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Coincidence: The Grounding Problem, Object-Specifying Principles, and Some Consequences Alan Sidelle

Abstract: This paper lays out the basic structure of any view involving coincident entities, in the light of the grounding problem. While the account is not novel, I highlight fundamental features, to which attention is not usually properly drawn. With this in place, I argue for a number of further claims: (1) The basic differences between coincident objects are *modal* differences, and any other differences between them need to be explained in terms of these differences. More specifically, the basic difference is *not* a difference in *sort*. (2) A number of recent defenses of coincidence, which share the basic structure I outline, misidentify what, in their accounts, plays the basic role of addressing (if not solving) the grounding problem. More tentatively, I argue (3) Coincident entities differ *only* in these modal properties, and properties they entail. In particular, they do not differ in properties like 'being a tree,' 'being a statue,' or aesthetic properties, and finally (4) in light of how the account of coincidence offered addresses the grounding problem, the grounding problem provides no reason to prefer monism to pluralism.

Since David Wiggins' seminal 'On Being in the Same Place at the Same Time,' (Wiggins 1968) there has been extensive debate on the possibility and actuality of what has come to be called 'coincident' entities. While many have objected to coincidence simply on grounds of intuitive implausibility (van Inwagen 1981, e.g., claims 'not to understand' it), the theoretical dispute has centered on the grounding problem, which asks what can ground the supposed differences in virtue of which the pairs of entities are taken to be numerically distinct. Opponents of coincidence—sometimes called 'monists'—find the grounding problem devastating; friends of coincidence ('pluralists') sometimes claim to have solutions, and other times seem to not worry about the problem very much. In this paper, I will not argue for either side, but I want to explore what the best understanding of pluralism is. I will first lay out what I think has to be





the basic structure of any story involving coincident entities, in the light of the grounding problem. This will not be a novel account; indeed, I think most friends of coincidence tell this story in one form or another. But I will highlight what I think are its fundamental features, to which attention is not usually properly drawn. With this in place, I will argue for a number of further claims: (1) The basic differences between coincident objects are modal differences, and any other differences between them need to be explained in terms of these differences. More specifically, the basic difference is not a difference in sort. (2) A number of recent defenses of coincidence, which share the basic structure I outline, misidentify what, in their accounts, plays the basic role of addressing (if not solving) the grounding problem. More tentatively, I will argue (3) Coincident entities differ only in these modal properties, and properties they entail. In particular, there is no good reason to think that these entities differ in properties like 'being a tree' or 'being a statue,' (except insofar as we (semantically) build modal requirements into the meaning of these predicates); and finally (4) In light of how the account of coincidence offered addresses the grounding problem, the grounding problem provides no reason to prefer monism to pluralism. That is, on the account I offer, the basic elements of the pluralist story are elements that are present in the monist's story as well—namely, what I will call 'object-specifying principles'. The difference between the two sides simply concerns the relations among different object-specifying principles, and the considerations involved in the grounding problem provide no reason to think the monist's commitment on this issue is any more plausible, in advance, than the pluralist's.

The Grounding Problem and the Basic 'Solution'

Those who believe in coincidence—'pluralists'—do so because they believe for some pairs A,B,¹ where A and B are each wholly composed of

¹ I use capitals since it is hard not to confuse small 'a' with the indefinite article. Also, if there can be coincidence, it is plausible that the number of coincident objects in a given case may be greater than two. To avoid tedious grammatical qualifications, I will focus on

matter m and located at some location l at some time t, that A and B differ in some property and hence must be numerically distinct. The differences which first caught people's attention were temporal differences (wood W continued to exist after the careful chopping up of tree T; wood W, but not tree T, became scattered after the tree was pruned) and modal differences (the temporal differences were possible even if the chopping or pruning never took place; the tree, but not the wood, is essentially a tree). It soon became customary to refer to pairs by their sorts—'the tree and the wood,' 'the statue and the piece of clay' (or 'alloy')—which also suggested a difference here as well, in sort. While many found the idea of coincidence preposterous on its face, others pressed a certain argument against it, which has since come to be known as the grounding problem or the indiscernability problem (Burke 1992; Olson 2001). The challenge is to explain how coincidence is possible that is, how the objects can differ in the features which are supposed to establish them as distinct, given their shared composition. Since the most salient differences are differences in sort and modal profile (what the object is essentially, its persistence and transworld identity conditions), the problem has been typically been put in those terms: how can (say) the statue and the piece differ in these respects?² Also, since there must at least be modal differences, and modal properties seem to call for an explanation in non-modal terms, this has been a particular focus.

The problem is that any explanation of why one of the objects is of the sort it is, or has the modal features it has, either (a) entails that the other coincident object *also* is of that sort or has that property (once one pays attention to the contextually easy-to-overlook fact that it shares the features in the explanatory base—as, for instance, one might try to explain a tree's sort in terms of the structure of its material constituents

the two object case.

² Since it became clear that it was possible for (purported) pairs of coincidents to coincide for their whole careers (Gibbard 1975), the temporal differences quickly came to be viewed as secondary. (Gibbard himself, however, did not interpret his example in this way.)

and subsequent causal powers) or (b) appeals to a property which, if the coincident does *not* share it, calls for as much explanation of this difference as did the initial difference (if, say, one tries to explain the tree's persistence conditions in terms of its being a *tree*, while denying the wood is a tree). In some cases, it is intuitively plausible that the objects differ in the cited respect (for instance, in persistence conditions), but the attempt to understand *how* only one of the objects can have the relevant property founders on the above dilemma; in other cases, the bare implausibility of the idea that the objects could differ in that respect prevents it from even being offered (anything that is obviously directly determined by the nature and arrangement of the constituents).

Put generally, the problem is that any difference with respect to property F is going to either have to be a brute difference, or else be committed to some *prior* difference—since explaining why A is F in terms of its being G will only allow B to fail to be F if *it* is *not* G. So *some* difference is going to have to be a brute difference. But properties in an object's modal profile, or its belonging to a given sort, do not seem like good candidates for being brute, while on the other hand, the properties in terms of which one might try to explain these do not seem to be features the coincidents can differ with respect to, given their material and contextual commonality. Thus, it is concluded, there is no way for coincidents to differ and so, no way for them to truly be coincidents: there can be only one object (at a time) to a parcel of matter.³

Pluralists tend not to address this problem directly, but instead, to tell a story about how there can come to be multiple objects composed of the same matter. While the details vary (Bennett 2004, Rea 1997, Baker 2000, Sutton 2012, Einheuser 2011, Moyer unpublished, Fine 2008 for a sample), the basic story is common and familiar. There are conditions C, such that when some matter, m, comes to meet conditions C—which may include structural relations within the matter, and/or relations to its environment, including *why* it is that the matter has come to have this

