

A SUBSTANTIAL PROBLEM FOR PRIORITY MONISM

MARTIN GLAZIER

Jonathan Schaffer has defended priority monism, the doctrine that ‘there is exactly one substance, the whole concrete cosmos’ (2009: 378; see also 2010a; 2010b; 2010c; 2013). This paper develops an objection to priority monism. The objection is that although every substance is necessarily a substance, for the priority monist the cosmos is *not* necessarily a substance. It follows that the cosmos is not a substance and so priority monism is false.

In §1 I defend the claim that, for the priority monist, the cosmos is not necessarily a substance. In §2 I defend the claim that every substance is necessarily a substance. In §3 I show that no parallel objection threatens the priority monist’s pluralist opponent.

1. FOR THE MONIST, THE COSMOS IS NOT NECESSARILY A SUBSTANCE

By ‘the cosmos’ Schaffer means the maximal actual concrete object of which all actual concrete objects are parts (2010c: 33). He takes priority monism to be the view that the cosmos is the sole substance. Modalized priority monism is the view that it is metaphysically necessary that the cosmos is the sole substance. This Schaffer also accepts (2010c: 56). The target of my objection is modalized priority monism, or as I shall henceforth call it, monism. Other forms of monism lie outside the scope of this paper.

What does it mean to say that the cosmos is a substance? The notion of substance has a long and distinguished—and muddled—history. The substances have been variously thought of as unified, durable, the paradigms of objecthood, the subjects of change, the subjects of predication, and the bearers of properties. But a central thread uniting these diverse conceptions has been the thought that substances are ontologically independent.¹ The substances are those entities which ontologically depend on no others, and are thus in an important sense fundamental.

The notion of ontological dependence has sometimes been understood in modal terms (Simons 1987: 295), sometimes in essentialist terms (Fine 1995), and sometimes in primitive terms (Schaffer 2009). We need not provide an account of it here. We can instead make do with a few familiar examples: (i) singleton Socrates depends on Socrates; (ii) my fist depends on my hand; (iii) the Golden Gate Bridge’s redness depends on the Golden Gate Bridge; (iv) the event of Vesuvius’s eruption depends on Vesuvius; (v) the fact that Schaffer exists depends on Schaffer.

¹See, for example, Aristotle (*Cat.* §5), Descartes (*Principles* 1.51), Spinoza (*Ethics* I Def. 3), Locke (*Essay* II xxiii 2), and Lowe (1998: 138). For further discussion see Woolhouse (1993) and Robinson (2021).

We have defined monism as the view that, at every metaphysically possible world, the cosmos is the sole substance. But this definition is ambiguous. Let C be the actual cosmos. Is monism the view that, at every possible world, C is the sole substance? Or is it the view that, at every possible world, that world's cosmos, whatever it is, is the sole substance?²

Some of Schaffer's remarks may suggest he holds the former view. Schaffer (2010c) formally regimented (unmodalized) monism as the statement that $(\exists!x)Bx \wedge Bu$ (42), where B is a basicness predicate and u is 'a dedicated constant for the actual material cosmos' (38). The necessitation of this statement will involve this same constant u and so will concern the actual cosmos, the object we have called C . Mostly, however, Schaffer seems to have in mind the latter view. For example, Schaffer (2010b) says that 'I hold that every possible world has exactly one fundament: that world itself' (321).

The former view, in any case, is easily refuted. For if, at every possible world, C is the sole substance, then at every possible world C exists. But surely C is a contingent being, not a necessary one.³

So if monism is to be at all plausible, it should be understood as the view that, at every possible world, that world's cosmos is the sole substance. But then for the monist, the actual cosmos is not necessarily a substance. For it could have been a proper part of a larger cosmos, and had it been, that larger cosmos would have been the sole substance.

More carefully: although there is no concrete object that fails to be part of C , there could have been. At some possible world w , then, C is a proper part of w 's cosmos C^+ , the maximal concrete object at w of which all concrete objects at w are parts. For the monist, at w the sole substance is C^+ , not C . And so C is not necessarily a substance.

The monist might be tempted to respond that w 's apparent possibility is an illusion. What *is* possible is a world v in which C is bigger than it is at the actual world—in which C has an extra concrete object as one of its parts. The illusion of w 's possibility derives from our confusing it with the genuinely possible world v . But at v , C is still the maximal concrete object, and it is still the sole substance.

