

## The compatibility of property dualism and substance materialism

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**Abstract** Several philosophers have argued that property dualism and substance materialism are incompatible positions. Recently, Susan Schneider has provided a novel version of such an argument, claiming that the incompatibility will be evident once we examine some underlying metaphysical issues. She purports to show that on any account of substance and property-possession, substance materialism and property dualism turn out incompatible. In this paper, I argue that Schneider's case for incompatibility between these two positions fails. After briefly laying out her case for incompatibility, I present an account of substance—one that relies on a relational ontology—that makes the combination of substance materialism and property dualism unproblematic. Then I show that even under the theories of substance that Schneider considers—those that rely on a constituent ontology—there still is no incompatibility problem.

**Keywords** Property dualism · Substance materialism · Ontology · Animalism

Substance materialism<sup>1</sup> is the view that human beings are identical to certain physical objects—possible candidates being the whole organism, a proper part of the organism such as the brain or the central nervous system, an object constituted by the organism, or a four-dimensional object whose parts consist of various temporal stages of organisms or brains (of course, this list does not exhaust all the

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<sup>1</sup> I use 'physical' and 'material' (and their cognates) synonymously throughout.

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possible substance materialist views). Property dualism maintains that there are phenomenal properties that are neither identical nor reducible to physical properties but are fundamental, i.e. we would have to include them if we wanted a complete ontological inventory.<sup>2</sup> It is commonly held that property dualism is a more plausible position than substance dualism, which is the view that a human being is an immaterial substance or has an immaterial substance as an essential component.<sup>3</sup> Given the typical rejection of substance dualism and the fact that many consider property dualism to be a viable option in the menu of positions concerning a theory of the mind, the combination of substance materialism and property dualism seems to be a perfect fit.

However some have demurred against this pairing.<sup>4</sup> Recently in this journal, Schneider (2012) has argued that the train cannot stop at the property dualist station; anyone who accepts property dualism must go all the way to accepting some form of substance dualism. If she is right, then substance materialists must reject property dualism, thereby constraining the range of accounts they can espouse concerning mental states. Her argument purports to show that on any theory of substance and property-possession, substance materialism and property dualism turn out incompatible.

In this paper, I argue that Schneider's case for incompatibility between these two positions fails. After briefly laying out her argument, I present an account of substance—one that relies on a relational ontology—that makes the combination of substance materialism and property dualism unproblematic. Then I show that even under the theories of substance that Schneider considers—those that rely on a constituent ontology such as a bundle theory or substratum theory—there still is no incompatibility problem. Thus, property dualists need not reject substance materialism (and vice versa).

## 1 The case for incompatibility

Schneider's incompatibility argument rests on the claim that no matter what account of substance one accepts, the property dualist will have to deny substance materialism.<sup>5</sup> She considers two leading conceptions of substance: the bundle theory and the substratum theory. According to the bundle theory, a substance is merely a

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<sup>2</sup> Some property dualists claim that intentional attitudes are also irreducible and fundamental, see Bonjour (2010) and Horgan (2010). For purposes of this paper, it does not matter whether we include this latter claim or not.

<sup>3</sup> For disagreement, see Lycan (2013), who argues that substance dualism is no worse off than property dualism.

<sup>4</sup> For another argument for their incompatibility (given additional assumptions), see Zimmerman (2010). For replies see Mackie (2011) and Yang (2015).

<sup>5</sup> She makes a similar argument concerning non-reductive physicalism in Schneider (2013), claiming that such a view also requires denying substance materialism. Along with bundle theory and substratum theory, she also considers in that paper a neo-Aristotelian view (which is closer to E.J. Lowe's version of non-Cartesian substance dualism than to other so-called neo-Aristotelian views), an event-ontology, and an independence conception of substance; and she argues that none of these positions helps in making the case for the compatibility of non-reductive physicalism and substance physicalism.

bundle or collection of properties that stand to each other in the relation of compresence (and for our purposes, it does not matter whether these properties are regarded as universals or tropes). For example, consider an ordinary cardboard box. We might say that it has run-of-the-mill parts such as different sheets of cardboard as well as microphysical parts such as the fundamental particles cited by our current physical theories (e.g., quarks and leptons). But the box can also be analyzed or decomposed in terms of its metaphysical constituents. According to the bundle theory, the box has the property of *being cubed* and the property of *being brown* in virtue of having those properties as constituents (whether as literal proper parts or as quasi-mereological “parts”). But there is nothing more to the box (in terms of its metaphysical structure) than the compresence of all the properties we ascribe to the box. So the bundle theory can be regarded as a reductive theory of substance: the box is nothing over and above the collection of its properties.

