

Against Strong Pluralism

Strong pluralists hold that not even *permanent* material coincidence is enough for identity, even in the case of purely material entities. Fine (2000) and Shoemaker (2007) are examples. Weak pluralists hold merely that numerically distinct things can be *temporarily* materially coincident. Lewis (1986) is an example. The argument for weak pluralism is that some temporarily coincident material objects differ in their actual histories. This seems about as uncontentious as anything in philosophy could be. The argument for strong pluralism is usually an appeal to the possibility of modal differences. The usual illustration of strong pluralism is the case (Gibbard 1975) of the all-time coincident statue (Goliath) and lump of clay (Lumpl). Another is Kripke's (unpublished) case of the permanently coincident, unfortunately never-flowering, plant (Plant) and its stem (Stem). The argument for strong pluralism appeals to Leibniz's Law. Goliath could not have survived being rolled into a ball, Lumpl could. They differ in their modal properties and so are distinct. Again, Stem could not have had a flower as a part, Plant could, so they must be distinct.¹

The standard response is to deny that the modal predicate is constant in reference throughout the argument. So a fallacy is diagnosed. This response does not require endorsing a Lewisian counterpart theoretic account of *de re* modal predication (Lewis 1986), though Lewis does provide the most detailed account available of the inconstancy of modal predication (Noonan 1991).

¹ Of course, if strong pluralists accept the Kripke case – in which neither of the putatively distinct objects is an artefact – as an illustration they must also accept that there are far more than two permanently coincident entities present in that spatio-temporal location, and must in fact accept that wherever there is a complex material object there are many (more than two). Thus strong pluralists who accept this type of case as illustrating their doctrine must be what we might call plenitudinous pluralists. Strong pluralists who accept as illustrations only cases involving artefacts, like the Goliath/Lumpl case, are not so obviously committed to plenitudinous pluralism, and may as we shall see, deny it – at a price.

So the most usual argument for strong pluralism can be rejected. But why should it be? What is wrong with strong pluralism?

I first say what is at issue between strong pluralists and their opponents.

Perhaps the most frequently raised objection to strong pluralism is that given that permanently coincident objects share the same matter arranged in the same way it is impossible to explain how they can be of different sorts or have different persistence conditions. Thus Karen Bennett (2004: 339-40) asks, ‘what grounds the difference between Lump1 and Goliath ... they are the same shape, the same size, made of the same parts, have the same history and future, are the same distance from the bagel store ... So what exactly makes it the case that they could have different shapes and sizes, etc.?’. Michael Burke (1992: 14-15) asks, ‘given the qualitative identity of these objects what explains their difference in sort?’ And Eric Olson (2001: 339) poses what he calls ‘the indiscernibility problem’: ‘by definition, materially coinciding objects are made up of exactly the same particles, arranged in exactly the same way, in identical surroundings. ... How could they have the qualitative differences constitutionalists [strong pluralists] say they have?’

It is not always clear what this ‘grounding problem’ is because it is not always clear what is being said to be ungrounded.

What is the real issue, I think, is that strong pluralism offends against a supervenience thesis: it entails the possibility of purely material objects, *even non-coincident*, alike in *all* general respects – categorical, modal, counterfactual, dispositional, relational and non-relational, past, present and future – at the microphysical level, but differing in general modal, counterfactual or dispositional respects at the macrophysical level. So it conflicts with the thesis that the general modal, counterfactual or dispositional macrophysical properties of material objects supervene on their general microphysical features (including those which are relational as well as non-relational, past and future as well as present, modal, counterfactual

and dispositional as well as categorical). If the strong pluralist is right to distinguish Plant and Stem there may be, far away, a twin of Plant, Plant*, and a twin of Stem, Stem*, each in *all* general respects, categorical, modal, counterfactual, dispositional, relational and non-relational, past, present and future, completely indistinguishable at the microphysical level from its unstarred twin (because symmetrical universes are possible). If so Stem*, like Stem, will be in all these respects microphysically indistinguishable from (unstarred) Plant, but macrophysically different in some general modal, counterfactual or dispositional respect, and not because it stands in the relation of constitution to Plant, since it does not.² So the issue between strong pluralists and their opponents, we can say, is not one about the relation of coincidence to identity or the nature of constitution, but simply about the supervenience on their general microphysical properties of the general modal, counterfactual and dispositional macrophysical predications of material objects.

So why should we object to strong pluralism?