Tempting though this response is, it cannot plausibly be sustained. We can see why by considering how the response looks in a particular case. Let the world w be one in which C is but a tiny enclave in an unfathomably vast universe, some 10^{100} times larger, the bulk of which is of a radically different character from C . When one ventures beyond C , one encounters all manner of objects and properties utterly alien to C : ghosts, spirits,

²These two ways of understanding monism are also distinguished by Wildman (2018: 280).

³This claim will be denied by a necessitist like Williamson (2013), who will insist that C necessarily exists (or is something, in Williamson's terms). But even the necessitist should concede that there is a possible world at which C fails to be concrete (cf. Williamson 2013: 6–9). At such a world, C lacks the distinction (which it has in the actual world) of being the maximal concrete object of which all concrete objects are parts. So why should it retain the distinction of being the sole substance?

entelechies, ectoplasm, and so on. Nature behaves radically differently outside C too: there is no phenomenon resembling gravitation, or electromagnetism, or even energy conservation. Surely we are not deluded in thinking that the world w , bizarre though it may be, is metaphysically possible. And surely we are not confusing w with some other world v in which C is 10^{100} times larger and almost unrecognizably different from how it is in the actual world.

2. EVERY SUBSTANCE IS NECESSARILY A SUBSTANCE

For the monist, then, the cosmos is not necessarily a substance. Yet every substance *is* necessarily a substance.

This last claim is supported by the following argument.

- (1) Entities belong to their ontological categories necessarily.
- (2) *Substance* is an ontological category.
- (3) So if an entity is a substance, it is necessarily a substance.

We will consider each premise in turn, beginning with (1).

The quest for a system of ontological categories goes back to Aristotle.⁴ The more ambitious questers have sought to make their systems both exhaustive and mutually exclusive. One can be forgiven for doubting whether this more ambitious goal is achievable, but (1) does not require that it is. It does not say that every entity must belong to some category, nor that an entity can never belong to more than one category. It says only that *if* an entity belongs to some category, then it does so of necessity.

We can bring out the intuitive plausibility of this claim simply by considering cases. Surely a quantity, such as 9.8 m/s^2 , could not have been an event. Or again, surely a quality, such as redness, could not have been a location.

Admittedly, the cases just given might not involve the real or true ontological categories. Perhaps, for instance, an event is nothing more than a particular instant or time interval considered under a certain description (as in van Benthem 1983) and so the true category to which events belong is *time*. But this category also obeys (1). Surely February 27, 2023, for instance, could not have been a quality. Or again, perhaps a quantity is just a relation between an object and a number (as in Eddon 2013: 81–5), and so the true category to which quantities belong is *relation*. But this category too obeys (1): surely the relation *pinest for*, for instance, could not have been a location.

In fact, we need not know the true categories in order to have support for (1). For (1) follows from the claim that entities belong to their highly general kinds necessarily. This claim is made plausible not only by the cases given above but by many others. Thus this bit of lead could not have been a bit of gold. Nor could Nixon have been a fried egg, nor the redness of the

⁴In the *Categories*; Chisholm (1996), Lowe (2006) and Paul (2016) are more recent contributors to the tradition. See Loux (1997), Westerhoff (2005) and McDaniel (2017: ch. 4) for further discussion of the notion of ontological category.

Golden Gate a mathematical property. And so on. Such ‘kind shifts’ are impossible.

This is not to say that entities belong to *all* of their kinds necessarily. Perhaps, for instance, this pair of jeans could have been a pair of shorts. But it seems that at least for highly general kinds, necessity reigns. How general is highly general? We need not settle this question here. The ontological categories will be highly general kinds on any reasonable understanding (and indeed are often taken to be the *most* general kinds). (1) follows.

In addition to this intuitive evidence, there is a further reason to accept (1). It is plausible that an entity’s category figures in its essence, in what it is to be that entity (cf. Rosenkrantz 2012: 90). For to identify an entity’s category is to give at least part of the answer to the essentialist question ‘what is it?’ If one takes *event* to be a category, for instance, then it will be plausible that what it is for something to be World War II is, in part, for it to be an event. But given this link between category and essence, (1) straightforwardly follows. For if entities belong to their categories essentially, then they belong to these categories necessarily.

Turning to (2), its acceptance is extraordinarily widespread among philosophers who have employed the notions of substance and ontological category.⁵ In my view, the best argument for (2) appeals to the *dependence test*: two entities differ in category just in case they differ in the way they ontologically depend on other entities.