³ The 'brute' option is usually ignored rather than considered and dismissed.

structure (parentage; artistic intentions)—then an object of a certain sort comes into existence composed of m.4 At the same time, there may be conditions C* such that when some matter satisfies C*, then an object of another sort comes into existence, composed of m. Basically, the same matter may, at the same time, satisfy two sets of what I will call 'object specifying conditions'. (It may be useful to distinguish between object specifying principles, and object-specifying conditions. The principles are—at a first pass—of the form 'When matter m meets conditions C, then m composes an object that is/has F'. The conditions are the values of C. A condition is an object-specifying condition only if there is a true object-specifying principle with C as a condition. As such, it will often be only terminologically different to ask, say, 'Which are the object specifying conditions?' and 'Which are the (true) object specifying principles?' and I will sometimes speak interchangeably about what is required by a principle, and what is required by the conditions.) It is fitting that the focus should be on how or why the objects come into existence, because it must be from the very start that they differ in some respect. If there were no differences, we would not have two objects.⁵

But familiar and fitting as this story is, it might still leave us unclear about the grounding problem. After all, the matter is still the same—what properties do the objects differ in respect of, and why? Further, there is a question here which is not, to my knowledge, properly asked: why must there be *two* objects? If conditions C and C* are both met, each of which requires that an object comes to be composed of m, why can't

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⁴ It will sometimes be more natural to put these conditions in terms of some *object* or objects (rather than some matter) meeting conditions C; but since the matter which comes to compose object O will not *always* have previously composed an object (at least, if Universalism is not true), and at bottom, it is the common *matter* that creates the problems, I have chosen this more general formulation. I also leave open the possibility that at some level of analysis, 'matter m' may (sometimes) be a plural reference to, say, some fundamental particles. Finally, the account can be naturally extended for those who believe there can be immaterial objects, if there is any sense to be made of their having a 'composition'.

⁵ Of course, it need not be the very start of *both* objects—a lump can precede its statue. But it must be from the very start of the *coincidence*.

we just have a *single* object come into existence? After all, the conditions for being a student and for being a citizen can both 'come to be realized', without there having to be a numerically distinct student and citizen.

Starting to Draw Out Some Consequences

Let us take the second question first. If there are two objects rather than one, something in the object-specifying principles must require it. And there is only one way, I think, that can be so: the principles must entail incompatible properties. There must be two objects composed of m because the C-principle (plus m's being in C) entails that there comes to be an object composed of m that is F, while the C*-principle entails that there comes to be an object composed of m that is G, where F and G are incompatible, and so, cannot be borne by the same object. And if it is such a pair of incompatible properties which mandates that there are two objects, then the basic explanation of how the objects differ is in terms of these properties.

But does this solve or address the grounding problem? Suppose, in our case, that A is F, while B is G. Why is A, but not B, F? It cannot be because of any *prior* difference we might think is relevant to being F. Nor can it be because the matter of A met conditions C, which entails that it composes an object, A, which is F—for the matter of B *also* met conditions C, yet B is *not* F. It can only be that A comes to be *in virtue of* C, which makes it F, while B does not so come to be. But if we ask why *A rather than* B came to be in virtue of C—or equivalently, why A did *not* come to be in virtue of C*—there can be no answer beyond 'A just *is* the object that exists because m was in C, while B just is the object that exists because m was in C*'. In short, the closest we come to addressing the grounding problem is by asserting a brute difference between the coincident objects, a brute difference in the conditions in virtue of which

⁶ For brevity, I shall henceforward call a pair of object-specifying conditions 'incompatible' if their principles are related in this way, even though it is part of our account that both members of such a pair may be met by a single bit of matter, and so, are not incompatible in that sense.

each came to be.⁷ They were both *in* the conditions—or rather, their matter was—but in each case, only one came into existence due to that.

Now, this latter account/concession (view it how you will) has been offered before (Sutton, Bennett, Fine, Moyer, Rea), and it might make it seem that the basic difference, then, between coincidents is the conditions in virtue of which they come to be. But we must revert to the preceding part of our discussion here. Why is it that 'coming to be in virtue of C' and 'coming to be in virtue of C*' are incompatible? Without this, we do not see why we cannot just have a single object. So, it seems to me, the *basic* difference between coincidents will be that in virtue of which the *conditions* are incompatible—that is, in the values of 'F' in the object specifying principles.

I have deliberately been keeping the discussion at a high level of abstraction because I wanted to avoid 'leading the witness' unduly. But at this point, it will help to be a little more specific. Suppose we have a lump of clay. It came into existence because some clay came to form a cohesive unit (this would be condition C, for lumps). The clay was then shaped, by an artist, with certain intentions, and when these intentions were adequately realized, another set of conditions—those for the coming to be of a statue—were met. And the same could be true if, like Gibbard's statue, the torso and legs were each constructed separately, and then put together, so that the clay met both sets of conditions at the very same time. Now: why can we not have simply made a single object here, which is both a statue and a lump? I have urged that it must be because there is some incompatibility in the features of the object(s) generated by (m in) C and those generated by (m in) C*. While it is not stated explicitly (because this question is not asked explicitly), a tempting, and common implicit answer is: what exists because of C are lumps, and what exists because of C* are statues. Generally, our object-specifying principles give conditions for the existence of different sorts of objects; indeed, those who tell this sort of

⁷ This is *not* to say that it has to be a brute fact that in these conditions, *some* object must come into existence which is F: that depends on whether there is an explanation of the object-specifying principle, or of why it is such a principle.

story tend to say exactly that. But in light of my earlier point, this is problematic, because there is no obvious incompatibility between being a statue and being a lump. There is certainly no surface contradiction, and for any pair of sorts that *do* seem incompatible (perhaps, like 'human' and 'pencil'), it will not be possible for the same matter to even seem to meet both sets of conditions. Indeed, that is the only sort of clear incompatibility there seems to be between different sortals—the material and structural requirements for one rule out satisfying those for the other. But that is exactly what we *don't* have in cases of coincidence, and that is precisely what allows many monists to believe, say, that there are statues, and there are lumps, and sometimes, a given lump *is* (numerically identical to) a given statue.

