll assume the truth of this throughout.

I'll close with some remarks about the logical properties of ground. It is standard to assume that grounding is reflexive, asymmetric, transitive, and well-founded. Grounding is thus widely conceived as a well-founded partial ordering over the domain of facts. To my mind, it seems plausible to think of grounding in this way. However, nothing I say here turns on that being right. (I note the standard assumptions just to help the reader gain a sense of what grounding is supposed to be.)

This completes my initial exposition of the grounding relation. (I'll spare the reader a list of examples of grounding. There are enough in the literature.[8]) At this point, then, we can turn to the main task this paper, namely, to make a case against

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[6] Plausibly, grounding can be one-one, many-one, and perhaps even many-many. But here I am interested in one-one cases. (Throughout I follow let 'Γ' and 'Δ' stand for arbitrary individual facts.)

[7] For more on the relationship between grounding and causation see Schaffer (2016) and Wilson (2017).

[8] But see especially Rosen (2010: 111—112) and Schaffer (2012: 52—54.)

Weak Formality, by interpreting and attempting to thereby solve two metaphysical problems in terms of the notion of 'kind-dependent grounding'.

3 Kind-Dependent Grounding

As we saw in the first section, one advocate of **Weak Formality** is Rosen (2010). In more recent work, however, Rosen (2015) expresses scepticism about this principle:

> **Weak Formality** is not self-evident. It amounts to the claim that when Ga grounds Fa in some particular case, the capacity of the first fact to ground the second derives entirely from the distinctive powers of the predicable G, and not from the combination of G and a together. But why shouldn't there be cases in which G and a conspire to make it the case that Fa, in part thanks to *G* and its distinctive powers, but also in thanks to *a* and its distinctive powers. (2015: 199, emphasis in the original)[9]

The suggestion here, apparently, is that there could be cases wherein there is some difference between two items, *a* and *b*, whereby, although both *a* and *b* are G, it is only *a* that is F for that reason. That is, the thought appears to be that there might be some difference between two things *a* and *b*, such that when *a* is G, *a* is F *in virtue of* being G, despite the fact that when *b* is G, *b* is not F for that reason.

There are, in fact, various ways to develop this idea. In what follows, however, I shall develop it in a specific manner, by appealing to two resources: the broadly neo-Aristotelian idea of *fundamental kind*, and the notion of *conditional grounding*.

3.1 Fundamental Kinds

There is a view, broadly Aristotelian in spirit, whereby all objects belong to (only) one (most specific) fundamental kind.[10] To introduce this idea, we can reason like so. Intuitively, there is a difference between specifying *what* something is as opposed to merely saying *how* it is (cf. Fine 2012b: 10; Wiggins 2001: 31). We can begin to regiment this intuitive thought, moreover, by saying that to specify merely *how* something is, we merely need to list its properties, whereas to specify *what* something is, we need to specify its fundamental kind, i.e., we need to state what sort of thing x most fundamentally is. For example, to say that x is an animal or a person is, arguably, to say *wha*t x is, it is to specify what kind of object we are dealing with. In contrast, the claim that x is white, intuitively, merely says *how* x happens to be. One specifies one of the object's properties; but one fails to disclose its fundamental kind. The thought is brought out nicely by Wiggins in the following passage:

> If somebody claims of something named or unnamed that it moves, or runs or is white, he is liable to be asked the question by which Aristotle sought to define the category of substance: What is it that moves (or runs or is white)? Perhaps one who makes the claim that something moves does not need to know the answer to this question in order to enter his claim. It is not hard to envisage circumstances in which he can know that it moves without knowing what the thing is. Yet it seems cer-

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tain…that, for each thing that satisfies a predicate such as 'moves', 'runs' or 'white', there must exist some…kind to which the item belongs and by reference to which the 'what is it' question could be answered. (2001: 21)

In this paper, I will take this basic framework for granted (the rationale being: it can do valuable metaphysical work). I assume also one particular element of the framework, namely, that fundamental kinds can determine, in at least some cases, what properties their instances can have. One way to showcase the plausibility of this idea is via examples. If, for example, x is a proposition, then plausibly, x is essentially and most fundamentally so. It is plausible, moreover, to think it's *because* x is a proposition that x can have certain features and not others. For instance, a proposition may be true or false, but neither red nor blue. And plausibly, this is because propositions are not the *kind of thing* that can be coloured, but are the kind of thing that can have truth-values. We can therefore explain why propositions can have truth-values but not colours by appealing to what kind of thing they most fundamentally are.

Manifold further examples are possible. A sphere may be misshapen, but not ungrammatical. A wedding can be joyous or boring, but not prime or even. A heap of sand, plausibly anyway, cannot survive a change in parts, whereas animals and plants seemingly can. All of these differences in properties, quite plausibly, are traceable in some sense to the fundamental kind the relevant item instantiates.[11]

Suppose, then, that we allow that fundamental kinds can determine what properties their instances may have. In light of this, it appears we should grant also that fundamental kinds can determine which grounding relations their instances are and are not able to enter into. If, for example, an object x is of fundamental kind K, and if, for that reason, x is unable to have the property of being F, then it follows that x cannot be F in virtue of being G. Moreover, this will be so even if x *is* G, and, importantly, even if other things, which are not K's, are F in virtue of being G.[12]

Return now to the illustrative case involving a and b. If we are to reject **Weak Formality** in a plausible way, then as per Rosen's suggestion, we must locate a relevant difference between these objects that could underwrite the fact that only a is F in virtue of being G, although both a and b are G. My suggestion at this point— given that fundamental kinds can determine what properties their instances may have, and thus determine what grounding relations their instances may enter into— is that the relevant difference between a and b is one of fundamental kind.

Suppose that a is most fundamentally a K, whilst b is most fundamentally a K*, whereby Ks are able to be F, but K*s are not. Suppose also that both Ks and K*s can be G (as witnessed by the fact that both a and b, a K and a K* respectively, are G). In this situation, I claim, the difference in fundamental kind between the objects can underwrite the fact that whilst a and b are both G, only a is F for that reason. (Given that a is the kind of thing that can be F, whilst b is not, it is only a that can be F in virtue of being G, even though both a and b are G.) On this view, it is

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[11] Notably, I *do not* say that a thing's fundamental kind fixes its modal profile entirely, so that x's being fundamentally a K determines the full range of properties that x is able to have. (Perhaps x could not have had another origin than the one that it has. On the face of it anyway, this is a fact about the properties x can/cannot have that does not trace to its fundamental kind.)