Consider Wittgenstein's supposition in Zettel (608): 'certain kinds of plant multiply by seed, so that a seed always produces a plant of the same kind as that from which it is produced – but nothing in the seed corresponds to the plant which comes from it; so that it is impossible to infer the properties or structure of the plant from those of the seed – this can only be done from the *history* of the seed.' This makes sense, even though we have to suppose causation across a temporal gap (because a seed S1 coming from a particular plant of kind K1 at a time t1 causes it to develop into a certain plant of kind K1 at a time t3 even though in the intervening times it is intrinsically identical in all respect to another seed S2 that comes from a particular plant of kind K2 and develops into a plant of kind K2 at t3); there is, as Wittgenstein says, 'order out of chaos'. But now suppose it is said that two seeds from the same kind of plant, i.e., with the same history, microphysically indistinguishable in

² Again, according to the strong pluralist, Goliath and distant Lump1*, which coincides with Goliath's twin Goliath*, will differ in some modal, counterfactual or dispositional respect at the macrophysical level, despite absolute indistinguishability in *all* general microphysical respects).

all respects (past, present and future, relational and non-relational, categorical, modal and dispositional), destroyed without being planted, differ in that they *would* have produced different kinds of plant if they had been planted. This is the supposition that concerns us. To believe it is to believe in magic – that is what it is to think that such a macrophysical dispositional difference does not reflect any difference at all at the microphysical level. But it is only ruled out by the supervenience thesis strong pluralists reject. It is exactly how Plant and distant Stem* are related according to them. The supposition about the seeds is absurd but the strong pluralist has deprived himself of an explanation of why this is so. Again, consider a symmetrical world of two indiscernible particles speeding away from one another. Is there not an accessible world in which one swerves off and the other continues straight? Yes. But it does not follow that either particle in the ‘straight’ world has a capacity which is different from that of the other (Curtis 2012, Zimmerman 1997). The supposition is absurd. But that is how Plant and distant Stem* must be related if the strong pluralist is right. So once again the strong pluralist cannot explain the absurdity.³

That is my first objection to strong pluralism. My second is an objection to the proposal that cases involving artefacts might exemplify it, even if it is allowed that other cases do. To be an artefact is just to have a relational property: to be created by intentional activity or to be in some way the focus of such activity. A thing which in our world has such a relational feature, or at least something *intrinsically* microphysically indistinguishable from such a thing, could have existed in an artefact-free world. In our world there may be, say, a piano, made of bits of wood and ivory and wires bound together. In another world there may

³ Weak pluralists are not thus deprived of explanatory resources; they do not need to believe in magic. All they must say is that things which are intrinsically microphysically indistinguishable at a time (or even at all times they both exist) may differ in some *sort* and in the (modally inconstant) *predicates* true of them (though they can say that if either is of sort *S* the other ‘is’, in the sense of the ‘is’ of constitution, an *S* when they are indistinguishable). But to find a problem with that is to commit what the late Jonathan Lowe called (2002:370) ‘the cinematographic fallacy’, ‘the idea ... that any qualitative differences between objects must be revealed by instantaneous snapshots’, and not to see that how the world is outside the temporal boundaries of a thing may be relevant to whether it satisfies a sortal predicate (because, in particular, sortal predicates are constrained by conditions of the form: ‘if *x* is (identical with) an *S* and if $Rxtt^* x$ exists at *t* and *t**’).

be an object which is microphysically intrinsically indistinguishable (with exactly the same microphysical particles within its boundaries, related to one another in exactly the same ways) created accidentally by naughty monkeys or by a freak gust of wind. Now, strong pluralism implies that if something is created by the appropriate intentional activity something *else*, numerically distinct but microphysically indistinguishable in all respects, relational and non-relational, past, present and future, is also created. So in the aforementioned ‘cosmic accident’ (‘naughty monkey’ or ‘freak gust of wind’) world either there would have been at least one fewer possessor of the actually shared intrinsic microphysical property than in the actual world – or else, as we shall see in a moment, something else, equally or more implausible, must be true. To revert to the familiar example, if in fact, as strong pluralism implies, Goliath and Lumpl are permanent coincidents in our world, there is another, artefact-free, world in which the intrinsic microphysical make-up they share (call it M) is still possessed. The strong pluralist has a choice about what to say about this world. He can say that Goliath does not exist there, even though Lumpl does, and so say that M is possessed in this world by *fewer* things than in our world. Or he can say that in the artefact-free world Goliath as well as Lumpl still exists, though it is not a statue there since it does not possess the requisite relational property of being a product of intentional activity. If he says the latter he must say that there are still two numerically distinct possessors of M in the artefact-free world. But he must also say that though neither is a statue, and though they are microphysically indistinguishable not merely intrinsically but completely in this world they, i.e., Goliath and Lumpl, differ in (some of) their macroscopic modal properties in just the way they do in our world where they are related as statue and coincident lump – though Goliath does not in this artefact-free world possess the modal properties which distinguish it from Lumpl *because* it is a statue (as the strong pluralist might wish to say of Goliath in the

