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You Needn't be Simple *Andrew M. Bailey*

Abstract: Here is an interesting question: what are we? David Barnett has claimed that reflection on consciousness suggests an answer: we are simple. Barnett argues that the mereological simplicity of conscious beings—Simplicity—best explains the Datum: that no pair of persons can itself be conscious. In this paper, I offer two alternative explanations of the Datum. If either is correct, Barnett's argument fails. First, there are not any such things as pairs of persons. Second, consciousness is maximal; no conscious thing is a proper part of another conscious thing. I conclude by showing how both moves comport with materialist theories of what we are and then apply them to another anti-materialist argument.

1. The Simple Argument

I have a height. I have mass, I take up space, and I have been seen. These are obvious truths. They are obvious to non-philosophers, at least. And if they are true, I am a material object. For only a material object can have a height, a mass, take up space, and can be seen. I am not alone in having a height, a mass, taking up space, and being seen. So human persons in general are material objects. So materialism about human persons ('materialism'), the thesis that human persons are material objects, is an obvious truth. Or so it seems. Non-materialists, no doubt, will not find these considerations persuasive. They will likely insist that it is only our *bodies* that have mass, that can be seen, and so on. But I think there is something to these considerations. They do offer some *prima facie* support for materialism.

That said, there are other obvious truths that are in tension with materialism. Here is one: I am a *thinking thing*. In particular, there is *something it is like* to be me. I can feel pleasure and pain. I can experience the sonic texture of a Pink Floyd masterpiece, the rich morning odor of





the Puget Sound, and the sight of sunlight reflecting off its surface. I am, in short, conscious.

It is not obvious that material objects can be conscious; indeed, many have thought that it is obvious that material objects *cannot* be conscious.¹ In light of this, the materialist has two challenges to meet. The first is to provide a positive account of how it is that material beings can be conscious.² The second is to rebut arguments purporting to show that they cannot. In this paper, I take up the second task.

Simplicity is the thesis that it is (broadly logically or metaphysically) impossible for something with proper parts to be conscious. If Simplicity is true, materialism is in trouble. Materialism says that humans are material objects, and the most plausible candidates (cerebral hemispheres, brains, nervous systems, organisms, etc.)—material things that we might be—have proper parts.³ But we are conscious. So if Simplicity is true, we are not any of *those* things, and thus not material objects at all.

David Barnett has recently argued for Simplicity.⁴ Barnett's argument goes like this. Take any pair of conscious beings:

... it is impossible for the pair *itself* to be conscious. Consider, for instance, the pair comprising you and me. You might pinch your arm and feel a pain. I might simultaneously pinch my arm and feel a qualitatively identical pain. But the pair we form would not feel a thing.⁵

No pair of conscious beings—no thing composed of two conscious beings—could itself be conscious. That is the Datum. And the best explanation of the Datum, Barnett says, is Simplicity. Pairs of people

¹ See, e.g., Plantinga (2007): 105-118.

² Thus Kim (2005): 7, 'The problem of consciousness is to answer the following question: How can there be such a thing as consciousness in a physical world, a world consisting ultimately of nothing but bits of matter distributed over spacetime behaving in accordance with physical law?'

³ See Zimmerman (2003) for discussion of various materialism-friendly candidates; I shall ignore the view that we are material simples.

⁴ Barnett (2008) and especially Barnett (2010).

⁵ Barnett (2010): 161, original emphasis.

cannot be conscious because nothing with proper parts can be conscious. There are competing explanations of the Datum, though. They include:

Number. Pairs of people lack a sufficient number of parts to be conscious.

Relation. Pairs of people lack parts capable of standing in the right sorts of relations to each other and their environment to be conscious.

Nature. Pairs of people lack parts of the right nature to be conscious.

Structure. Pairs of people lack the right kind of structure to be conscious.

Each of these fails, Barnett says. So Simplicity is the best explanation of the Datum. Thus, the Simple Argument.

Simplicity is inconsistent with (any plausible form of) materialism. I shall in the sequel discuss the Simple Argument with an eye to showing that the materialist need not be worried by it. But others too should take notice. For Simplicity conflicts with many theories of human nature, theories of what we are (given that we are substances and that we are conscious). Aristotelian hylomorphism has it that you and I—like other substances—are compounds of form and matter. We are each composed of form and matter. If this means that you and I each have, in *some* sense, proper parts (and it seems it does), then Simplicity conflicts with Aristotelian hylomorphism. More generally, Simplicity conflicts with socalled constituent ontologies according to which every substance has proper constituents or parts (whether those parts are properties, tropes, universals, or bare particulars). The proponent of Simplicity must thus reject the bundle and bare particular theories of substance. Finally, Simplicity also conflicts with union dualism, according to which we each have an immaterial part and a material part (other forms of dualism those according to which we are wholly immaterial beings—are quite consistent with Simplicity).