Let us take this back to the mind problem. According to the bundle theory, the subject of irreducible phenomenal properties has these properties as constituents. If so, it seems that the subject (or the “self”) cannot be a material substance, or at least not wholly a material substance. Consider some of the possible substance-materialist candidates for being the subject of mental properties such as a human organism or a brain. These objects are supposed to be regarded as wholly physical—they are supposed to have no immaterial components. But if we combine the bundle theory with property dualism, the subject of mental properties will not be wholly physical since it possesses non-physical constituents. According to Schneider, we should therefore adopt substance dualism given that the subject of mental properties will not be a wholly physical substance.

The same problem arises even under the substratum theory, which claims that a substance can be analyzed as a collection of properties that are held together by a substratum (or bare particular).<sup>6</sup> Given that substances under such a construal would also have their properties as constituents, the possession of fundamental mental properties yields that the substance is not wholly physical. Thus, the property dualist must reject substance materialism regardless of whether she endorses the bundle theory or the substratum theory. As long as fundamental mental properties are constituents of some subject, that subject will not count as a wholly material substance. Thus, the burden is on the property dualist to provide an account of substance that is compatible with substance materialism.

## 2 Relational ontology and substances

Now I endorse Schneider’s methodology: we ought to examine the metaphysical assumptions at work when sketching a theory of mind. But when we examine the metaphysical assumptions employed by Schneider, it becomes evident that her argument for incompatibility rests on a constituent ontology as opposed to a

<sup>6</sup> Bare substrata/particulars are also generally regarded as playing the role of individuator.

relational ontology (cf. Wolterstorff 1970; van Inwagen 2011). Here is how Michel Loux explains the difference between these two ontologies:

Constituent ontologists take [familiar objects] to have something like a mereological structure. Familiar objects, in their view, are wholes—complexes made up of components or parts, and they have the forms of character they do because their components nonderivatively have the character they do. These components have to be distinguished from a familiar object's commonsense parts...The Relational ontology, by contrast, rejects the framework of constituents and wholes...On this view, the only mereological structure familiar concrete objects exhibit is their commonsense mereological structure. So the only parts an object like Socrates has are things like his hands, feet, heart, and lungs (2005: 89; cf. Loux 2006).

And Lowe distinguishes the two positions as follows:

There is a common presumption that ontologies inspired by Aristotle are 'constituent' ontologies, whereas ones inspired by Plato are 'relational'—a presumption founded on the notion that Aristotle's metaphysics is distinctively 'immanent' whereas Plato's is distinctively 'transcendent'...[and] the immanentist sees the properties of concrete objects as being ingredients of those very objects, whereas the transcendentist sees them as being separate entities to which the objects stand in some special relation of exemplification (Lowe 2012: 229–230).

Constituent ontologies would include the bundle theory and the substratum theory since both accounts treat substances as having an ontological structure, whether in the full-blown mereological sense or in some weaker, analogous relation of parthood or constituency. On the other hand, relational ontologists deny that substances have any ontological structure.<sup>7</sup> A material substance, for the relational ontologist that accepts the existence of separate, independent properties, possesses its properties by way of exemplification (where this "relation"<sup>8</sup> is regarded as not being mereological in any sense whatsoever).