[12] It might be, of course, that in some cases, if a thing is unable to have the grounded property because of the kind of thing it is, then for the same reason, it cannot have the grounding property. However, we should not just assume that all cases are like this. Perhaps, a in some cases, a thing x can have grounding property G but not the various properties {F} that G is otherwise able to ground.

the difference in fundamental kind between a and b that makes it so that Ga grounds Fa, even though even whilst b is G, it is not so that Gb grounds Fb.

This is the beginning of the account I want, ultimately, to defend. As things stand, however, important details must be filled in. Consider, for example, the role that fundamental kinds play in the story. Are they to be conceived as partial grounds—so that when a is F in virtue of being G, a is F partly in virtue of being G *and* partly in virtue of being a K? Or is the role of fundamental kinds something different? Well, the answer has to be the latter, if the notion of kind-dependent grounding is to perform genuinely interesting work. After all, it is hardly news that one thing can be F partly in virtue of being G even if this isn't so for all the Gs, and even if some Gs fail to be F entirely. The really interesting possibility, therefore, as introduced at the outset of this paper, is that one thing might be F *solely* in virtue of being G, even though there are some Gs that are not F. The point is that if we want to make good on this possibility then we cannot assign to fundamental kinds the role of partial grounds. Rather, we must assign instead some alternative role.

How, then, are we to model the fact that a's being of kind K somehow determines that a is F in virtue of being G, without treating the fact that a is a K as a partial ground of the fact that a is F (alongside the fact that a is G)? My suggestion will be that we should develop this thought in terms of the notion of conditional grounding. As we will see, this will enable us to conceive of fundamental kinds as enablers on certain grounding relations obtaining rather than partial grounds.[13]

3.2 Conditional Grounding

In the literature on causation, a distinction is sometimes drawn between causes and conditions.[14] That is, it is sometimes claimed that there are cases wherein an event A causes a further event B only given that some background condition is met. Absent this further condition, so the idea goes, and A would not be able to cause B. (That is, whilst A would still obtain, it would not cause B.) As an example, one might, for example, claim that striking the match causes the fire only given that the background condition of oxygen being present is met. On this view, were oxygen to have been absent, striking the match would not have caused the fire. So whilst (the event that is) the striking of the match would still have occurred, it would have been unable to cause the fire, due to the absence of a necessary background condition on this event performing its causal work, *viz.* the presence of oxygen.

To be clear, the thought here is not that the alleged conditions involved in these causal facts are just further partial causes. Rather, the idea is that if C is a condition on event A causing event B, then, rather than being a further cause of B, C is that

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[13] The notion of conditional grounding (which is not my own) has recently been put to work in a variety of theoretical contexts. Kit Fine (2014, 2015), for example, argues that we need to make use of conditional grounding in order to properly model the role that existence facts play with respect to the holding of diachronic identities. Meanwhile, Ralf Bader (manuscript-a) and Ted Sider (independently) argue that we should appeal to conditional grounding (which Sider calls 'grounding-qua') in order to handle the problem of truth-grounding universal generalisations. And in other work, Bader (2015) also argues that we need the notion of conditional grounding in order to properly model the way in which reasons can vary across contexts (cf. here Dancy 2004: ch. 3). The notion of conditional grounding is also rather similar to the notion of an 'anchor' in Epstein (2015).

[14] For relevant discussion of this kind of distinction see Bader (manuscript-b), Dancy (2004: ch. 3) and Schaffer (2005). A classic source of scepticism about the distinction is Mill (1950: 244).

which enables the causal relation to hold between A and B in the first place. It is part of the idea, then, that certain things can play a role in generating events without playing a causal role. On this conception, instead of playing a causal role, the idea is that certain things can act as background conditions whose role is to enable the causal relation to obtain between the effect and the cause.[15]

In my view, a similar distinction can be drawn in the case of grounding. What we can claim is that, just as, in some cases, one event, A, causes another event, B, only given that some background condition C is met, so too, in some cases, one fact Γ grounds another fact Δ only given that some condition Φ is met. In short, the idea is that just as background conditions might be relevant to the production of an event without themselves being causes of that event, so too, certain background conditions might be relevant to the obtaining of a fact without themselves being grounds of that fact. As Fine (2015: 311) summaries: '[C]ertain conditions may produce a background to other conditions having a determinative role even though they do not themselves have a determinative role'. (Cf. also Bader manuscript-a, who notes that '[n]ot everything that plays a role in making it the case that something else is the case needs to play a grounding-role', since 'things can also be relevant by being conditions that must be satisfied for other things to do their grounding work'.

To make sense of conditional grounding, we must distinguish the different roles things can play in making a fact obtain. Suppose that Γ conditionally grounds Δ, and suppose that the condition on this grounding relation holding is that Φ obtains. In this case, the grounding relation holds solely between Γ and Δ. However, the grounding relation holds between these facts only given that the condition, Φ, is met. Moreover, it is part of the view that Γ and Φ play fundamentally different roles in making Δ obtain. For, while Γ plays a grounding role, Φ plays the role of a condition, i.e., whereas Γ acts as the ground of Δ, Φ acts as the condition on the grounding relation between Γ and Δ obtaining (the condition's role in making Δ obtain being to enable Γ to perform its grounding work, rather than acting as even a partial ground for Δ.)

Conditions, then, are not to be treated as partial grounds (just as conditions in the causal case are not to be thought of as further causes, at least on the view sketched above). Rather, they are to be understood as playing different roles entirely to grounds. Specifically, they should be thought of as playing a *sui generis* role in helping to make it the case that certain facts obtain, by enabling the grounding relation to hold between the grounding and the grounded fact.[16] Consequently, to understand conditional grounding, we have to draw a robust distinction between grounds and conditions, whereby conditions simply enable the relevant grounding relations to obtain. (I take this assumption as unproblematic here. However, I realise that one could contest the grounds/conditions distinction in various ways.)

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[15] Note that I am non-committal as to whether there really are such things as non-causal conditions that enable causal relations to hold. (I appeal to the causal case only for illustrative purposes.)