Thus the import of the Simple Argument. Is it sound? The Datum is plausible. I shall not, at any rate, try to resist it here. But the argument is not sound. For there are other equally good explanations of the Datum, each consistent with materialism. To those explanations I now turn.

2. Elimination

Person-pairs have persons as their parts. I shall suppose that a person-pair is a mereological fusion of two persons. I mean nothing mysterious by 'mereological fusion'. A fusion of some objects is just something that is overlapped by anything overlapping those objects. More precisely: y is a fusion of the xs = df a thing overlaps y just in the case that it overlaps one or more of the xs (where x is a proper part of y = df is a part of y but is not identical to y, and where x overlaps y = df some one thing is a part of both x and y). I do not take it as given that mereological fusions are a special kind of thing (for one, everything is a fusion of itself). Nor shall I take it as given that mereological fusions have their parts essentially (and in my view, a great many mistakes may be avoided by jettisoning this assumption).

Says Elimination: there are not—and could not be—any person-pairs. And elimination is to the Datum as atheism is to the problem of evil. Things that do not exist cannot be conscious. Thus, the Datum.

Let me elaborate. Person-pairs—if such there be—are things with parts; they are fusions of persons. But there are principles governing when there is a fusion of some objects. No correct principles of this kind—no correct answer to the so-called *special composition question*—yields the result that there are or could be person-pairs. So the best explanation for the Datum is that there are not—and could not be—any person-pairs.

⁶ These definitions are standard; see van Inwagen (1994): 207.

⁷ van Inwagen (2006).

⁸ The special composition question (roughly): 'when do some xs compose a y? '. See van Inwagen (1990): 21-32.

This explanation is extreme. But it is not an explanation that may be ignored. One reason why it should not be ignored is that a wide variety of philosophers working on composition have concluded that things like person-pairs do not exist.⁹

I have claimed that if there are person-pairs, they are fusions of persons. Some may here balk, claiming that names for person-pairs are, in fact, plural referring expressions. If that is right, one may speak of person-pairs without commitment to mereological fusions of persons. It would be perverse to think of such things as mereological fusions of persons as I have done, the thought goes; there is just no need for such *exotica*. There need not be any one thing that is a person-pair for 'the person-pair of Leopold and Marian' to refer; the expression *refers collectively* to Leopold and Marian.

This suggestion is a non-starter. It is just Elimination in another guise, or perhaps a nice linguistic supplement to Elimination; and *that* will not do the proponent of the Simple Argument any good. Indeed, it gives the proponent of Elimination a two-fold explanation of the Datum. Person-pairs cannot be conscious since there could not be any such things (that is the metaphysical part of the explanation). Here is the linguistic part of the explanation; it *sounds odd* to say 'the person-pair of Leopold and Marian is in pain' because predicates expressing conscious properties (e.g., 'being in pain') are *monadic* and thus cannot be properly said of two things. It is a sort of grammatical mistake to say of a person-pair that it is conscious. It would not be a mistake, note, to say of a

⁹ More than a few philosophers agree that there could not be person-pairs, each for strikingly different reasons. Dorr (2005) and Sider (forthcoming) deny that *anything* could have proper parts. Hoffman and Rosenkrantz say that some things compose another just in the case that either those things are functionally united or they and all their parts are rigidly bonded (1997): 80-90, 128-134. Horgan and Potrč (2008) maintain that the only concrete being is the *cosmos*, and that the *cosmos* has no proper parts. Merricks (2001) says that only things with non-redundant causal powers could have proper parts. Unger (1979) says that no objects answering to ordinary sortals like 'person' could exist (from this it follows, I take it, that nothing could have two persons as its two parts). And van Inwagen (1990), finally, argues that only *organisms* can have proper parts. This is as motley a crew of philosophers as any, but each of them is committed to Elimination.

person-pair that *they are conscious*, for that would just be to ascribe a monadic property to each member of the person-pair. This is the difference between 'Leopold and Marian is conscious' and 'Leopold and Marian are conscious'.