But perhaps there is a hidden incompatibility. Statues, being what they are, cannot survive being flattened. Lumps, however, can. This is indeed a pair of logically incompatible properties. But notice now that these are incompatible *all on their own*, whereas it is *not* entirely clear—not even for pluralists (as I will discuss below)⁸—that no statues can survive being flattened. Thus, *even if* being a statue is incompatible with being a lump, it is because of the *modal differences* that they (purportedly) entail. And so, our better candidate for the incompatibility that requires there to be *two* objects when conditions C and C* are met, is that the objects induced have certain *modal* properties, and (at least one of) those induced by C are incompatible with (at least one of) those induced by C*. Which means that the best candidate for the basic, brute difference between A and B is that A has modal feature G, while B has incompatible modal feature G*. This does not require it to be an *entirely* brute fact

⁸ To anticipate: a pluralist can believe that Lumpl and Goliath are both statues—but the former is so accidentally (for only so long as it has the relevant shape, and never, in some worlds), and the latter essentially—and so, while Goliath is a statue that cannot survive being flattened, Lumpl is a statue that *can* survive it.

⁹ By 'modal' here, I mean it more traditionally, so as to include essential properties, even if this is not to be analyzed in terms of necessity. It is clear that proponents of the grounding problem think that differences in essence are just as problematic as differences in being necessarily/contingently F (and rightly so).

that A is G—for example, the fact that Goliath cannot survive being flattened will be *largely* explained by the statue-making features Goliath has, and the fact that when those features obtain, there is something that cannot survive being flattened. It is just that, since Lumpl (or Lumpl's matter, at the time of their co-creation) *also* has those statue-making features, this is not a fully sufficient condition, and does not explain why Goliath *differs* from Lumpl in this respect. ¹⁰ *That* is the brute fact, and the brute difference. We might, then, think of the basic form of object specifying principles as not 'When some matter m meets conditions C, m comes to compose an object of sort S' but '... m comes to compose an object with such-and-such persistence/identity conditions' or less commitally, 'with modal features H.'

To avoid confusion and clarify my claim, there seem to be two senses of 'is of sort S', and its specific instances 'is a tree/statue/human' etc. When we say, for instance, that Goliath is a statue, we may mean (roughly) that Goliath is an object whose matter was intentionally shaped for some artistic purpose (no doubt further conditions would be called for)—call this 'simple' being a statue, or 'being a statue simplicitor'. Or (one gets this second reading by stressing 'is') we may mean that Goliath has being a statue 'as its sort' or essentially or 'sortally'. This requires not merely simply being a statue, but also something further and stronger: having S as the locus of its modal profile, governing its criteria of persistence and identity-something of the 'problematic' sort we considered above. Many philosophers (seem to) believe that there are S's such that anything that is an S simplicitor is also sortally an S. But this has to be a substantive claim; the latter concept is built from the former plus something extra. That there is such a 'modally innocent', simplicitor sense of 'is an S' seems plausible from the fact that for any such S, it may be obvious that there are S's, but controversial whether anything is sortally or essentially an S; many monists, for instance, allow that there are

¹⁰ This sort of explanation is suggested by Zimmermann (1995) and advocated by Rea (1997) along the lines of 'coincidents-friendly supervenience'.

people, but not that anything is 'sortally' or essentially so.¹¹ Further, it seems coherent (and I will argue later, plausible) for pluralists to claim that where there are coincident objects, one of which is sortally an S, the other is also S, just not sortally so.¹² In claiming above, then, that modal differences are prior to differences in sort, what I meant was that (a) differences in being S *simplicitor* are *not* the basic differences, since they are not (in the relevant cases) pairwise incompatible and (b) incompatibilities in being *sortally* an S are due to the modal differences built into the concept of being sortally an S. (This distinction induces a general ambiguity when it is claimed that some object is 'of a certain sort,' or when it is proposed that something can be explained in terms of an object's sort; this can make interpretation challenging. What I will mean, by 'S' and by 'sort' is the *simplicitor* notion—(a) because I think this is ordinary English and (b) because 'sortally' can always be added as needed.)

The idea that the basic difference between coincidents is modal is hardly novel—as I noted, it is the most familiar and typically most convincing sort of difference urged in favor of pluralism (along with temporal differences, but it is clear that these depend on differences in persistence conditions). However, I would like to make a number of points here that I think are distinctive. First, the 'epistemic' priority of the modal obviously does not establish a metaphysical or conceptual priority, which is what I am arguing for here. Second, in urging the priority of modal differences, I am doing so *in contrast to* differences in sort. These are often not distinguished, and so, perhaps, often when

¹¹ All of this, it seems to me, also supports the view that ordinary language instances of 'is an S' typically use the *simplicitor* sense, and that a typical proposal that an object has persistence conditions P 'because it is an S' purports to offer this explanation in terms of being S *simplicitor*. It is also worth noting that if this is *not* so, then the proposed explanation loses its veneer of explaining the more problematic in terms of the less so.

¹² And *not* merely in the 'derivative' sense proposed by Baker (1997, 2000), but in the straightforward *simplicitor* sense. Indeed, some monists agree that where S is a sortal, some things can be S *simplicitor* (in a non-derivative sense) but not sortally: Burke (1994) holds that lumps that are statues are sortally statues, and non-sortally lumps, though lumps that are 'just' lumps are sortally lumps.

people focus on modal differences, they do not mean to assert any sort of priority of modality over sort. 13 But I am here explicitly distinguishing them, and asserting that to the extent that there are differences in sort (whether simplicitor-which I will challenge later on-or 'sortally'), it is because of modal differences. The fundamental story about coincidence is modal, not sortal. Third, I have offered an argument for this conclusion; an argument which is not about the priority of sorts vs. identity conditions or essential properties in general, but based on the structural conditions which give rise to coincidence. It is based on a need for incompatibility in properties in the objects generated. Fourth, a consequence of this is that if one believes in coincidence, one cannot explain why, say, the statue is essentially a statue, or has statue-y persistence conditions, in terms of its being a statue. This is, I suppose, an obvious consequence, but it is a sort of explanation offered so frequently that it cannot hurt to point out that, if what I have argued is correct, these sorts of explanations are erroneous. Also, it is possible that thinking about the question of overall fundamentality for understanding coincidence, one might overlook the consequence that even in ordinary explanatory contexts ('Why can't Joe survive brain death?'), we cannot (if we accept coincidence) explain the modal in terms of sortals (viz. 'because he is a person'). Lastly (for now), we can actually be a bit more specific than simply saying the basic differences are modal differences. Our requirement on coincidence is that there needs to be a pair of incompatible properties that are instantiated by objects composed by some matter. We saw that, straight up at least, 'statue' vs. 'lump' will not do. But not everything in the modal realm will either. In particular, consider 'being essentially a statue' and 'being essentially a lump'. These are so far from being logically incompatible that one might think that most statues (those that are not spatially dispersed in conception) have them both. If we want incompatibility, here are two

13 Moyer (unpublished) is an exception, who explicitly explains sort, and sortal difference, in modal terms. My argument for this priority, however, is quite distinct from anything he provides in his very interesting and insightful paper.

representative candidate pairs: 'being essentially a statue' and 'being accidentally a statue', and 'being capable of surviving flattening' and 'being incapable of surviving flattening'. The latter pair, on any plausible account, will be a special case or consequence of some more general pair of persistence conditions. In the former case, while the pair is incompatible, it seems that something's being (only) accidentally F must come from either (a) some conditions—persistence, say—which would allow the object to persist through a change which renders it not-F, or (b) some complete set of essential features that does not include or entail F. But I do not want to insist on that, as we are not here investigating priority among modal features as such. I just mean to draw attention to the fact that not just any pair of modal features which superficially look incompatible indeed are so, and that such differences, like that between being essentially a person and essentially an organism, are not good candidates for being the basic differences between coincidents, even if we think the basic differences must be modal.