So the problem with Schneider's incompatibility argument is that she considers only constituent ontologies as possible accounts of substance for the property dualist to adopt. But we can instead espouse a relational ontology, thereby avoiding the problem of having non-physical items such as mental properties as constituents. Thus, the possessor of mental properties can be regarded as wholly physical since it has no non-physical part or constituent—rather, it inherits its attributes by exemplifying the relevant properties.<sup>9</sup> Schneider does consider this response in another related context (where she argues that non-reductive physicalists must also

<sup>7</sup> Armstrong would regard such an account as a "blob" theory (1989: 76–77), though "blob" theories also include nominalist theories.

<sup>8</sup> The scare quotes on 'relation' is to indicate the loose sense of that term, especially since some realists do not want to construe exemplification as a genuine relation in order to avoid Bradley's regress.

<sup>9</sup> An anonymous reviewer raises the worry that such a relational (Platonic) view might still be incompatible with substance materialism since such properties will exist outside of spacetime. However, this worry is misguided since substance materialism only requires that we have no parts that are

reject substance materialism), but her dismissal of such a move is too quick. Consider her only remarks concerning this response:

[one] could turn to a notion of substance in which properties are not metaphysical constituents. This may initially strike the reader as a difficult pill to swallow, for properties seem to be part, if not all, of an object's nature. As Armstrong points out, objects are not undifferentiated "blobs"—they seem to be made of features. An ontology that simply took objects to be primitive, denying that they have properties, as some of the cruder nominalist theories have, is unable to account for why objects have the causal powers that they do, or appear to be propertied (Schneider 2013: 147).

I find her response to be a bit odd. First of all, she seems to dismiss relational ontologies as being implausible since it does not account for the possession of properties or the possession of causal powers. But the relational ontologist does not maintain that substances lack properties; rather, the way in which substances possess their properties is merely different from the way it is construed by the constituent ontologist. According to a relational ontology, properties are possessed by way of exemplification, not by way of some mereological-like relation. Of course "cruder nominalist theories" that deny that objects are propertied count as versions of a relational ontology (or at least as a "blob" ontology), but they are not the only ones. The relational ontologist can also adopt a Platonic theory of properties (cf. van Inwagen 2011). Moreover, the object will have the causal powers it does in virtue of having the properties it exemplifies (whether that is because the properties just are causal powers, confer causal powers, etc.—obviously it depends on what theory of powers one accepts).

Secondly, a relational ontology seems no worse off than its rival. In fact, a common charge against a constituent ontology is the need to explain exactly how abstract entities can be constituents or components of concrete particulars. van Inwagen, in his customary fashion, objects to constituent ontologies because he finds such views to be baffling:

My principal reason for repudiating the idea of ontological structure...is a very straightforward one: I do not understand the idea of ontological structure or, indeed, any of the ideas with which one finds it entwined in the various constituent ontologies. I do not understand the words and phrases that are the typical items of the core vocabulary of any given constituent ontology (2011: 393).

I would not go so far as van Inwagen to claim a lack of understanding concerning the ideas and terms employed by the constituent ontologist (I think I understand what some philosophers mean by 'trope', 'substratum', and so forth). But Schneider's dismissal of relational ontology is too hasty given that a constituent ontology has its work cut out in trying to respond to such a charge.

Once we adopt a relational ontology, Schneider's worry no longer arises. What makes a substance a material object is having only material objects as (improper or

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Footnote 9 continued

immaterial. But under the relational ontology, these non-spatial properties are not parts of the substance in any sense of 'part'.

proper) parts, in particular the ones that are attributed to it by commonsense and the empirical sciences. However, a material substance can exemplify both physical properties and mental properties, neither of which is in any sense a constituent of that object. Thus, a relational ontology provides a way of maintaining the compatibility of substance materialism and property dualism.