actual world), since, of course, it is not.⁴ As I have indicated, I think that this is a completely implausible thing to say and it is not something a strong pluralist or even a plenitudinous pluralist is required to say (it perhaps will help to bring home the implausibility here to reflect that *any* complex lump of matter in any artefact-free world is intrinsically microphysically indistinguishable from *some* artefact in some artefact-containing world, so according to this suggestion there will be two completely microphysically indistinguishable material objects where *any* such lump is, differing in their macroscopic modal properties in just the way some possible artefact and coincident lump are – though not because either of the objects is an artefact rather than a mere lump). But if the strong pluralist recoils from this alternative and says instead that Goliath does not exist in the artefact-free world he is committed to saying that the number of complex material objects is fewer in the artefact-free world.⁵ This also seems absurd. All that is true is that nothing is a *statue* in the absence of intentional activity because nothing then possesses the appropriate relational property – this is a *de dicto* conceptual truth. The number of *complex material objects possessing the intrinsic microphysical property M* is be the same in the artefact-free world, namely, one, despite the absence of intentional activity, given that M is instantiated at all. (Contrast the number of *outlaws in Sherwood Forest*, which may differ between two worlds just because of the fickle decrees of a distant king, though life goes on under the Greenwood in exactly the same way in both worlds – this simply reflects the difference between the concept ‘complex material object possessing intrinsic microphysical property M’ and the legal concept ‘outlaw’.) This follows from a *de dicto* implication of a constraint laid down by van Inwagen ‘whether certain objects add up to or compose a larger object does not depend on anything besides the spatial and causal relations they bear to one another’ (1990: 12) – and, in particular, not on

⁴ I assume the strong pluralist will not want to say that Goliath and Lump both exist in the artefact-free world, but do not differ at all, even in modal respects.

⁵ If they accept Bennett’s proposal that all of the complete modal profiles possible in a given spatio-temporal location are instantiated there (2004: 355) they must also say, if they say that there are fewer possessors of M in the artefact-free world, that there are also fewer *possibilities* there.

the intentions of any creators.⁶ The *de dicto* implication of this constraint (stated in the previous footnote) seems to me platitudinous. Others agree. For example, Jon Tresan, who does not have a dog in this fight, arguing in favour of what he calls *de dicto* internalist cognitivism, writes (2006: 164): ‘Consider ... artefacts, such as cars. Are cars necessarily cars? At first glance it may seem so: how could that very thing sitting in the driveway exist and not be a *car*? And yet when we recall that being a car involves not just a certain arrangement of matter but certain *intentions* it seems that it may exist and not be a car. The same arrangement of the same matter brought together, by coincidence, in a universe without sentience, would not be a car – yet it would be numerically identical to the object now sitting in the driveway. So cars turn out only contingently cars after all. The naturalness of thinking they’re necessarily cars is due to our utter lack of interest in those circumstances in which they aren’t cars. Such circumstances are so unlikely we don’t bother to take note of them, and that may distort our modal intuitions. Likewise, I suggest, with moral beliefs’.⁷ What may cause resistance is the thought that if we create things when we make artefacts it immediately follows that there must be fewer things with the intrinsic microphysical make-up of Goliath (or a piano or car) in an artefact-free world. It does not *follow*, not even from a strong pluralist viewpoint, as we have seen, for he can say that Goliath still exists in the artefact-free world. And it is certainly not something a weak pluralist need or can accept. As a weak pluralist I accept that we do bring things, new things, into existence when we create artefacts (Goliath (=Lumpl)), but I deny that the intrinsic microphysical make-up of Goliath is instantiated by fewer things in the artefact-free world. People intentionally bring artefacts

⁶ I read this as, ‘for any x , if the y s compose x the y s compose x in any world in which they bear to one another the same causal and spatial relations as in the actual world’. In a sense it expresses the necessity of composition. But for my purposes I need only a *de dicto* implication of this: the number of possessors of the microphysical property in question is the same in the two worlds.