[16] Cf. Sider on the notion of *grounding-qua*, which is very much like the notion of conditional grounding that I am presently appealing to. According to Sider (manuscript: 37): 'grounding-qua statements must be understood as *sui generis*, in that they cannot be defined as meaning that [a certain collection of facts] A1…, together with the further statement that they satisfy the condition, ground B in the orthodox sense. The further statement [i.e. the condition] is not part of the ground of B; rather it is in light of the further statement [condition] that A1,…ground B'.

3.3   Kinds as Conditions

With the notion of conditional grounding introduced, return now to the case in-
volving *a* and *b*. We now suppose that whilst *a* is the kind of thing that can be F,
the same is not true of *b*. The thought is that for this reason, *a* is F in virtue of being
G, whilst *b* is not, although both items are G. The question we are presently en-
gaged with is is how exactly to model this. How should we think about the role of
fundamental kinds in making it so that whilst *a* is F in virtue of being G, neverthe-
less *b* is F but not G? My suggestion is that we can model this in terms of condi-
tional grounding, treating fundamental kinds as conditions. When *a* is F in virtue
of being G, the grounding relation holds only given the condition that *a* is funda-
mentally a K. The fact that *a* is a K thus acts as an enabling condition on *a* being F
in virtue of being G. That *a* is G is consequently the sole and full ground of the fact
that *a* is F. The fact that *a* is a K is simply what enables this grounding relation to
obtain. As for *b*, the fact that *b* is a K* acts as a disabler on *b* being F in virtue of
being G. Given that *b* is a K*, and given that unlike Ks, K*s cannot be F, it follows
that *b* cannot be F, and hence cannot be F in virtue of being G. So, although *b* is G,
b is not F in virtue of being G, since *b* is not the kind of thing that can be F.

   Let us say that in general, cases wherein some x is F in virtue of being G, but
only on the condition that x is fundamentally a K, are cases of *kind-dependent
grounding*. What I now wish to point out is that, given that cases of kind-dependent
grounding are possible, **Weak Formality** has to be rejected.

   After all, **Weak Formality** entails that if two things are G, and if one of them is
F in virtue of being G, then both things are F in virtue of being G. However, this is
not so if cases of kind-dependent grounding are possible. For it might be that whilst
two things are G, only one of them is the kind of thing that can be F, meaning that
only one of them is the kind of thing that can be F in virtue of being G.[17]

   In the following two sections, I explain how two outstanding problems within
contemporary metaphysics can be handled when viewed as cases of kind-dependent
grounding. This will provide us with broadly abductive reasons for accepting that
cases of kind-dependent grounding are possible and that **Weak Formality** is false.[18]

3.4   Kinds as Basic

Before moving on, one further thing must be said regarding fundamental kinds.
Earlier, I said that in specifying x's fundamental kind, one specifies what sort of

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[17] Strictly speaking, to show that **Weak Formality** is false, we need to go further than just show-
ing that there can be cases of kind-dependent grounding. For in fact, we need a case that shows
whilst in general, things that are G are F in virtue of being G (so long as they are the right kind of
thing), it is also the case that there could be two objects that are both G, even though only one of the
is kind of thing that can be F. (The following two sections of this paper in effect provide the basis for
a broadly abductive argument to the effect that cases of *this* kind are indeed possible.)

[18] Certain variations on the notion of kind-dependent grounding may also be of interest. For
example, in place of kind-dependent grounding, one might consider the idea of essence-dependent
grounding, or form-depending grounding…, and so on and so forth. (Since the essence, or form, or
mode of composition, of an object can be thought of as determining which properties it can have,
we can also imagine cases in which the essence, or form, or mode of composition…, of an object
determines which grounding relations it can enter into.) One may even prefer to think about the
metaphysical puzzles discussed below in terms of some such alternative notion.

thing x essentially and most fundamentally is. That is, one says not merely *how* x is, but rather *what* x is. What I now want to add is that, in my view, fundamental kinds are fundamental in another sense: that is, they are fundamental not only in that they tell us what the object essentially and most fundamentally is, but also fundamental in that when something is of some fundamental kind K, there is nothing in virtue of which that is so. In short, fundamental kinds are ground-theoretically fundamental, since their instantiation is ungrounded. This view is plausible, I claim, because in specifying an object's fundamental kind we specify what sort of thing it essentially is. But arguably, we needn't explain why an item has the essence that it does. Explanation has to come to an end somewhere, and, as Hawthorne & McGonical (2008: 436) point out, the idea that explanation comes to an end when we begin talking about the essence of an object looks rather plausible. As they explain: '[a]ll views have foundational facts that are not in turn grounded in further, deeper facts'. On the view that I advocate in this paper, the facts regarding what an object most fundamentally and essentially is are such foundational facts.[19]

Of course, this view of matters is not uncontroversial. Indeed, for some kinds, it may seem much more plausible to think that there must be some ground-theoretical explanation as to why the object is the kind of thing that it is. Consider, for instance, the kind *statue*, which one might plausibly take to be a fundamental kind in my sense (after all, in saying that x is a statue, one thereby says *what* x is and not merely *how* x is.) As Kit Fine notes:

> Surely…there must be some [ground-theoretic] account of what is involved in being a statue or a piece of clay, from which it should then be apparent why a given object is the one rather than the other. (2008: 125)

So the worry is: not all fundamental kinds can be ungrounded (basic, fundamental) since at least some of them clearly demand ground-theoretic explanation.

There are various ways to respond to this objection. But my main reply is this. As we will see in the next section, with the assumption being challenged by the objector about fundamental kinds in the background, i.e. given the assumption that fundamental kinds are basic and ungrounded, we can solve two important metaphysical problems that are presently unresolved. The idea is that this, together with the aforementioned connection between kinds and essence, provides us with strong grounds for thinking accepting that kinds are indeed basic. Doubtless, there are other ways to reply to this worry. However, for reasons of space, I will not discuss further possible replies here. Instead, I shall just assume in what follows that fundamental kinds are not in need of grounding due to being ground-theoretically basic The aim will then be to showcase the work that this assumption can do, in conjunction with the idea that there can be cases of kind-dependent grounding.