As Schaffer (2009: 355–6) has observed, we arguably find a version of the dependence test in Aristotle. For Aristotle,

there are many senses in which a thing is said to be, but all refer to one starting-point; some things are said to be because they are substances, others because they are affections of substance, others because they are a process towards substance, or destructions or privations or qualities of substance, or productive or generative of substance, or of things which are relative to substance, or negations of some of these things or of substance itself. (*Met.* 1003b5–10)

This passage suggests a view on which the way an entity depends on the substances corresponds to the sense of ‘being’ exemplified by that entity. And elsewhere Aristotle asks:

[I]f ‘being’ has many senses (for it means sometimes substance, sometimes quality, sometimes quantity, and at other times the other categories), what sort of one are all the things that are, if non-being is to be supposed not to be? (*Met.* 1089a14–1721)⁶

⁵According to Thomasson (2018), among partisans of (2) we find Aristotle in the *Categories*, Alexander (1920), Johansson (1989), Hoffman and Rosenkrantz (1994), Chisholm (1996) and Lowe (2006); to this list I would add Russell (1927).

⁶I am indebted to McDaniel (2017: 123) for drawing my attention to this passage.

The parenthetical remark suggests a view on which the different senses of ‘being’ correspond to different categories.⁷ Putting this together with the view suggested by the first passage, on which the different senses of ‘being’ also correspond to different ways entities depend on the substances, we arrive at the view that the different categories correspond to the different ways entities depend on the substances.

On this view, the substances constitute a category. After all, a substance does not depend on any entity—and so in particular does not depend on any substance. The substances therefore resemble one another and differ from all other entities in the way they depend (or rather fail to depend) on the substances. And so given Aristotle’s version of the dependence test, (2) follows.

Our version of the dependence test, unlike Aristotle’s, makes the different categories correspond to different ways those categories’ members depend on *other entities*, whether or not these entities are substances. It can therefore more smoothly handle the possibility that there are no substances or that some non-substance fails to depend on the substances. But our version of the dependence test yields (2) no less than Aristotle’s version does. For the substances (alone) depend on no other entities, and so they resemble one another and differ from all other entities in the way they (fail to) depend on other entities. From this we may conclude that they constitute a category all their own.

Although Schaffer was once in agreement (2009: 356) he has since changed his mind, arguing that ‘given that things are substances only contingently, *substance* cannot be a category’ (2013: 81). In support of the premise that things are substances only contingently, Schaffer (2013) offers three examples. First, on a monist view, the substantial cosmos could have been part of a larger whole and would then have been insubstantial.⁸ But to offer this as a plausible example of contingent substancehood is question-begging in the present context, since the plausibility of monism is precisely what is at issue. Second, on a pluralist view on which the substances are the mereological simples, a substantial simple such as an electron could have been divisible into smaller constituents and would then have been insubstantial. I argue in §3 that there is no reason to agree that a simple thing could have had proper parts.

Schaffer’s third example is that a given mind could be substantial at a dualist world and insubstantial at a physicalist world. But this does not seem to be a genuine possibility. If a given mind *m* is a substance at a dualist world, then presumably it is an immaterial entity, something like a soul or Cartesian ego. How could that very thing have existed in a physicalist world entirely free of such entities? It does not seem possible. We may perhaps

⁷Additional textual support for this view is found in *Met.* 1017a23–30. I am grateful to Paolo Natali for bringing this passage to my attention.

⁸Wildman (2018: 280) makes the related point that, on a monist view, an insubstantial proper part of the cosmos could have been the whole of concrete reality and would then have been substantial.

grant that the body to which m is linked could have existed in a physicalist world and that it could have behaved just as it does in the dualist world. We might even go so far as to allow that in the physicalist world this body would have a mind of some form, one dependent upon physical goings-on. But this mind, whatever its exact nature, would be a very different kind of thing from the immaterial substance m . It does not seem plausible to identify the two.

I take it, then, that we have compelling reasons to accept the conclusion (3): every substance is necessarily a substance. But we have seen that for the monist, the cosmos is *not* necessarily a substance. It follows that the cosmos is not a substance and so monism is false.

The claim that every substance is necessarily a substance is of interest apart from its connection to monism.⁹ Consider the following four claims:

- (4) No proper part of a substance is a substance.
- (5) Necessarily, every animal is a substance.
- (6) x is a proper part of an animal.
- (7) x could have been an animal.

(4) evokes Aristotle's claim that 'no substance is composed of substances' (*Met.* 1041a4–5) and is endorsed by Schaffer (2013: 82), who labels it the 'Aristotelian principle'. And (5) is plausible if one thinks that *in fact* every animal is a substance, a thesis which is at least seriously considered by Aristotle (*Met.* 1028b9–26) and which among contemporary philosophers is endorsed by Oderberg (2007: 66) and Inman (2017: 279).