⁷ Others also find it congenial, e.g., Cameron (2007: 118): ‘One might well balk at the thought that whether or not a collection of objects composes could have anything to do with external factors, such as the intentions of designers ... perhaps any possible answer [to the SCQ] must only concern the intrinsic properties and internal relations of the X’s’.

into existence by rearranging bits of matter (and even perhaps, in the case of art objects, merely by transferring integral macroscopic objects from one location to another, e.g., moving a piece of driftwood into an art gallery, and maybe even by mere (communally assented to) declaration). If instead the *same* bits are rearranged in the *same* way, remain so arranged for the *same* span of time and cease to be so arranged in exactly the *same* way, though all this happens only by accident (a freak gust of wind),⁸ then it does not follow that fewer things are brought into existence; all that follows is that nothing that is brought into existence qualifies as an artefact. The suggestion that fewer things with a particular intrinsic microphysical make-up exist when no external intentional agency is involved I do not believe (to forestall a protest: the origin of an artefact in intentional activity is not, it should be noted, ‘origin’ in the sense Kripke had in mind when he argued for the necessity of origin; Lump and Goliath have the same Kripkean origin).⁹ Nor, as noted, is it something a strong pluralist is required to believe and I know of no strong pluralist who has actually explicitly endorsed it, when distinguished from the disjunctive claim the strong pluralist *is* required to make if he accepts cases involving artefacts as illustrations of his doctrine, that is, that *either* fewer things instantiating the complex intrinsic microphysical property in question exist in the artefact-free world *or* two microphysically completely indistinguishable things are present there, neither an artefact, though differing in modal macroscopic properties precisely as do a lump of matter and coincident artefact.¹⁰ So, I think, strong pluralists should not give

⁸ A fortiori, if it is only by accident that the location of an integral macroscopic object is changed.

⁹ Why should the presence or absence of external *intentional* agency be so important to the number of things possessing a particular intrinsic microphysical make-up? Why is the presence or absence of, say, external agency *by water* not equally important? How would the argument go against someone who insisted that it was?

¹⁰ Of course, some strong pluralists have made claims from which it follows (given that, as they think, modal predication is constant). Thus Baker (1997) affirms (a) that it is a *de dicto* necessary truth that all statues are products of intentional activity and (b) that anything which is (not only a statue but) non-derivatively a statue (in a sense she introduces) is necessarily a statue. But she does not explicitly consider the consequence, that the number of material things with a particular intrinsic microphysical make-up (and hence the same Kripkean origin) will vary with the presence or absence of intentional activity external to the region in which that make-up is instantiated. And the only thing she says in support of her claim that nothing which is non-derivatively a statue could have existed without being a statue is that a world without art objects is ontologically poorer than our world. So it is in a sense; there are no statues there. In the same sense a world without outlaws or husbands

examples involving artefacts and coincident lumps as illustrations of their doctrine, since doing so commits them to a disjunctive claim neither disjunct of which has any plausibility.

In sum, I have argued that two questions should be at the focus of, indeed, should replace, the debate about strong pluralism: (1) Can two spatially separated material objects, like Plant and distant Stem*, alike in *all* their general microphysical properties, differ in their general modal, dispositional or counterfactual macroscopic properties (is magic actually possible)? (2) Given a complex intrinsic microphysical property M, i.e., a property of the type *having within its boundaries exactly such-such microphysical particles arranged in exactly such-and-such ways*, instantiated in some spatio-temporal region, can the number of material things possessing M located exactly in that region (not merely the relational properties of the material things possessing M in that region) vary with the presence or absence of intentional activity taking place outside it? If the answer to (1) is negative strong pluralism is false, if the answer to (2) is negative cases involving artefacts cannot exemplify it unless, utterly implausibly, permanently coincident material objects, neither an artefact, can differ in modal properties in precisely the way an artefact and a non-artefact do. I think the answer is negative in each case.

References

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is ontologically poorer. Of course, as a weak pluralist I do not wish to *deny* the claim that nothing which is a statue could have existed without being a product of intentional activity. In some context which selects an appropriate property as the reference of the modal predicate an utterance of this sentence will be true, but so in some context will be an utterance of ‘no one who is an outlaw could have existed without being an outlaw’ (Lewis 1986, Chapter 4). I deny only that, as Baker thinks, there is some objectively true proposition which the former sentence expresses independently of context.

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