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[19] N.b. the view that fundamental kinds are ground-theoretically fundamental is not built into the very notion of a fundamental kind. That is, one could in principle believe that each thing falls under a fundamental kind in the sense of that term introduced above without thinking that when they do fall under some such kind, there is nothing that grounds the fact that they fall under it. It just that in this paper, I also add the further claim that these facts are indeed ungrounded.

4   Coinciding Objects

Many believe that distinct material objects can coincide, i.e., that two or more objects can wholly occupy the same region of space and be composed of the same microphysical parts at once. Consider, for example, a statue and the lump of clay making it up. The statue cannot survive being squashed; after all, it must have a certain form or structure in order to exist, one that it would lose if it were squashed. But the lump *could* survive being squashed. Accordingly, the statue and the lump differ in properties, and so by Leibniz's Law are distinct.[20] Given this fact, the most plausible thing to say it seems is that they are distinct yet coincident objects.

Or consider a person and her body. The person wouldn't survive even a gentle death; with death the person *ceases to be*. The body, however, could well survive a gentle death. So, plausibly, we have to hold that the person and her body are distinct, coincident items (cf. Johnston 2007: 57 and Sosa 1987: 156—157).[21]

In the next sub-section, I will focus on cases that apparently involve coincident objects that instantiate *different* fundamental kinds. (Therefore, I set aside alleged cases of 'same-kind coincidence').[22] Specifically, I focus on coincident objects that differ in (at least some of) their non-basic properties. The trouble, as we will see, is that it's difficult to make sense of how coincident objects *could* differ in such properties. What I will also show, however, is that we can, ultimately, make sense of this if we allow for cases of kind-dependent grounding and reject **Weak Formality**.

The following sub-section deals with an objection. What will emerge is the idea that plausibly, the kind of item that something most fundamentally is can determine, not only which non-basic properties it can have (*simpliciter*), and, hence, which non-basic properties it can have in virtue of others that are more basic, but also which properties can act as grounds for certain less basic ones. This will also bring out a further way in which the **Weak Formality** principle might fail.

4.1   The Problem

Focus on the statue/lump case. These items are *fundamentally different kinds of object:* one is a statue, the other is a lump (of clay). Now it's often said that there's a problem regarding *how* the statue and the lump could differ in kind, since they are composed of the same microphysical parts. However, there is only a problem here if we assume that what kind of thing that something fundamentally is depends on its microphysical profile. Yet I deny that assumption. In my view, there is *nothing* that explains why an object is the kind of thing it is (cf. §3.4). The fact that an object is

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[20] Some philosophers have tried to resist this style of argument by appealing to 'predicational shifts' (though see Fine 2003 for some powerful criticisms of this move). Others have developed the considerably more radical option of rejecting Leibniz's Law, by appealing to some form of relative identity (for further discussion of these matters see Burke 1994 and Noonan 1991).

[21] Manifold similar examples could be given here. For instance, it is often said that a person would 'go with the brain' in a brain-transplant case, whilst the body would stay on the operating table. This again would appear to establish the distinctness of these items (see Shoemaker 2004).

[22] In fact, I follow Locke (1690) and Wiggins (1980, 2001) in holding that there are no such cases. (See Fine 2003 and Johnston 2006 for arguments to the contrary.)

most fundamentally an item of kind K is not explicable in more basic terms. There is no ground for the fact that x is fundamentally a K (and not, say, a K*).[23]

Accordingly, in my view, we can accept, unproblematically, the idea that the statue and the lump are fundamentally different kinds of thing. But this is not to say that coincident items pose no problems at all. On the contrary, the fact that co-incident apparently items differ in their non-basic properties poses a real problem that demands a solution, the claim that kinds are basic notwithstanding.

Note first that when it comes to material things, it's plausible to think their non-basic properties are (ultimately) grounded in underlying basic microphysical properties. If x is a material object, and if F is some non-basic property of x, then plausibly, there is some microphysical property M, which x has, such that x is F in virtue of having M. This view is standardly referred to as Microphysicalism.[24]

To focus on a specific example, consider the fact that whilst the statue is beautiful, the lump it is coincident with is not. It follows that:

(1) The statue is beautiful.
(2) The lump is not beautiful.

The reason trouble emerges is that, given the plausible premise that *being beautiful is a non-basic property*, plus Microphysicalism, we can derive a contradiction from (1) and (2). At least, this is so if we accept that **Weak Formality** holds. To see this, note first that given Microphysicalism, claim (1) implies the following, namely:

(3) There is some microphysical property, M, such that the statue is beautiful in virtue of having M.

(In general, the microphysical properties of an object are a function of the properties and relations of the object's microphysical parts. Accordingly, microphysical properties can be both intrinsic and extrinsic, at least on the present conception.)

Note also that, since grounding is factive, claim (3) entails:

(4) The statue has microphysical property M.

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[23] Notice that one cannot solve the problem of explaining why coincident objects x and y differ in kind despite being microphysically alike in the way that I just did unless one treats kinds as ungrounded. That is part of why this assumption is crucial to this section. However, if one were able to explain how objects were to differ in kind despite sharing their microphysical properties, then one could solve the problem I raise in this section for believers in coincidence *without* having to hold that fundamental kinds are ungrounded. (Good news, I suppose, for those who find that idea distasteful.) The trouble is that it really has proven rather hard to show how objects could differ in kind despite sharing their microphysical properties, at least without treating kinds as basic in the way that I propose, as the massive literature on the so-called 'grounding problem' has effectively shown. Accordingly, I prefer to divide and conquer: we first take kinds as ungrounded, and then we use this to offer an explanation for certain other differences that should be grounded in more basic ones.

[24] Cf. the thesis of Mereological Supervenience in Kim (1993). In effect, Microphysicalism is the ground-theoretic analogue of Kim's thesis of Mereological Supervenience. (As I am sure Kim would recognise, it is something like Microphysicalism that rationalises Mereological Supervenience in the first place—since for Kim, supervenience relations merely suggest the presence of interesting dependence relations like grounding but are not themselves such relations—see Kim 1993: 167.)

But the statue and the lump are coincident, and are therefore composed from the same microphysical parts. Hence, the lump has all the same microphysical properties as the statue does. So we can derive:

(5) The lump has microphysical property M.

We also know **Weak Formality** tells us that if some possible object *a* is F in virtue of being G, then, if any possible object *b* is G, *b* is F in virtue of being G. So, given (3), if **Weak Formality** is true we can derive:

(6) If any object whatsoever has microphysical property M, then it is beautiful in virtue of having M.