Still ... Can't There be a Brute Incompatibilty Between Sorts?

Still, might it not be urged that there *is* an inconsistency between the various sortals—being a lump and being a statue, say—and that it is not grounded in the inconsistency between the modal properties, but instead, that it explains that difference? In light of our above discussion, if we are to avoid the modal explanation of inconsistency in sort, the inconsistency between these sorts will have to be a brute, metaphysical fact. But, it might be suggested, since I have argued that pluralists are committed to a brute fact in their account anyway, this is not unacceptable, and might in fact be repaid by our ability to then use the differences in sort to explain the differences in modal properties, and to give general explanations of modal properties in terms of sorts. That is, we start with a non-modal, *'simplicitor'* understanding of the sorts, posit a brute incompatibility between the sorts, and then offer explanations of modal properties of the form 'Whatever is S has an S-ish modal

profile'.¹⁴ This will not be part of what it *is* to be S (otherwise, we would be back to the priority of the modal), but a metaphysical consequence of it. Coincident objects will differ in modal profile, then, because they differ in sort.¹⁵ Aside from the explicit avowal of the brute incompatibility between sorts, this is, I take it, an extremely common picture pluralists have of the basic structure of coincidence.

But the impression that this account may be on all fours with the modality-first account is an illusion. The brute fact, such as it is, in the modality-first account is that A, but only A, has a given modal property or profile. It is not a brute fact that the modal properties are incompatible—that is a logical matter. The sort-first approach, just sketched, also has the first sort of brute fact: we are still without an explanation for why A, but only A, is of a given sort. We still have to say 'A (but not B) just is the object that comes to exist because m (given that it is in C) must compose an object of sort S'. But we have a new brute fact in addition—the brute incompatibility of the sorts, the basic fact which requires that we have two objects, rather than one. And this is a brute fact of an entirely different kind. Supposing there can be incompatible object specifying conditions met in the same matter, there has to be a brute fact that A, rather than B, is the object that exists in virtue of C. But there is no such need to suppose that being a statue and being a lump are incompatible, if 'statue' and 'lump' are understood nonmodally (simplicitor). And not only is there no such need, it seems simply false: to anyone who is not a philosopher familiar with puzzles of coincidence, there are many things that are both lumps and statues, or people and animals. So, to compare the accounts, (a) the sort-first approach posits an extra brute fact, of an entirely different sort from the

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¹⁴ By 'an S-ish modal profile,' I mean: being essentially S, having S as the locus of persistence/identity conditions (as in Wiggins' 'following an S-path/f-continuity'; see 1980, ch. 2) etc. This emphatically does *not* mean 'the modal profile of things that are S's (simplicitor)'—whether all S's have Sish modal profiles is precisely one of the substantive questions at issue here.

¹⁵ This, as I understand it, is in effect Fine's 2008 account, replacing 'sort' with 'form', though he is not explicit about the brute incompatibility of forms.

sort of brute fact pluralists already (by my argument) need to accept, (b) the particular 'fact'—that the sorts, *simplicitor*, are incompatible—seems not to be a fact at all, whereas (c) the incompatibility which explains the need for multiple objects and a brute difference on the modality-first view, is a logical one which everyone must accept (even if they deny that there are in fact any objects that *have* the modal properties in question).

Before entirely leaving this, there is one more subtle move that a friend of the sort-first approach might offer. She may urge that we need to distinguish a further sense of 'being an S'—being of a certain sort, like a tree. There is being a tree *simplicitor*—which perhaps the wood also has—and there is the modally-packed notion, which I have been calling 'being sortally S'. But—perhaps one may urge—there is another notion which can be called (perhaps more properly?) 'being sortally S'. For something to be, in this sense, 'sortally S' is for S to be the answer to 'What is it?' asked in the Aristotelian/philosophical way. We may allow that something is a tree, but still not be clear whether 'tree' answers 'what is it?' of this object. Only if that is so is 'tree' the sortal that the object falls under. And while it would have to be a brute fact if one were to urge that 'simple' being a tree and lump were incompatible, it is not so when it is said that something is *sortally* a tree or a lump. 'It is a tree' and 'It is a lump' cannot both correctly answer 'What is it?' of the same object.

Does this work? I do not think it does. I have already distinguished between two notions of (say) 'being a tree'—simplicitor and sortally. The latter requires that for an item to be a tree, it must have certain persistence conditions and/or essential properties, whereas the former, as I have been understanding it, is more purely biological. But is there some *third* sense? Is the proposed notion something other than what I have been calling the 'sortal' sense? For if their sortal notion *is* the modally packed notion, then this is simply a misleading way of accepting the modality-first account while pretending to give the sort-first account. On the other hand, even if there *is* a third sense (perhaps 'x is an S just in case S answers "What is it?" of x'—but where that is not because the

question asks 'What is S essentially?'), the inconsistency between being S and S* will still be brute, unless there is a modal requirement in the concept. So this approach is either the modality-first approach in disguise, or is still left with the fundamental disadvantage the sort-first approach had to begin with. Finally, even if we *did* grant that there was an inconsistency at the (new) level of sort, which was *not* due to a prior modal inconsistency, we would then have yet a *further* brute fact in our account: that things that are sortally S are essentially S/have an S-ish modal profile. While it is true that on this account, we can use the differences in sort to (fully) explain the modal differences, this is only with the help of this further premise, appealing to this extra brute fact. In sum, this 'more subtle' strategy is either really the modal-first view, the *old* sort (*simplicitor*)—first view, with its attendant problems, or a new view which, to the extent that it can be distinguished from the modal-first view, has the old problems and perhaps some new ones.

More Consequences: Misidentifying How One's Solution Addresses the Grounding Problem

As I noted earlier, the general form of the account of coincidence I have offered has been given by various other authors. However, it has often taken a more specific guise, and when it has done, these authors have taken their specific details to be that in virtue of which they solve, or address, the grounding problem. In this, I think they are mistaken (which is not to say that they may not be correct in the details of their account itself). In this section, I consider a number of such accounts, both for this critique, but also as it may help to illustrate and enhance understanding of the essence of our 'incompatible object-specifying conditions' approach.