Objection. Elimination does not explain the Datum. For even if there could not be such things as person-pairs, it still seems that this Conditional Datum is true: if there *were* such things as person-pairs, they could not be conscious. Elimination does not explain the Conditional Datum, and thus is at best a shallow explanation of the Datum.¹⁰

Reply. Explanation by elimination is a reasonable philosophical tool. Consider the following example. Some have thought that there are puzzles associated with vagueness. On the one hand, it seems that there could be no fact about the matter about whether some atom is part of, say, a statue. On the other, it is odd that a thesis like *the atom is part of the statue* could fail to be metaphysically settled. What is to say?

Those who deny the existence of composite objects—mereological nihilists—have an answer. They can explain—or explain away—this puzzle. Says the nihilist: there are not—and could not be—any composite statues. All views that imply otherwise are false. Nihilism thus solves all such puzzles of vagueness, and this counts in its favor. Consider this reply: 'Yes, but if there were statues, then there would be puzzles of vagueness, so your nihilism has explained nothing'. This reply is completely unpromising. Nihilism in fact solves these problems of vagueness. The claim that if nihilism were false, there would be puzzles in need of explanation is wholly irrelevant. If solving problems of vagueness counts in favor of a philosophical theory, then nihilism's solution to those problems counts in its favor, even if it could not solve those problems if false. The same goes for Elimination and the Datum. Of course Elimination could not solve problems about the Datum or provide a satisfactory explanation of the Datum, if false. But this is wholly irrelevant to the question of what Elimination could do, if true.

¹⁰ Thanks to David Barnett for discussion on this point.

For the record, I endorse Elimination. But I think we can do better. It would be nice if one could reject Simplicity—and be a materialist without commitment to the impossibility of person-pairs. For note that simply saying there are not in fact any person-pairs will not do. Elimination must be modally loaded; for the Datum is the modal thesis that person-pairs—wherever in modal space they may be—cannot be conscious. It is, I concede, far from obvious that Elimination is true. Believers in unrestricted composition (roughly: for any xs, there is a fusion of the xs) are committed to the existence of person-pairs. And some friends of restricted composition have reason to believe in them too. Person-pairs are, after all, not entirely unfamiliar objects. It is reasonable to think that we have words for such things ('couples', 'pairs', 'groups', 'committees', 'teams') and quantify over them ('There is this great couple I want you to meet'). And while paraphrases of such apparently ontologically committing sentences may be available, their ubiquity should give us pause before accepting Elimination.

A dialectical point is in order. I have not here argued that Elimination is true and from that thesis argued that a premise of the Simple Argument is false. Instead, I have pointed out that Elimination—a thesis Barnett does not so much as consider—explains the Datum. I thus provide an undercutting defeater to Barnett's claim that only Simplicity can explain the Datum. If explaining the Datum counts in favor of a philosophical view (as Barnett has assumed), then this could be used as an argument for Elimination, I suppose. But that is not my purpose here; my main goal is rather to show that the Simple Argument is unsound.

3. Maximality

A property F is maximal, let us say, just in the case that necessarily, for any x that is F, there is no y such that x is a proper part of y and y is F.¹¹ In this section, I propose that being conscious is a maximal property. The same goes for the various conscious properties like being in pain and being

¹¹ This definition will do for my purposes. But see Sider (2001) for further discussion.

appeared to redly. And it is this feature of conscious properties that explains the Datum. I shall first offer some considerations on behalf of Maximality, the thesis that conscious properties are maximal properties. Then I will show how Maximality explains the Datum and answer some objections.

Properties expressed by many of our ordinary sortals are maximal. A human organism is sitting in my chair as I write these words (let us call it Org). And there is exactly one human organism seated in that chair. Take the fusion of all my parts save my left pinky (let us call it Orgminus; on the definition of 'fusion' I have given above, Org-minus is a proper part of Org); is that thing a human organism? If Org-minus is a human organism, then there are two human organisms seated in my chair: Org and Org-minus. But surely this is as absurd a result as any. The moral to draw, I think, is either that Org-minus does not exist, or that Org-minus is not a human organism. These are two routes to the right result: that there is exactly one human organism in my chair. But why? Why does not Org-minus count as a human organism? Surely if Org had lost a pinky, Org would have been a human organism; so does not Org-minus count as one? One obvious answer is that being a human organism is a maximal property. That being a human organism is maximal makes sense of these data nicely. Human-organism-shaped things that are proper parts of human organisms just are not human organisms themselves, whatever else they may be.

I have given an example of a property expressed by an ordinary sortal ('being an organism') and argued that it is maximal. The same goes for many ordinary sortals. I own exactly one car—a Honda CRV; so CRV-minus is not a car; so *being a car* is a maximal property. And so on. As Ted Sider notes: 'Maximality is everywhere. Very large proper parts of houses, tables and chairs, rocks and mountains, persons and cats, are not themselves houses, tables, chairs, rocks, mountains, persons or cats. These properties are all maximal.'¹²

¹² Sider (2001): 357.