(5) and (6) then entail:

(7) The lump is beautiful in virtue of having microphysical property M.

And since grounding is factive, claim (7) entails:

(8) The lump is beautiful.

The problem is that together, (1) and (8) engender the contradiction that the lump both is and isn't beautiful. Moreover, the problem is quite general. Indeed, given Microphysicalism and **Weak Formality**, we end up facing this kind of problem whenever coincident objects differ in terms of some non-basic property.

One way to react here would be to reject Microphysicalism. Another option would be to claim that all differences between coincident objects are ungrounded differences. However, these moves seem implausible. Moreover, there is a better way. For, we can instead put to work the notion of kind-dependent grounding. We can then reject **Weak Formality**, and block the inference from (5) and (6) to (7).

This response depends on the intuitive claim that *whilst the statue is the kind of thing that can be beautiful, the same is not true of the lump of clay*. And for what it's worth, this claim feels correct to me. If something is a statue, it is the sort of thing that can be beautiful, whereas if something is a lump (of clay), then it is not the kind of thing that can be beautiful.[25] For present purposes, suppose that we accept this claim.[26] Then if we grant that being beautiful is a non-basic property of the statue, and also grant Microphysicalism, we must accept that there's some microphysical property, M, in virtue of which the statue is beautiful. However, if the statue is only able to be beautiful given it's *the kind of thing able to have this property*, then what we have is a case of kind-dependent grounding. That is, we have a case

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[25] One might argue to the contrary that whenever lumps of clay and statues are coincident, both items will be beautiful. But this is not a worry for me, for whilst it would show, were it true, that lumps are *not* the kind of thing that cannot be beautiful, it would also show that beauty, at least when it come to statues and lumps, is not one of the properties apt to generate instances of problem we are concerned with. (More generally, whenever the constituting item shares the non-basic property with the constituted item, then we do not have an instance of the problem we are dealing with.)

[26] Again, one could also accept a variation on this claim, according to which the statue but not the lump is able to beautiful because it has a certain form, or essence, etc. (cf. fn. 18 above).

wherein, although (3) is true, it is true only given that the object in question (the statue) is a certain *kind* of thing. It follows that claim (3) would be more perspicaciously written as follows:

> (3*) There is some microphysical property, M, such that the statue is beautiful in virtue of having M, whereby this grounding relation holds only given that the statue is the kind of thing it is.

On this view, whilst the statue *is* beautiful in virtue of having M, the fact that the statue has M makes it so that it is beautiful only given that it meets the condition of being a certain kind of thing. Call the particular statue *s*. We can then put this point by saying that the fact <that *s* has M> grounds the further fact <that *s* is beautiful> only given that *s* meets the condition of *being the kind of thing* that *can* be beautiful, In short, *s*'s fundamental kind enables the grounding relation to obtain between the ground*ing* fact <that *s* has M> and the ground*ed* fact <that *s* is beautiful>.

This view implies that having microphysical property M is not *sufficient* for being beautiful. For in addition, an item must meet the condition of being the sort of thing that can instantiate the property of being beautiful. Thus, were something to *not* be the kind of thing that can be beautiful, then even if it were to have microphysical property M, it would not be beautiful for that reason. So it also follows that **Weak Formality** is false; the same is then true for the more specific (6). (For, if being beautiful depends on being a certain kind of thing, only things of the relevant kind (or kinds) can be beautiful in virtue of having microphysical property M.) Instead of (6), moreover, what is true is something more like:

> (6*) If any object whatsoever has microphysical property M, then *if* that object is the kind of thing that can be beautiful, it is beautiful in virtue of having M.

This reformulation suggests a more general re-formulation of **Weak Formality** (letting 'K$_F$' stand for the predicate 'is the kind of thing that is able to be F'):

Kind-Dependent Formality:
$\exists(x) \exists(F) \exists(G) (Gx < Fx) \rightarrow \Box [\forall(y) (Gy \& K_Fy \rightarrow (Gy < Fy))]$

Thus, once we recognise that there can be cases of kind-dependent grounding, we can resolve, in a compelling way, a problem that arises for those who claim that there are differences in non-basic properties between coincident things.[27] This strat-

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[27] Moreover, if we can maintain that whenever coincident objects differ in terms of some non-basic property, this can always be traced back to a difference in fundamental kind between them, then we can offer a compelling answer to what Koslicki (2004) calls the 'similarity problem'. Essentially, the problem here is to explain not only how the coincident objects manage to differ in certain ways, but also why in certain respects they are the same. That is, we have to explain why some properties (like mass) are shared, whilst others (like beauty) are not shared. My answer is that the shared properties are either those that are not kind-dependent or those that are kind-dependent but that can be had by both statues and lumps, whereas those that are not shared are 'kind-dependent properties' that can be had only by statues and not lumps/only by lumps and not statues. Given this view, I

egy, however, requires rejecting **Weak Formality**, replacing it with **Kind-Dependent Formality**. I submit is that this provides motivation for rejecting the former principle.

Notice, also, that same basic strategy as employed above can be used to solve a whole range of similar problems. For, if we grant Microphysicalism, then we face exactly the same problem whenever we wish to allow that coincident objects differ regarding any non-basic property. So since it seems plausible to think that whenever such objects differ in their non-basic properties in this way, this is traceable to some difference in fundamental kind, we can employ the same basic strategy as above in order to avoid contradiction when wishing to claim that the coincident objects genuinely differ in terms of the non-basic property in question. For instance, by appealing to the kind-dependent grounding strategy, we might be able to make headway with the longstanding problem regarding modal differences between material things. For it is plausible to hold that these modal differences are in some way at least traceable to a difference in fundamental kind.[28] We might also be able to make headway with the important problem as to how persons and their bodies manage to differ in consciousness. For, the difference in consciousness between a person and a body would also seem to be traceable in some sense to the fact that whilst the person is the kind of thing that can be conscious, the body of the person is not.[29]

4.2   An Objection

I now want to deal with an objection to the kind of view regarding cases of coincidence that I have set out so far. Imagine the following case. We have a piece of metal constituting a statue. In this particular case, moreover, the piece of metal is not valuable, but the statue is. The trouble is one might think that it is just not true that things of the kind *piece of metal* are, in virtue of their kind, unable to be valuable. After all, perhaps some pieces of metal are valuable whilst some others are not.