One response to the grounding problem, of our general sort, maintains that the key is seeing that many, or most, object-specifying principles look to *relational* conditions, rather than just intrinsic ones. This approach is famously presented by Lynne Rudder-Baker (1997, 2000), and has also been recently championed by C.S. Sutton (2012). I

will discuss this approach in some detail, since understanding my critique will then make it easy to see how the same concern applies to the other approaches.

Baker suggests that the grounding problem gets its force from thinking that modal profile and sort must be grounded in intrinsic properties, while Sutton proposes, that so long as at most one of the objects has these features determined by intrinsic features, the grounding problem goes away. She claims that most objects have, in her terms, 'extrinsic composition', which is not to say they have parts extrinsic to their parts (!), but that their conditions of composition or existence (my object-specifying conditions) depend, in part, on relations that the parts (matter) stand in to other things (2012, p. 7). Her thought (and Baker's) seems to be that since the supervenience base for the existence (and sort, and modal features) of each object will then be different (some including this external relation, some that), then we can address the grounding problem.

As Eric Olson (2001) and others have pointed out, this reply to the grounding problem seems surely inadequate, since each of the coincident objects is positioned in exactly the same context, standing in exactly the same relations to everything outside of the objects. One might try to deny this by claiming, for instance, that the statue, but not the lump, is admired for its fine musculature—but surely, this (supposed) difference presupposes a prior difference in sort. So, we are not really getting an explanation of differences in the objects by appeal to a prior, unproblematic difference, as the grounding problem demands—not even a relational one. The relational differences are just as problematic as the intrinsic ones.

What Sutton will surely urge (and I expect, Baker as well) is not that the objects (fundamentally) stand in different relations, but that they come to exist in virtue of different relations to things outside the matter, in which the matter (parts) stands. Sure, the matter (parts) of the lump stands in the same relations to intentions, evaluations, people as does the matter of the statue—but only the statue exists in virtue of these

relations. This is why Sutton can say that the existence of the one has a different supervenience base than the other, even though each of them has the exact same constitution and is related in the same way to external items. Put another way: if taken as a strict supervenience claim—'what has B has S'—we would have to say that the lump has just the supervenient properties, including sort and modal profile, which the statue has. But if it is more of the form I have been urging: 'when B is realized, there comes to be something composed of m with modal profile F (or: "of sort S"),' then in virtue of the incompatibility of F and F*, we can explain why there must be two objects, and so, why A, given that it is the one that exists because of B (and so, is F) cannot be F*. And this is what Sutton herself fundamentally claims (sec. 10): it is the supervenience base of the coming to be of the object that differs. But when it comes to saying why, since the lump is made of the same matter, which also stood in those relations, it did not come to be in virtue of that base, the answer is the same as ours: the lump just is the object that exists in virtue of these, and the statue in virtue of those. This is a paradigm example of what I earlier had in mind as an approach that may present itself as a solution to the grounding problem, but really is better seen as addressing it, with a fundamental appeal to a brute difference.

If this is correct, then the fundamental way in which this 'relational' approach to the grounding problem works is *not* by finding a non-sortal, or unproblematic difference between coincidents, but by claiming that they *come into existence* in virtue of different conditions. The conditions *themselves*—C and C*—are occupied by *both* objects (or their matter), but the intensional 'coming to be in virtue of is different. And for *this* to be so, what is crucial is what I have urged earlier, that something in the principles for these objects must be incompatible. That the object-specifying conditions are in terms of *relational* features is playing *no role* in this explanation. One could give the very same 'solution' if one thought, for instance, that the 'animal-specifying' condition was intrinsic, based on, say, DNA and arrangement, and that the 'lump' specifying condition was intrinsic as well, just based on a more coarse-grained

arrangement. Each condition requires an object with a certain modal profile, these profiles are inconsistent, so there are two objects. Just *what* the nature of the supervenience, or 'object-specifying' base is, is different on the two accounts—whether one or both is relational or intrinsic—but that is entirely a *side* issue, one that does not factor in the basic explanation. Nor does it make the explanation itself any more (or less) plausible, except insofar as one *independently* finds the relational account of the nature of these sorts of things more (or less) plausible.

To reiterate, I am raising no objections at all to the idea that many or most sorts of objects have relational object-specifying conditions (nor, clearly, am I supporting this). My point is *only* that this claim, despite their authors' presentations, plays no role at all in how the approach addresses (or solves, if you like) the grounding problem. Insofar as it is addressed, it is according to the format I have outlined through this paper.

Having dealt with that case in some detail, I will more briefly sketch some other approaches to which the basically same idea applies.

Some authors have suggested that the grounding problem can be addressed in terms of a conventionalist, conceptualist or constructivist view about material objects (Einheuser, Sutton (as applied to non-living things), Sidelle (1992)). The main idea here seems to be that we have a variety of different conventions, each of which is such that, when some matter meets some (possibly relational) conditions, then that matter comes to constitute an object (of a certain sort/with a given modal profile)—and, here again, our familiar refrain, given certain sorts of conventions, it is possible for a single parcel of matter to meet the condition specified in more than one convention. Thus, coincidence is possible in what seems like a quite unmysterious way.

It should not be hard to see that what is doing the work here are pairs of object-specifying principles that require incompatible properties to be instantiated, and so, multiple objects to be their bearers. What is distinctive about this approach is simply the claim that what makes it the case that some object-specifying principle is true is some *convention* of

ours. But what is doing the work is the incompatible conditions. Once again, one may think, on independent grounds, that conventionalism about object-specifying principles, or modal properties, is more (or less) plausible than its realist counterpart, and for that reason prefer (or not) the conventionalist story. But as far as addressing the grounding problem per se, the conventionalist account here is not depending upon, or getting anything extra from the conventionalism. As with the relational approach, it may seem that we can distinguish objects in terms of distinct relations to different conventions. But also, as with the relational approach, each object (or its matter) is equally related to each convention except in respect of coming to exist in virtue of-and the difference here, as on every approach we have looked at—is ultimately brute. If there is any advantage to the conventionalist account, it would be because given conventionalism, it is more plausible than it would otherwise be to think that there are, or can be, multiple, incompatible object-specifying conditions satisfiable by the same matter. And it does seem plausible that assuming conventionalism, there is nothing to prevent this. But that is no advantage for conventionalism unless we think that, assuming realism, there would be. But most people who think this are opponents of coincidence in the first place. If one starts off as a realist, and comes to believe in coincidence, one will simply think that there can be such pairs of conditions. Thus, as with relationalism, there may be independent reasons to like (or dislike) the details of the conventionalist approach, but the conventionalism itself is playing no role, and lends no extra (or less) credibility, in the basic way it confronts the grounding problem, which is, once more, simply in terms of incompatible object-specifying conditions, and a consequential brute difference.