Schneider's primary argument focuses on the bundle theory and the substratum theory, but she also states that no matter what theory of substance one accepts, the property dualist must reject substance materialism. Before ending this section, I want to consider her reasons for making this claim. According to Schneider, minds and brains have different modal profiles and so are distinct. Considering the thought experiment of zombie worlds—what some regard as a compelling case for property dualism<sup>10</sup>—she concludes that minds and brains are distinct substances, thereby pushing the property dualist toward substance dualism (2012: 67). The problem is that her use of 'mind' is ambiguous. If by 'mind' we mean all of one's mental properties, then the thought experiment does show that the mind is distinct from the brain or any material object. But that does not require abandoning substance materialism, for it has not been shown that the brain or the organism (or whatever physical object you prefer) cannot be the bearer of such properties (or at least such a thought experiment has not by itself shown that to be the case). But if by 'mind' we mean the subject of mental properties, then these thought experiments that advance property dualism do not show that the mind is distinct from the brain (i.e., it does not show that the subject of mental properties is distinct from the subject of physical properties). Additional arguments, such as the Unity Argument<sup>11</sup> (Lowe 2014; Plantinga 2006), would have to be advanced to support that claim; but the zombie argument alone does not make any such conclusions. Thus, her case for incompatibility—regardless of what account of substance one accepts—is not established on the basis of the zombie argument (or other arguments that support property dualism) alone.

### 3 Constituent ontology and animalism

Even if one were to embrace some version of a constituent ontology, whether a substratum or a bundle theory, it can still be shown that there is no incompatibility between substance materialism and property dualism. To make this more perspicuous, I will present a particular account of substance materialism—viz. animalism—to show that no such incompatibility arises. According to animalism, human beings such as you and I are numerically identical to certain biological

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<sup>10</sup> For the *locus classicus* of the zombie thought experiment, see Chalmers (1997).

<sup>11</sup> This argument attempts to show that it is impossible for my body or any of its parts to be the subject of all and only my mental states, and hence I (as the subject of all and only my mental states) am not identical to my body or any of its parts.

organisms (e.g., I am identical to the animal sitting in my chair).<sup>12</sup> This view implies that my essential properties and my persistence conditions do not involve any psychological or mental properties whatsoever, even if such properties are fundamental and irreducible. So my essential properties are wholly physical and my persistence conditions are wholly biological.<sup>13</sup>

Suppose that the bundle theory is true. Given animalism, the only essential properties I have are physical. Of course I currently possess both physical and mental properties and therefore have both physical and mental constituents, but it is only the former properties that are required for me to exist. We can designate the set of properties whose members include all and only my mental states as 'M', and we can designate the set of properties whose members include all and only my physical states as 'P'. According to animalism, all my essential properties will be members of a proper subset of P and no (proper or improper) subset of M will have any of my essential properties as a member. Even if at some later time I no longer instantiate any of the members of M, I will continue to exist provided that I instantiate all the members of P (or at least the ones that comprise my essential properties). For example, if I enter into a persistent vegetative state, I will continue to exist even though I can no longer experience any conscious episode. And this is the case even if we take a subset of M to include fundamental properties. So my having non-physical constituents such as mental properties does not rule out my being a wholly physical substance since I can exist at a time in which I have no mental properties as constituents. Moreover, since animalists hold that I was biologically continuous with an embryo or fetus, there actually was a time in which I existed and had no mental properties.

The acceptance of bundle theory and property dualism, then, does not by itself require that one reject substance materialism. What more is required for Schneider to make her case for incompatibility is to show that mental properties are essential properties of its bearers—but that is a contentious claim since animalists (and perhaps others who would accept a biological or bodily approach to personal identity) would deny that. At the very least, she has not argued for this claim, and so her case for incompatibility is at best incomplete. And if animalism is true, then her claim is false.

Schneider does briefly consider the move of distinguishing essential and accidental properties, but her response is to claim that if we treat phenomenal properties as fundamental, then they would have to be type-individuating—and therefore the bearer of such properties would have to be (at least partly) non-physical (2012: 69–70). But the coherent conjunction of animalism and property dualism serves as a counterexample to that conditional because animalism does not rule out phenomenal properties as being fundamental even though they are not type-individuating. For animalism is open to the question of the nature of mental states and so is compatible with property dualism, reductive physicalism, or some brand of

<sup>12</sup> Adherents of animalism include, *inter alia*, Blatti (2012), Olson (1997), Snowdon (1990), van Inwagen (1990), and Yang (2015).