The general problem here is this. It might be so that x and y are coincident and so share microphysical properties. And they might differ in non-basic property F. My way to avoid contradiction would be to claim that if, say, x lacks F whilst y has it, then x is the kind of thing that cannot be F, and so cannot be F in virtue of the base properties it shares with y (§4.1). But perhaps this won't cover all cases. For perhaps, whilst x is not F, other things of the same fundamental kind as x *are* F.

Let's grant, for the sake of argument, that such cases are possible. My response is to invoke a different way in which fundamental kinds can condition what grounding relations their instances may enter into. Consider the case of the piece of metal

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submit, we can offer a plausible and principled account as to why, for example, the statue and the lump differ with respect to certain properties but not others.

[28] Cf. Fine (2008: 106): 'when we ask how it is possible for the piece of alloy to survive being moulded into the shape of a sphere but not possible for the statue, then the answer which most naturally suggests itself is that it is because the one is a piece of alloy and the other is a statue of Goliath that they enjoy the capacities or incapacities for variation in shape that they do.'

[29] Indeed, it just *sounds wrong* to say that my body is thinking. As David Wiggins writes, in connection with the idea that we human persons are identical with our bodies, so that our bodies are thinking beings with the same full range of mental capacities as ourselves, '…there is something extremely unnatural—so unnatural that the upshot is simply falsity—in the proposition that people's bodies play chess, talk sense, know arithmetic, or even run or jump or sit down.' (Wiggins 1980 163—164; cf. Fine 2008: 115 and Johnston 2007: 55.)

that is not valuable—the one that is coincident with a statue that *is* valuable. Given Microphysicalism and **Weak Formality**, the piece of metal ought to be valuable when it is not. Moreover, I cannot respond by saying that the piece of metal is not the kind of thing that can be valuable and therefore not the kind of thing that can be valuable in virtue of having microphysical property M, i.e. the same microphysical property that makes the statue valuable, granting that some pieces of metal can be valuable. For it is just not true (or so we are granting) that things of the kind *piece of metal* are not as such able to be valuable. What can be said, however, is that pieces of metal are not the kind of thing that can be valuable *in virtue of having microphysical property M*. Regarding those pieces of metal that are valuable, *they* must be valuable in virtue of having different base properties than those pieces of metal that are *not* valuable. And so they must be valuable in virtue of having different base properties to that base property the piece of metal coincident with the statue (the one that is not valuable) shares with that statue, namely, microphysical property M.

This view is not *ad hoc*. If kinds can determine what non-basic properties a thing can have, should they not also be able to determine which base properties can (conditionally) ground certain of their non-basic properties? (That is: it should be possible that for things of kind K, being of kind K means that you can be F in virtue of basic property G, but not F in virtue of basic property H, etc.) Moreover, this view has the virtue of explaining why some instances of a kind can have non-basic property F whilst others cannot. The answer is: their kind determines that certain base properties can make them F whilst other similar base properties cannot.

We now see another way in which **Weak Formality** might fail. Again, this thesis claims that if x and y both have G, and if x is F in virtue of being G, then both must be F in virtue of being G. I set out one way in which this might be false just above. The second way in which that principle might fail then turns on the fact that there might be cases wherein some x lacks F and y has F, yet wherein also, whilst x is the kind of thing that can be F, it is not the kind of thing that can be F in virtue of being G (even if it is the kind of thing that can be F in virtue of being H, or J, etc.) This means that fundamental kinds can determine not only which non-basic properties a thing can have, and, therefore, which non-basic properties a thing can have in virtue of which base properties, but also which base properties out of a certain class of such properties are able to make instances of the relevant kind have certain non-basic properties.[30]

5   Thinking Parts

I have argued that the notion of kind-dependent grounding can perform useful metaphysical work within the context of a view that allows for non-basic differences

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[30] This response might require us to modify **Weak Formality** even further. Instead of replacing this principle with **Kind-Dependent Formality**, we might now need to replace it with (letting 'K_G' stands for the predicate 'is the kind of thing such that, if it is G, then it is F in virtue of being G'):

Kind-Dependent Formality*
$$\exists(x)\,\exists(F)\,\exists(G)\,(Gx < Fx) \rightarrow \forall(y)\,\square\,[(Gy\,\&\,(K_F y\,\&\,K_G y) \rightarrow (Gy < Fy))]$$

I propose, however, not to dwell on this further modification in what follows.

between coincident entities (§4). In this section, I show that this notion can also perform valuable work even if we don't countenance coincident things. My strategy will be to consider a problem that arises even if we don't allow for coinciding objects, before explaining how appealing to kind-dependent grounding can solve it.

The problem is known as the 'thinking parts problem'.[31] The trouble is that whilst it seems like I'm the only conscious being in my vicinity, there's an argument to show that I—like all other human persons—contain a 'mighty host' of conscious beings within my borders. Yet clearly this is absurd. For '[t]here is not a mighty host of conscious, reflective, pain- and pleasure-feeling objects now sitting in my chair, now wearing my shirt, now thinking about this paper' (Merricks 1998: 63).

The problem turns on two plausible ideas. The first of these is that at least some of our conscious properties are intrinsic. (In general, a property is intrinsic just in case the things that have it do so solely in virtue of how they are in and of themselves, and not in virtue of how they are related to other disjoint things.) Many arguments for this premise may be given—here I'll just note two considerations.

First, it seems intuitive to think that there could be a 'lonely' object that is conscious (cf. Merricks 1998). That is, it seems that something could be conscious despite being the only object that exists. This suggests that at least some conscious properties are intrinsic properties. For if a lonely being can be conscious, there are at least some conscious properties a lonely being can have. These properties would then appear to be intrinsic. (In general, if a property passes the 'isolation test'—i.e., if it is instantiable by a lonely object—this is a strong indicator that it is intrinsic.)

Second, there is the intuition that an intrinsic duplicate of one of us would have to be conscious. Consider, for example, 'swampman', an intrinsic duplicate of one of us 'forged by fortuitous happenings in a swamp' (cf. Hawthorne 2006: n. 11). Many of us share the intuition that swampman would have to be conscious, due to being an intrinsic duplicate of a conscious being (one of us). This again suggests that there are at least some intrinsic conscious properties. For it seems to suggest that at least some such properties are necessarily shared by intrinsic duplicates.