One other philosopher who offers an approach most explicitly like that I have advocated here is Karen Bennett (2004). Like myself, Bennett is not actually advocating coincidence, but only asking what is the best thing to say if one wants to be such an advocate. And like myself, Bennett suggests that if there is coincidence, there must be, at bottom, a brute

difference between coincidents, which difference redounds to each object simply being the one that exists because a given modal profile needs to be instantiated. What Bennett adds to this is the (surely right) thought that if one is going to advocate a brute fact (or difference), one ought to explain why there is a brute fact at this particular place—why it is to be expected or required. (In the case of, say, fundamental laws of nature, the reason would stare one in the face.) And she proposes that this can best be done by supposing a principle of plenitude: for any coherent modal profile that can be 'extracted' from a given actual set of conditions, there is an object there that instantiates that profile. So, for instance, where there is a red apple, one set of conditions includes, say, being essentially an apple, and accidentally red, while another includes being essentially red and being essentially in a given location, and perhaps only accidentally being an apple. It is pretty obvious that when we ask how the latter object can be essentially red, while the former is not, we will have to say that it simply is (one of) the object(s) that exists in virtue of a set of conditions that includes 'essentially red'.

While, as I say, I am substantially in agreement with Bennett, I include her here because of her proposal of plenitude, or as she calls it, 'bazillion thingism'. There are two jobs Bennett invokes this for—one is to explain why there is going to be some primitiveness in saying why a given object has a given modal profile, the other is to explain why the modal profiles there are are the modal profiles. However—as I think she acknowledges (356-7?)—the latter is not really essential to the basic explanation of bruteness. If someone thought, on independent grounds, that only a smaller subset of the logically possible modal profiles were ever actually the modal profiles of anything (if, say, one doubted that anything was [or could metaphysically be] essentially red), one would still have the basic story of coincidence and brute difference that I have told here (and that Bennett is telling). The explanation for why A is essentially F will, of course, partly include that being essentially F is a property that something has to have when certain actual conditions are met (those met by the matter of A), and so, the full explanation will include the explanation (if there is one) for why *this* is so—that is, for why this is a true object-specifying principle. But so long as it is part of one's view that there can be incompatible conditions realized in the same matter, the fundamental account is the same whether one thinks there are two or a bazillion. Once again, it is one's *independent* judgment about the plausibility of more or less sparse answers to 'what sort of object-specifying principles are there?'—and perhaps to whether one thinks *this* is a brute matter—that is at issue here, not the means of addressing the grounding problem.

Finally, one last approach in the same ballpark worth mentioning is Kit Fine's 'form' based approach, or hylomorphism, or 'object-definition' account (Fine 2008). On Fine's view, which harks back to Aristotle, objects are compounds of form and matter. The definition of an object is given by 'form+matter' and multiple forms can be realized in the same matter. 'Form,' for Fine, is to be understood non-modally—the form is the essence of the object, and this *explains* why it has its modal features, like a statue's being incapable of surviving flattening. Fine thus explains modal differences between coincidents in terms of their difference in form; form, in addition, explains why an object is of the sort that it is.

I hope it is clear that in a certain way, we have the same general sort of structure as I have been presenting—'form' is an object-specifying condition, and we will have multiple objects when two incompatible forms are both realized in the same matter. But it might be thought that Fine's account presents a contrast to what I have been urging—he claims to *solve* the grounding problem, while I say it can only be 'addressed', and he seems to be able to explain the modal differences in terms of another difference, a difference in form. So, it may seem that (1) he can avoid the brute difference I have claimed must be allowed by pluralists and (2) we have a candidate for the basic difference which is more at the level of sort than at the modal level, as I have argued.

These advantages are, however, illusory.¹⁶ Just as attempting to explain modal differences by differences in sort pushes the issue to what

¹⁶ I develop this critique in greater depth in my (2014).

allows for the differences in sort, so we now are left with the question of what allows for the differences in form. If form is understood in a way that does not require modal or essential properties, then it will be a mystery why the statue and lump do not share all the same forms, whereas if having statue 'as a form' is precluded from the lump because the lump is not a statue essentially, then (a) our question again is why this is so, if the statue is a statue essentially and (b) our fundamental difference will again be at the level of essence and modality, rather than that of form or sort. Furthermore, we again have the question of why pairs of forms are incompatible, and so require multiple objects. In practice, Fine seems to find the difference in the objects in their 'real definitions'—the statue is a compound of statue-form plus matter, while the lump compounds lump-form and matter. But as to why, given that their matter is arranged in the same way in the same context, it is the statue, and it alone, that has statue as its form and part of its definition, the answer is—that is what it is. So despite what may appear to be a basic difference in account, this hylomorphic approach, like those above, is really of the same type, with incompatible properties arising from the basic object-specifying principles, and a brute fact about which object has which form or essence.

Once again, let me emphasize that I am not providing any arguments against hylomorphism, bazillion thingism, conventionalism or relationalism—except insofar as these are thought to be motivated by their ability to solve or address the grounding problem for coincident objects. My point has simply been that in each case, the solution or address does not come from the 'special', distinctive features of these views, but from their shared general approach, which is also available to the non-hylomorph, the more sparse theorist, the realist and the intrinsicalist. One simply needs to believe in pairs of object-specifying principles which can require objects with incompatible properties to be composed of the same matter.

Two More Speculative Results

In concluding, I want to briefly suggest two other results which, while not immediately entailed by our account, are at least suggested by it. These, however, are more speculative, and would require more detailed consideration elsewhere.¹⁷

1. Only Modal Differences

Let us first return to our distinction between being S (being a statue, lump, animal, tree, aggregate, etc.) *simplicitor*, and being sortally S. It is clear enough that given the modal differences between coincidents, they will differ in being *sortally* S. But do they differ in *simply* being S? Since most writers do not distinguish these two senses of 'being an S', it is hard to tell whether, when they say things to suggest that lumps which are coincident with statues are not themselves statues, they only mean to deny that lumps are *sortally* statues, or if they mean that lumps are not statues *simplicitor*. At any rate, there is enough in what is typically said to at least raise a question of whether many or most friends of coincidence believe that (these) lumps are statues, in this perfectly familiar and ordinary sense. My proposal here is that these lumps *are* statues, and that for any S such that one coincident is sortally an S, the other coincident is an S *simplicitor*. Put perhaps more contentiously—since the ambiguity is not totally absent—coincidents do not differ in sort.