<sup>13</sup> Though animalism has Aristotelian roots, I take it that it is a distinct position from what Schneider calls the “neo-Aristotelian view” in (2013: 147).

non-reductive physicalism.<sup>14</sup> But whichever account of mental properties the animalist endorses, such mental properties will not be essential for the existence or persistence of the entity that is the subject of those properties—only the possession of the relevant physical and biological properties are necessary for our existence and persistence.

I conclude that Schneider has not established the incompatibility of property dualism and substance materialism. For we can accept a relational ontology (which some consider as a better alternative to a constituent ontology), and no obvious incompatibility arises under that framework. And even under a constituent ontology, animalism provides a framework of coherently conjoining substance materialism and property dualism. Though Schneider claims that wedding the two would form a “disagreeable marriage” or an “unnatural marriage” (2012: 64–73), I hope to have shown that such a marriage is perfectly legitimate.

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## References

- Armstrong, D. M. (1989). *Universals: An opinionated introduction*. Boulder: Westview Press.
- Blatti, S. (2012). A new argument for animalism. *Analysis*, 72, 685–690.
- BonJour, L. (2010). Against materialism. In R. Koons & G. Bealer (Eds.), *The waning of materialism* (pp. 3–24). Oxford: Oxford University Press.
- Chalmers, D. (1997). *The conscious mind*. Oxford: Oxford University Press.
- Horgan, T. (2010). Materialism, minimal emergentism, and the hard problem of consciousness. In R. Koons & G. Bealer (Eds.), *The waning of materialism* (pp. 309–330). Oxford: Oxford University Press.
- Loux, M. (2005). Aristotle on matter, form, and ontological strategy. *Ancient Philosophy*, 25, 81–123.
- Loux, M. (2006). Aristotle’s constituent ontology. In D. Zimmerman (Ed.), *Oxford studies in metaphysics* (Vol. 2, pp. 207–249). Oxford: Oxford University Press.
- Lowe, E. J. (2012). A neo-Aristotelian substance ontology: neither relational nor constituent. In T. Tahko (Ed.), *Contemporary aristotelian metaphysics* (pp. 229–248). Cambridge: Cambridge University Press.
- Lowe, E. J. (2014). Why my body is not me: the unity argument for emergentist self-body dualism. In A. Lavazza & H. Robinson (Eds.), *Contemporary dualism: A defense* (pp. 245–266). New York: Routledge.
- Lycan, W. (2013). Is property dualism better off than substance dualism. *Philosophical Studies*, 164, 533–542.
- Mackie, P. (2011). Property dualism and substance dualism. *Proceedings of the Aristotelian Society*, 111, 181–199.
- Olson, E. (1997). *The human animal*. Oxford: Oxford University Press.
- Olson, E. (2003). An argument for animalism. In R. Martin & J. Barresi (Eds.), *Personal identity* (pp. 318–334). Oxford: Blackwell.
- Plantinga, A. (2006). Against materialism. *Faith and Philosophy*, 23, 3–32.
- Schneider, S. (2012). Why property dualists must reject substance physicalism. *Philosophical Studies*, 157, 61–76.
- Schneider, S. (2013). Non-reductive physicalism and the mind problem. *Nous*, 47, 135–153.
- Snowdon, P. (1990). Persons, animals and ourselves. In C. Gill (Ed.), *The person and the human mind*. Oxford: Oxford University Press.

<sup>14</sup> For Olson’s (2003) Thinking Animals Argument to work, it seems that at minimum mental states must be *nomologically* supervenient on physical states—which I take to be compatible with property dualism.

- van Inwagen, P. (1990). *Material beings*. Ithaca: Cornell University Press.
- van Inwagen, P. (2011). Relational vs. constituent ontologies. *Philosophical Perspectives*, 25, 389–405.
- Wolterstorff, N. (1970). Bergmann's constituent ontology. *Nous*, 4, 109–134.
- Yang, E. (2015). Unrestricted animalism and the too many candidates problem. *Philosophical Studies*, 172, 635–652.
- Zimmerman, D. (2010). From property dualism to substance dualism. *Aristotelian Society Supplementary*, 84, 119–150.