The second core premise concerns the *grounds* of our intrinsic conscious properties. The core claim is that if a material thing has some conscious property F, then there is some *intrinsic microphysical property* M, such that the object has F in virtue having M. This second premise flows from three ideas. The first is the idea that consciousness is a non-basic property of persons and is, therefore, grounded in some more basic property (or congeries thereof). The second is the idea that the non-basic properties of material objects are grounded in their microphysical properties (i.e. Microphysicalism). The third is the idea that in general, intrinsic properties have intrinsic grounds. Given the first two claims, it follows that when a person has a given conscious property, she has this property in virtue of having some more basic microphysical property The third idea then ensures that the microphysical properties that ground intrinsic conscious properties are themselves intrinsic.

Now consider some arbitrary human person, P. And let 'P-minus' denote the large proper part of P that consists of all of P minus his left foot. (Of course, P and P-minus are distinct, for no object is identical to one of its proper parts. And things

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[31] There are several discussions of this problem in the literature. See Burke (2003, 2004); Dorr (2003); Hawley (1998); Kovacs (2010); Merricks (1998, 2001: ch. 4); Noonan (1998); Olson (1995); Robinson (2006); Sider (2003). For discussions of the thinking parts problem within the context of the personal identity debate see Blatti (2016); Madden (2016); Olson (2007: ch. 9).

that are distinct are necessarily so.) Lastly, consider some other human person, Q, which has all of the same intrinsic microphysical properties as P.[32]

We now suppose that Q loses his left foot and survives.[33] This means that Q is no longer an intrinsic microphysical duplicate of P, and is instead an intrinsic microphysical duplicate of P-minus. This, in turn, entails that Q and P-minus now share all their intrinsic microphysical properties.

From the first premise set out above—that at least some of our conscious properties are intrinsic—we can suppose that Q instantiates (after the loss of his left foot) some intrinsic conscious property C. Then, given the second core premise, which tells us that intrinsic conscious properties always have intrinsic microphysical grounds (there are more basic microphysical properties that are themselves intrinsic), we can then infer that Q has C in virtue of having some intrinsic microphysical property M:

(1) Q has intrinsic conscious property C in virtue of having intrinsic microphysical property M.

This then implies:

(2) Q has intrinsic microphysical property M.

But Q and P-minus share intrinsic microphysical properties. Therefore, from (2), we can infer:

(3) P-minus has intrinsic microphysical property M.

However, by **Weak Formality**, we can infer from (1) that:

(4) If any object whatsoever has intrinsic microphysical property M, then it has conscious property C in virtue of having M.

From (3) and (4) we can then infer:

(5) P-minus has conscious property C in virtue of having intrinsic microphysical property M.

And this entails:

(6) P-minus has conscious property C.

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[32] For present purposes, we can think of the intrinsic microphysical properties of an object as being a function of its individual intrinsic properties of, and the spatiotemporal and causal relations obtaining between, its microphysical parts (cf. Merricks 1998). Given this conception of an intrinsic microphysical property, there is no barrier to supposing that two persons (or a person and a large proper part thereof) might be intrinsic microphysical duplicates.

[33] There is a delicate question as to what happens here (in cases where an object O loses a part P but survives, thus seemingly becoming coincident with what once was a large proper part of it O-P, i.e. the part that comprised all of O besides P). For my views of this matter see Moran (2018).

Which then implies:

(7) P-minus is conscious.[34]

At this point, we have proven that the human person, P, contains a conscious proper part, namely, P-minus. But the reasoning here could easily be extended to prove, not only that P-minus contains a whole multitude of such conscious parts, but also that the same is true for every one of us. It is in this way that we end up with the absurd result that each one of us contains multitudinous conscious beings.[35]

There are various ways in which one might respond to this problem. One could contest the implicit idea that human persons are complex material beings—and hence the kind of thing that can have intrinsic microphysical properties.[36] Or one could deny that there are any intrinsic conscious properties, holding instead that all such properties are extrinsic (Burke 2003; Hawley 1998; Sider 2003). One might argue whilst there are some intrinsic conscious properties, such properties are *not* grounded in more basic microphysical properties (Merricks 1998, 2001). Or, one could dispute the idea that there are such entities as P-minus in the first place; that is, one could contest the claim that we human persons have large undetached proper parts (Olson 1995, 2007).

It seems to me, however, that each of these options is rather radical. It is certainly radical to hold, in line with either the first or the last option, that we aren't complex material things, or that we do not have large undetached proper parts. The more plausible view is surely that we are complex material things, with various large proper parts, including heads and an upper-halves, etc. It also looks quite radical to hold either that there are *no* intrinsic conscious properties, or that such properties are not microphysically grounded. We are therefore left with but one option: reject **Weak Formality** and thereby block the inference from (1) and (3) to (4).

This is the answer to the thinking parts problem I recommend. On this view, there is a difference in *fundamental kind* between we persons and our large proper parts, such that whilst we human persons are the kind of object that can be conscious and have mental properties, the same is not true of our large proper parts.[37] Given this view, it follows that all conscious properties are 'kind-dependent properties', which can be had only by things of certain kinds. We can then claim that when the person, Q, has conscious property C, she has this property in virtue of having intrinsic microphysical property M *only given that* she is the sort of object

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[34] I assume here that having at least one conscious property is sufficient for being conscious. Given that conscious properties are determinates of the determinable *consciousness*, this claim follows from the more general idea that having a determinate of some determinable is sufficient for having the determinable itself.

[35] This conclusion is absurd in and of itself. But it also gives rise to various troubling ethical problems. See Johnston (2016) and Unger (2004, 2006).

[36] Cf. Unger (2004, 2006) and Zimmerman (2003), who, in connection with two other problems which seem to over-generate conscious beings, advocate adopting an immaterialist view on which we human persons are immaterial entities.

[37] This view presupposes no particular view about what kind of thing we human persons most fundamentally are. It states only that *whatever kind of thing we are*, things of that kind are able to be conscious (at least in propitious circumstances), whilst the same is not true of our large proper parts.

able that is able to be conscious in the first place. If this is right, then it follows that (1) is more perspicuously written as:

> (1*) Q has intrinsic conscious property C in virtue of having intrinsic microphysical property M, whereby this grounding relation holds only given that Q is the kind of thing that it is.