Being conscious, too, is maximal, and so are other conscious properties (like being in pain). Nothing that is a proper part of another conscious thing can have these properties. Given that so many of our ordinary sortals express maximal properties, this should come as no surprise. And we may argue for Maximality much in the way that we argued for the maximality of being a human organism. At least, we may so argue on the assumption of materialism. For there is exactly one being sitting in my chair that has a slight itching sensation in the right foot; that being is me. If the fusion of all of my parts save my left pinky had such a conscious property, what is obviously true (that I am the only being in my chair with a slight itching sensation) could not be so. But even if materialism is false, it seems that being conscious must still be maximal. It is I that now experiences itching in just this way, and nothing else; so no proper part of my soul (or proper part of whatever other immaterial thing the immaterialist says I am) itches. Maximality offers a principled explanation of these data.

Maximality explains the Datum. Why cannot a person-pair be conscious? Because person-pairs have proper parts (namely, persons) that are themselves conscious. The fusion of Leopold and Marian is *not* conscious because Leopold and Marian *are*. There is nothing it is like to be a fusion of Leopold and Marian precisely because there is something it is like to be Leopold.

One might try to counterexample Maximality like this: Doctors remove my failed digestive system and replace it with a live, paralyzed, chihuahua. The chihuahua's heart and lungs are removed and its circulatory system is connected to my own. It seems *possible* that a chihuahua could survive such a procedure, and that it might remain conscious throughout. But then it seems possible that some conscious being (the hapless chihuahua) is a proper part of another (me).¹³

I reply as follows: For the case to succeed, the chihuahua must be both conscious and a part of me. And it is not clear how to describe the

¹³ Thanks to an audience at the Central APA for discussion on this point.

case to ensure both results (note that being inside of me does not obviously suffice for being a part of me). But I need not rest my reply on such considerations. For it is not open to the proponent of Simplicity to propose counterexamples to Maximality because the proponent of Simplicity cannot consistently deny Maximality. For Simplicity entails Maximality. If no conscious beings have proper parts (as Simplicity maintains), then no conscious beings have conscious beings as proper parts (as per Maximality). My dispute with the proponent of the Simple Argument is not over the truth of Maximality, then. It is over whether Maximality adequately explains the Datum. And Maximality looks pretty good on that count. For 'Maximality' seems to be at least as good an answer as 'Simplicity' to the question of why the Datum is true.

Maximality falls under what Barnett calls 'Nature', for according to Maximality, the *kind* of things that make up a pair is relevant to whether the pair itself is conscious. Maximality is a species of Nature because Maximality says a thing cannot be conscious if it is a proper part of something that is conscious; nor could a conscious thing have as a proper part another thing that is conscious. Given Maximality, whether a person-pair could be conscious is in a part a matter of whether its parts are conscious. Barnett has a quite general reply to appeals to Nature, and thus to my appeal to Maximality. Says Barnett of Nature:

Clearly this cannot be the whole explanation either. For it does not matter whether the pair we consider is a pair of people, a pair of dogs, or a pair of inanimate objects, say carrots or neurons. In every case, we have the intuition that the pair itself cannot be conscious.¹⁴

I reply as follows: First, consider Lefty and Righty, the left and right halves (supposing there are such things) of a human organism. Could the pair comprised of Lefty and Righty be conscious? It is not obvious that it could not. For it is not obvious that human organisms cannot be conscious; and the pair comprised of Lefty and Righty is a human organism (suppose that Lefty and Righty are attached in the right way).

¹⁴ Barnett (2008): 315.

This case suggests that Barnett's list of examples is incomplete. For some two things (like carrots or dogs), it is obvious that their pair could not be conscious. But for some other two things (like Lefty and Righty), it is not obvious that their pair could not be conscious. The nature of those things would, then, appear to at least *sometimes* be relevant. Second, whether Org-minus is conscious or not is obviously relevant to whether Org is conscious. At least, if Org-minus is conscious and there is exactly one conscious being in my chair, then Org is *not* conscious. The moral to draw from this is that the *nature* of a thing's parts is indeed relevant to whether that thing is conscious. The general principle that Barnett here appeals to would rule that whether Org-minus is conscious is irrelevant to whether Org is conscious. But that is the wrong result. The nature of a thing's parts is clearly relevant in *this* case to whether that thing is conscious.