Whether (6) and (7) are plausible depends on what x is. But let x be a certain largish part of a planarian worm, so that (6) is true. It turns out, rather amazingly, that if x were to be severed from the rest of the planarian, it would grow into a new planarian. And so it may seem that although x is in fact a proper part of a planarian, it is possible for x to be a full-fledged planarian in its own right, so that (7) is true too.

Now presumably our premises (1) and (2) are necessarily true if true at all, and so the same goes for (3). And given the necessitation of (3), the claims (4)–(7) are inconsistent.

To see why, suppose (7) is true and that there is some possible world w at which x is an animal. By (5), at w , x is a substance. By the necessitation of (3), at w , x is necessarily a substance. By the modal axiom B ($\Diamond\Box\varphi \rightarrow \varphi$), x is (actually) a substance. By (6), x is a proper part of some animal y . By (5) and the modal axiom T ($\Box\varphi \rightarrow \varphi$), y is a substance. So x is a substance, y is a substance, and x is a proper part of y , which contradicts (4).

Thus if (3) is necessarily true, then given widely accepted principles of modal logic at least one of (4)–(7) must be rejected. And, if the fault is taken to lie with (6) or (7), then it must be argued not just that one of these claims is false in the specific case in which x is a certain part of a planarian, but that there is no choice of x on which both will turn out to be true.

⁹I am grateful to Petter Sandstad for drawing this point to my attention.

3. PLURALISM UNSCATHED

Most of us are not monists. One way to reject monism is to be a pluralist: to hold that the substances are many, not one. And one way to be a pluralist is to hold that, necessarily, what is substantial is not the one whole concrete cosmos, but the many concrete mereological simples. In the actual world, these substances might be taken to be the elementary particles, or perhaps the points of spacetime. For our pluralist, these simple entities ontologically depend on nothing else (and certainly not on the whole cosmos). I cannot offer a comprehensive assessment of this form of pluralism here, but I do want to argue that the considerations of this paper, at least, pose no threat to it.¹⁰

Here is why. To mount an argument against this form of pluralism parallel to the one given above against monism, one would have to argue that some simple—some electron e , say—could have had proper parts. If this key premise is granted, pluralism is in trouble. For let w be a world at which e has proper parts. At w , by the pluralist's lights e is not a substance. But since every substance is necessarily a substance, e is not (actually) a substance and so pluralism is false.

But why grant the key premise? It is here that the parallel with the main argument of this paper breaks down. For while it is plausible that our cosmos might have been a proper part of something larger, it is much less clear that some simple might have had proper parts.

One might insist on the key premise on the grounds that, for at least some apparently simple things, we can imagine discovering that they are not in fact simple. We can imagine discovering, for instance, that electrons are composed of some still smaller particles. So even if electrons are in fact simple, they nevertheless could have been composite.

But this is exactly the sort of reasoning that Kripke (1980) showed was problematic. We can imagine discovering that water is not in fact H_2O : perhaps experimental error and bad luck have concealed from us that it is really XYZ. But although we can imagine this, we should not conclude that water could have been XYZ. Or again, we can imagine discovering that cats are automata rather than animals, and yet we should not conclude that cats could have been automata. In just the same way, although we can imagine discovering that electrons are composite, we should not conclude that electrons could have been composite.

We should not conclude this even if we think that in general a scenario's imaginability or conceivability is evidence of its metaphysical possibility. This is a special case. When we imagine water's being XYZ, we imagine water's having an internal structure utterly different from the structure it actually has. While in the actual world water's behavior is explained by its being H_2O , in this imagined scenario its behavior is explained by its being XYZ. Or again, when we imagine cats' being automata, we imagine their

¹⁰I raise some very different considerations against pluralism in Glazier (forthcoming).

having an internal structure completely different from the structure they actually have, and we imagine their behavior being explained not, as it actually is, by their mammalian anatomy, but rather by some artificial mechanism. In just the same way, when we imagine electrons' being composite, we imagine their having an internal structure utterly different from the structure they actually have (or rather fail to have), and we imagine their behavior being explained by this alien structure.

We can allow that there is some epistemic sense in which these scenarios are possible. We can allow that, as Kripke suggests, it might turn out that water is in fact XYZ or that cats are in fact automata. And we can similarly allow that it might turn out that electrons are in fact composite. Put another way, we can allow that we might be wrong in taking these imagined scenarios not to obtain. But supposing that we are not wrong, that these scenarios do not in fact obtain, then there is no reason to think it is metaphysically possible for them to obtain either.