Claim (4) would then have to be rejected in favour of:

> (4*) If any object whatsoever has intrinsic microphysical property M, then *if* that object is the kind of thing that can be conscious, it has conscious property C in virtue of having microphysical property M.

Just as before, however, accepting (4*) in place of (4) implies that we should abandon **Weak Formality**, and replace it with **Kind-Dependent Formality**.

The crucial point here is that if (4*) is true instead of (4), then we can no longer obtain (5), (6) and (7), and hence, we can avoid the conclusion that each of us contains a mighty host of conscious proper parts. Moreover, we do not have to make any of the radical moves noted above that other authors have made.[38]

On the proposed view, our intrinsic conscious properties are fully grounded by intrinsic microphysical properties. Moreover, there are large proper parts of human persons that share these intrinsic microphysical properties. However, these large proper parts do not instantiate intrinsic conscious properties, despite instantiating their (conditional) microphysical grounds. This is because such properties can only be instantiated by things of a certain kind. Since the large proper parts of human persons are not the kind of thing that can be conscious, it follows that the large proper parts of human persons do not have any conscious properties, despite some of them having all the necessary microphysical properties.[39]

Rejecting **Weak Formality**, therefore, and replacing it with **Kind-Dependent Formality** provides us with an attractive way to handle the thinking parts problem.

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[38] One might wonder if we have only gained a Pyrrhic victory here. For we have avoided having to saying that consciousness is brute, yet at the cost of having to introduce brute fundamental kinds. Two points are to be made here. We can distinguish between *how* something is and *what* something is (cf. §3). To say that something is conscious seems clearly to say merely *how* it is (cf. van Inwagen: 1990: 120—121). So it does not seem plausible to take consciousness as basic. Whereas to specify the fundamental kind of an object is to disclose its nature: to specify *what it is*. Thus it does seem, by contrast, much more plausible to treat fundamental kinds as basic (i.e. ungrounded).

The second thing to say is that one *could* develop the present strategy by treating the kind that we persons fall under as grounded but extrinsic. However, this requires accepting that there can be extrinsic conditions on the possession of an intrinsic property—for again, we wish to retain the view that at least some conscious properties are intrinsic. I explain how this goes in Moran (under review).

[39] One might wonder whether this view is really consistent with taking some of our conscious properties to be intrinsic. After all, this view seems to imply that Lewisian duplicates (things that have precisely the same perfectly natural properties and relations) can differ in terms of these properties (we can imagine a person and a proper part of some person that are Lewisian duplicates), yet one could reasonably take this to show that none of these properties is intrinsic. I have tackled this objection elsewhere, and so I won't address it here. Suffice it to say that so far as I can see, the present proposal does not in any way impugn the claim that at least some of our conscious properties are intrinsic. (Note for instance that on the present view, the allegedly intrinsic conscious properties only ever have intrinsic grounds. This is arguably sufficient to show that such properties are intrinsic.

For if the former principle is replaced by the latter, then, given the intuitive claim that whilst persons are the kind of thing that can be conscious, the same is not true of their (large) proper parts, it follows that *even though persons and the large proper parts thereof can have the same intrinsic microphysical properties*, it is only ever the persons, never their parts, that are conscious in virtue of having such properties. Therefore, since the thinking parts problem arises even for those who don't believe in coincident things, there may be reason for *everyone*—not just those who accept coincident objects—to hold that **Weak Formality** fails, and that the closest thing that holds instead is **Kind-Dependent Formality**.

It might be noted, moreover, that this reply to the thinking parts problem can be extended to handle a whole range of related problems, which arise whenever two or more material objects (that differ in kind) fail to share some non-basic intrinsic property whilst being intrinsic microphysical duplicates. For whenever such cases arise, that is, when two intrinsic microphysical duplicates x and y are such that x has intrinsic property F and y lacks it, we can say that whilst the objects share their microphysical properties, these properties can do their grounding work only in the case of x and not in the case of y, for it is only x that is the kind of thing that can instantiate the relevant non-basic intrinsic property in question.[40]

The solution to the thinking parts problem developed here, therefore, suggests a more general style of a reply to a broader range of problems. These share a common structure: they arise whenever two material objects that differ in kind are intrinsic microphysical duplicates and yet differ regarding some non-basic intrinsic property.

6 Conclusion

The thesis of **Weak Formality** tells us that if one thing, *a*, is F in virtue of being G, then any possible object that is G is F in virtue of being G. What I have argued here is that despite its intuitive appeal, one can plausibly reject this principle by appealing to cases of kind-dependent grounding. Specifically, I have argued that there is theoretical utility in treating certain cases as being cases of kind-dependent grounding, whereby these cases show that **Weak Formality** fails.

I have focused on two metaphysical problems. The first arises if we grant that coincident objects (of different kinds) can differ in terms of their non-basic properties. The problem is that since the properties are non-basic, it is hard to see how the coincident entities could fail to share them, without ending up facing contradiction. The second arises even without the assumption that entities can coincide. Here, the trouble is that it can apparently be shown that each of us contains manifold conscious proper parts. Yet evidently, this is not the case.

What I have tried to show is that both problems can be given elegant solutions if we appeal to the notion of kind-dependent grounding, and thus reject **Weak Formality**. I submit that this gives us good reason to reject this principle, and to believe that there are genuine cases of kind-dependent grounding.

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[40] Think, for example, of a case involving a statue and some intrinsic microphysical duplicate of it that is itself a mere proper part of some larger block of marble. Intuitively, only the statue is intrinsically beautiful, not the embedded hunk of marble, despite the fact that both items have the same intrinsic microphysical properties. I suggest that we can account for this while preserving Microphysicalism by saying that only the statue is the kind of thing that can be intrinsically beautiful.

In short, we began by asking whether it is so that if one thing, *a*, is F in virtue of being G, does it follow that *everything* that is G must be F for that reason? The answer is that there appears to be good reason not to accept this. For it appears that maintaining otherwise, by holding that there can be cases of kind-dependent grounding, has theoretical utility, insofar as it enables us to solve a range of metaphysical problems. (It may even be serviceable for solving problems I have yet to consider. I would encourage the reader to explore whether this is the case.[41])

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