More generally, insofar as the basic differences are seen to be at the level of essence and modal profile, it becomes a more vividly real question whether coincidents differ with respect to *any* properties other than their modal differences, and whatever those modal differences logically entail.¹⁸ And I would suggest that, given our findings, there is

¹⁷ I pursue the second suggestion below—that given our account, the grounding problem does not favor monism over pluralism—in 'Coincidence, Bruteness and Why the Grounding Problem Doesn't Support Monism' (draft).

¹⁸ By 'logically entail', I include things like the following: A statue has persistence conditions that entail that if it were flattened, it would go out of existence. This in turn entails that if it is flattened, it does go out of existence. This (given corresponding facts about lumps) can generate the non-modal difference that Statue does not exist at 12, while

reason to think they do not so differ.

Why think this? First, one important reason one might have thought that coincident objects *do* differ in sort is that one could think an object's sort explains its modal profile, so if a pair of objects differ in modal profile, as coincidents do, then they must also differ in their sort. But now we have seen that defenders of coincidence—pluralists—should *not* believe that sort explains modal profile. Thus, the modal difference does not support a difference in sort (except for the trivial case of the explicitly modally-loaded sortal notion, where this difference follows by the definition of the sortal 'is').

This affects the claim that the objects do differ in sort in two ways. First, it undermines a motivation—perhaps a central (implicit) motivation for it. Second, insofar as we have found the modal differences to be basic, then any difference in sort must either (a) be explained by the modal differences or (b) have some other explanation. But (b) has already been seen to be problematic by the grounding problem. If sort is not explained by modal profile, then difference in sort will have to be another brute difference, and one would certainly want extra, special reason to posit another one. On the other hand, there is no logical entailment from modal profile difference to sortal difference, so long as we are not defining 'tree', etc., in part by 'has a tree-based modal profile'. So the claim that, say, 'something is a tree only if it has a treeish modal profile, it is not a tree'—would be another fact looking for an explanation (see note 8).

This ties in to a second central reason to think coincident objects do not differ in sort (that is, in being 'simply' S), nor in any other property that is not entailed by their modal differences, which is that every other

Lump does, given the non-modal fact that flattening occurs at t1. I count this non-modal difference as 'logically entailed' by the modal differences, even though strictly, it is entailed by the modal facts *plus* some non-modal ones. If one prefers not to call them this, my thesis can obviously be reformulated so as to allow non-modal differences when (but only when) they are entailed by modal differences *plus* relevant non-modal facts that are the antecedents of conditionals logically entailed by the objects' modal profiles.

type of property, sort included, seems to have some sort of non-modal account. This, of course, is closely related to the grounding problem in first place. Coincident objects share their microstructural constitution and their (non-modally based) relations. So they are not going to differ in weight, shape, causal powers, color, how warm they keep you or ability to photosynthesize. 19 This makes some people think they must agree in their modal properties as well, but if one is convinced by the familiar arguments for coincidence—that is, by the claims of modal and modally grounded differences—one will, as discussed above, be willing to deny this and accept a small amount of bruteness in connection with modal profile. But having so accounted for the relevant judgments of difference in essence, persistence conditions and existence or location at some time (tensed properties), we can now return to the powerful case that in *general*, objects composed of the same matter in the same way have to share all their (other) properties. The friend of more differences can urge that the intuitions that coincidents differ in other respects are just as strong as that they differ in their essence or in where they would be, or whether they would still exist upon being subjected to certain forces (pruning, flattening, unraveling). While this would need to be argued on a case by case basis, I guess I just think this is false. After one is convinced that there are two objects, one can get oneself to say things like 'the lump is not a statue'—but it certainly jars (unless one is implicitly reading 'is a statue' as 'is sortally a statue') and does not have the sort of independent force that 'if a statue is flattened, it ceases to exist, but the piece does not' does. In every other case, it is quite easy to think that certain descriptions are just imperspicuous, like 'the critic greatly admired the piece of alloy' or 'the piece of wood stood wide open'. This is not, of course, to say that there might not be other considerations one

¹⁹ I leave open the possibility that there may be some *predicates* which we will apply to things only if they are 'sortally' S. *Maybe* a piece of yarn cannot be cableknit, while a sweater can—but given their commonality, this will not be a *metaphysical* difference between how the yarn and the sweater are related to the conditions for being cableknit, but only because the *meaning* of 'is a cableknit' requires its bearer to be not only a sweater, but to have a sweaterish modal profile.

might bring to bear to counter this prima facie case for no other differences—that is why I put the conclusion forth here only speculatively and suggestively.²⁰ But seeing that denying these differences is compatible with, and not at all motivated by, allowing that there are modal differences, at least puts the burden on the friend of more differences. Notice in particular that for all proposed differences other than differences in sort—that animals do not think, that lumps are not Romanesque—such differences are associated with, indeed, seem to presuppose, differences in sort. So insofar as the case for difference in sort is—as I have suggested—particularly problematic, the case for other differences will be in the same boat. So for now, I tentatively propose that relevant lumps are statues, pieces of yarn are sweaters, aggregates of cells are trees—they are just not essentially so, nor do they have 'statueish,' 'sweaterish,' or 'treeish' persistence conditions and modal profiles. And they are statues, etc., in the very same way that the statues, etc., are—i.e., they do not 'merely' constitute them, or have the properties 'derivatively'.21

2. No advantage for Monism

Finally, I suggest that when we understand the basic story of the pluralist in light of the grounding problem, we should conclude that the grounding problem actually does not provide any support for monism over pluralism—that is to say, it provides no good reason to reject the claim that there are coinciding entities. In a way, of course, this is not surprising, since we have been discussing how pluralists can respond to, or address, the grounding problem. But saying that a view can response to a challenge

²⁰ One such special problem may arise for those who think people and animals coincide; if one allows that they both share their non-modal psychological features, we encounter Eric Olson's 'too many thinkers' problems (Olson 1999 and elsewhere). This may generate special reason to either deny this case of coincidence, or to allow in *this* case that there is a further difference—though there are also strategies for granting that both the objects *do* share their psychological features are well (e.g., see Noonan 2010, Brueckner and Buford 2009 and Sutton 2014 for three quite different approaches).

²¹ Contra Wiggins (1968, 1980) and Baker (2000).

is not, in general, to say that overall, in light of the challenge, the view emerges as equally plausible to its competitor(s), and that is the claim I would like to (tentatively) make here (see also Sidelle (draft)).