There is, then, no reason to grant the key premise of the argument against pluralism. So although the principle that every substance is necessarily a substance supports an objection to monism, it leaves pluralism unscathed.¹¹

REFERENCES

- Alexander, S. 1920. *Space, Time and Deity*. London: Macmillan.
- Aristotle. 1984. *The Complete Works of Aristotle: The Revised Oxford Translation*. Princeton: Princeton University Press.
- Chisholm, R. M. 1996. *A Realistic Theory of Categories*. Cambridge, England: Cambridge University Press.
- Eddon, M. 2013. Fundamental properties of fundamental properties. In *Oxford Studies in Metaphysics*, eds. K. Bennett and D. W. Zimmerman, Volume 8. Oxford: Oxford University Press.
- Fine, K. 1995. Ontological dependence. *Proceedings of the Aristotelian Society* 95: 269–290.
- Glazier, M. 2023. Is the macro grounded in the micro? *Philosophical Quarterly* 73(1): 105–116.
- Hoffman, J. and G. S. Rosenkrantz. 1994. *Substance Among Other Categories*. Cambridge, England: Cambridge University Press.
- Inman, R. 2017. *Substance and the Fundamentality of the Familiar: A Neo-Aristotelian Mereology*. London: Routledge.
- Johansson, I. 1989. *Ontological Investigations*. London: Routledge.
- Kripke, S. A. 1980. *Naming and Necessity*. Cambridge, Mass.: Harvard University Press.
- Loux, M. 1997. Kinds and predications: An examination of Aristotle's theory of categories. *Philosophical Papers* 26(1): 3–28.
- Lowe, E. J. 1998. *The Possibility of Metaphysics: Substance, Identity, and Time*. Oxford: Oxford University Press.

¹¹I would like to thank Paolo Natali, Petter Sandstad, Jonathan Schaffer, and Jared Warren for helpful comments and discussion. I acknowledge the support of the Swiss National Science Foundation.

- Lowe, E. J. 2006. *The Four-Category Ontology: A Metaphysical Foundation for Natural Science*. Oxford: Oxford University Press.
- McDaniel, K. 2017. *The Fragmentation of Being*. Oxford: Oxford University Press.
- Oderberg, D. S. 2007. *Real Essentialism*. London: Routledge.
- Paul, L. A. 2016. A one-category ontology. In *Freedom, Metaphysics and Method: Themes from van Inwagen*, ed. J. A. Keller, 32–61. Oxford: Oxford University Press.
- Robinson, H. 2021. Substance. In *The Stanford Encyclopedia of Philosophy* (Fall 2021 ed.), ed. E. N. Zalta. Metaphysics Research Lab, Stanford University.
- Rosenkrantz, G. 2012. Ontological categories. In *Contemporary Aristotelian Metaphysics*, ed. T. E. Tahko, 83–93. Cambridge, UK: Cambridge University Press.
- Russell, B. 1927. Substance. *Journal of Philosophical Studies* 2(5): 20–27.
- Schaffer, J. 2009. On what grounds what. In *Metametaphysics: New Essays on the Foundations of Ontology*, eds. D. J. Chalmers, D. Manley, and R. Wasserman. Oxford: Oxford University Press.
- Schaffer, J. 2010a. The internal relatedness of all things. *Mind* 119(474): 341–376.
- Schaffer, J. 2010b. The least discerning and most promiscuous truthmaker. *Philosophical Quarterly* 60(239): 307–324.
- Schaffer, J. 2010c. Monism: The priority of the whole. *Philosophical Review* 119(1): 31–76.
- Schaffer, J. 2013. The action of the whole. *Proceedings of the Aristotelian Society* 87: 67–87.
- Simons, P. 1987. *Parts: A Study in Ontology*. Oxford: Oxford University Press.
- Thomasson, A. 2018. Categories. In *The Stanford Encyclopedia of Philosophy*, ed. E. N. Zalta.
- van Benthem, J. 1983. *The Logic of Time*. Dordrecht: Kluwer.
- Westerhoff, J. 2005. *Ontological Categories*. Oxford: Oxford University Press.
- Wildman, N. 2018. On shaky ground? Exploring the contingent fundamentality thesis. In *Reality and Its Structure: Essays in Fundamentality*, eds. R. Bliss and G. Priest, 275–290. Oxford: Oxford University Press.
- Williamson, T. 2013. *Modal Logic as Metaphysics*. Oxford: Oxford University Press.
- Woolhouse, R. S. 1993. *Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth-Century Metaphysics*. London: Routledge.