To remind ourselves of the basic story: There are 'object specifying principles,' which provide (sufficient) conditions for an object (of a certain sort, or with a certain modal profile) to come to be composed of matter m. Different such principles may require that there be objects with different properties, and pairwise, these properties may be inconsistent. A single portion of matter may satisfy pairs of such 'incompatible' conditions: though the results of these conditions cannot be satisfied by a single object (e.g., pairs of incompatible modal profiles), the conditions that generate the objects are not thereby incompatible, so some m can meet two (or more) such conditions, and thus, come to constitute two (or more) objects. Each object composed by m will bear one of the incompatible pairs of properties, and this will be because (a) m's being in C entails that m constitutes something (A) that is F, and (b) A is the object that exists in virtue of this condition. Because of (b), the difference between the coincidents will be a brute difference, but because of (a), it is not just a brute fact.²²

I have acknowledged that this account addresses, rather than solves, the grounding problem, because it does make it a brute fact—albeit a limited one, and more limited than anti-pluralists seem to acknowledge—that objects have the (basic) modal profile (or sort, if one is not convinced by my earlier argument) that they do. Does this bruteness give us reason to prefer monism to pluralism?

I think not. The first thing to notice is that this bruteness is a direct consequence of the (purported) facts that (a) pairs of object specifying

²² I have throughout been ignoring the fact that when objects coincide at some time *later* than their creation, the matter which they *then* share may not be (indeed, almost never will be) the matter which was in C and C* so as to generate the coincidence. Obviously, the account of *that* coincidence will be addressed in terms of the basic story, plus the persistence conditions of the generated objects which will allow the later matter, m*, to be in circumstances which require that it constitutes O (or a temporal part of O) as well as O* (via the persistence/unity conditions for O and O*).

principles can have properties in their consequents that are inconsistent with each other, and (b) a single bit of matter can simultaneously met the conditions of such pairs of principles—e.g., it can meet the conditions for composing a lump, which can survive flattening, and the conditions for composing a statue, which cannot. Now, anyone who believes that there are material objects at all—which includes monists!—believes that there are object specifying conditions of some sort.²³ They may be uninteresting—Universalists think that whenever any matter exists at all, it wholly composes some object—and perhaps there are not necessary and sufficient conditions, and maybe it is all very complicated. But there is some story here (and those who would insist that there is not such a story are in no position to be pressing the grounding problem against pluralists, which is fundamentally a demand for an explanation in this ballpark). Further, it is almost trivial that some pairs will be inconsistent—for instance, there is wide agreement that a material object cannot have been originally composed of entirely different matter. So objects originally composed of non-overlapping m and m* will have incompatible modal properties. And anyone who believes in different sorts of objects-trees and humans, say-will think that there are conditions basic to being one (say, being almost wholly composed of cellulose) which cannot be had by the other. So at least most monists accept (a) above. The issue between monists and pluralists then fundamentally comes down to (b)—whether, among the object-specifying conditions, there can be pairs that require inconsistent properties, but can be realized in a single portion of matter. For if there are, it follows trivially that there will be coincidence and this sort of bruteness.

But do we have any reason to think there *can't* be? We have lots of *models* for how there *can* be—for every purported case of coincidence,

²³ One may point out that some opponents of pluralism, who would press the grounding problem, are nihilists rather than monists, and against them, this argument would have no force. But showing that for all the grounding problem shows, pluralism is no worse off than monism, should be an interesting enough claim. That there are no objects does not obviously recommend itself as more plausible than the claim that there are no brute facts about material objects' basic features.

there is such a pair. Perhaps, when the case is put abstractly, there can be the appearance of a contradiction, since one might think it requires the matter itself to bear inconsistent properties. But as we have explained, all that is required of the matter, in our examples, say, is to be simultaneously lump-arranged and statue-arranged (and situated), and these are not inconsistent. Similarly, there will be no object that bears the inconsistent properties specified in the consequents of the object specifying principles—indeed, that is the whole point: that is why we need m to compose multiple objects. But once we agree that there are object specifying principles, and that there is no logical problem with pairs of such principles of the sort the pluralist requires, why should we have any general confidence that the range of object specifying conditions is restricted so it is impossible for a single bit of matter to satisfy more than one (of an 'inconsistent' (sic) set) at a time? This is now all that the monist's grounding-problem case comes to: the claim that this is impossible. (Or at least, never actually obtains. But it is hard to see how one could support the weaker claim without the stronger.)

Here is one reason that *cannot* be offered: If there were such pairs, we would be stuck with coincident material objects. The questionbeggingness of this argument is too obvious even to comment upon. But here is something that may catch the spirit of the grounding problem: 'If there were such pairs, we would not be able to explain why objects have the sorts/modal profiles that they have.' However, as we have seen, they can offer partial explanations—there is just a residual bit that is a brute fact. But is not that 'residual bit' something that can be urged against pluralism and for monism? Here we find the above questionbeggingness in a less obvious form. I have been arguing that this brute fact will follow if there can be pairs of object-specifying conditions of the relevant sorts: if there are, there just will not be the 'pure', completely universal, sufficient-condition sorts of explanations of sort or modal profile that the grounding problem is demanding. But given this, we need to be given some reason to think there are such sorts of explanations, and in particular, a reason which does not simply

presuppose that object-specifying principles have the relevantly sparse structure to preclude overlap of inconsistent conditions. And it is not clear what such a reason could be. I suspect that if there is an argument to be had here, it would provide an *independent* reason to reject coincidence, rather than buttressing the grounding problem. But for now, I will content myself with the claim that the grounding problem supports monism over pluralism *only if* some *independent* grounds can be found for thinking that inconsistent object-specifying conditions can never 'overlap', and that in light of the above points and distinctions, it is hard to see what those grounds might be.

Conclusion

To summarize: We have argued that in light of the grounding problem, supporters of coincidence should accept that there is a brute modal difference between coincident entities, which is explained by the simultaneous satisfaction of incompatible object-specifying conditions by a single bit of matter. The basic difference is modal because different modal profiles are logically incompatible, while no other properties which are candidates for a basic difference are (except as modally explained). The basic difference is brute because the matter of both objects satisfies the conditions entailing each modal profile equally. From this, we have drawn various conclusions for those who would accept coincidence: the basic differences are modal, not sortal; modal properties are not explained by sortal properties, nor modal differences by sortal differences; those who have suggested solutions to the grounding problem with relational, conventional, universalist or hylomorphic accounts do not address the grounding problem in virtue of the distinctive features of these accounts, but simply via our above structure; and more tentatively, that there are no differences between coincident entities other than the modal ones and properties they entail (which includes the claim that they do not differ in properties like 'being a tree' or 'being a statue'), and that the grounding problem provides no basis for preferring monism to pluralism—the issue simply concerns the distribution of object-specifying principles. While the grounding problem does not undermine coincidence, seeing how to address it tells us a lot about how to understand the phenomenon, and what is, and is not, crucial to it.²⁴

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