One might further object that Maximality is itself in need of explanation, and that only Simplicity will do. It is sensible to ask *why* consciousness is maximal; and it further seems that Simplicity—if true—explains Maximality. At least, Simplicity *obviously entails* Maximality; if no conscious being can have proper parts, then no conscious being can have conscious proper parts. Does this show that the real and *ultimate* explanation of the Datum is Simplicity and not Maximality?

I reply: It does not. First, it is not obvious that Maximality *needs* an explanation. It is a necessary truth, if true at all, and we are often inclined to accept necessary truths even when unexplained; why should this be any exception? (And if my interlocutor is free to insist that Simplicity is a necessary truth not in need of explanation, why should Maximality be any different?) Second, I have given *something* of an explanation of maximality; for I have shown how it fits nicely with other obvious truths (e.g., that I am the only thing with just this itching sensation).¹⁵

¹⁵ Maximality may be marshalled to do other theoretical work too. While he does not use it in defense of materialism, Sider (2003) does invoke Maximality to resist Merricks' (1998) argument against the doctrine of microphysical supervenience.

A dialectical point—similar to the one made above concerning Elimination—is in order. Though I have argued that Maximality is quite plausible, I have not argued that Maximality is true and from that thesis argued that a premise of the Simple Argument is false. Instead, I have pointed out that Maximality—a thesis that is independently plausible and that Barnett does not so much as consider—explains the datum. I thus provide an undercutting defeater to Barnett's claim that only Simplicity can explain the Datum. If explaining the datum counts in favor of a philosophical view (as Barnett has assumed), then this could be used an argument for Maximality, I suppose. But that is not my purpose here; my main goal is rather to show that the Simple Argument is unsound.

4. Conclusion

If I am right about all of the above, there are two routes a materialist may take in resisting the Simple Argument. She may endorse Elimination, and deny that there could be person-pairs. Or she may endorse Maximality. If either route is correct, the Simple Argument is unsound and provides no reason to reject materialism.

But my results extend beyond the unsoundness of the Simple Argument. The two moves I have advocated have application elsewhere; they may be deployed to deflect other arguments against materialism. I shall first sketch two kinds of materialism and then give an example of what I have in mind.

Materialism about human persons comes in forms both promiscuous and chaste. The chaste materialist conjoins her materialism with a modest ontology of the material world. She believes in organisms and perhaps tables, but not in a fusion of Art Garfunkel's hair and my iMac. She gives a restricted answer to the special composition question. The promiscuous materialist will have none of that. She believes in everything her chaste cousin believes in and more besides (like a fusion of Art Garfunkel's hair and my iMac). Her answer to the special composition question is unrestricted.

Consider now this argument against materialism:

There is exactly one being thinking my thoughts. Materialism cannot accommodate this truth. For if materialism is true, then I am a material object (e.g., a brain, a nervous system, or an organism). Whichever of these things I am, it seems that there is something very much like me but slightly smaller. Suppose I am an organism. Then there is something very much like that organism, overlapping me on all parts but one atom, say; let's call it MiniMe. Is MiniMe a thinking thing? It seems that it is; surely one atom can't make the difference between something's being a thinking thing and not. But what thoughts would MiniMe be thinking but just the ones I am? So if materialism is true, then there isn't, after all, exactly one being thinking my thoughts. So much the worse for materialism.

Thus the Thinking Parts Argument.¹⁶ There is much to say here; but my point will be simple: there are moves that rebut the Thinking Parts Argument, moves parallel to the ones that I have argued rebut the Simple Argument (Elimination and Maximality). And each move finds a home in one of the two forms of materialism.

The first of these moves is already rehearsed in the literature. According to Extended Elimination (naturally enough, an extension of Elimination), the Thinking Parts Argument is unsound because there are not such things as MiniMe. While the various things arranged living-organism-wise compose one object (me), some items properly among those things do not compose anything at all. There are things arranged-MiniMe-wise, as it were, but they do not compose MiniMe, and indeed do not compose anything at all. Extended Elimination is a consequence of some restricted theories of composition (e.g., van Inwagen's). Thus, chaste materialism pairs nicely with this eliminativist reply to the Thinking Parts Argument. But many, unsurprisingly, find this consequence of chaste materialism difficult to accept. Could it really be that one atom makes the difference to whether some things compose

¹⁶ For more treatment of this argument and related issues, see *inter alia* Olson (1995), Olson (2007): 78-84, and van Inwagen (1990): 173-179.

¹⁷ For the details, see van Inwagen (1990): 213-227.

¹⁸ See Vander Laan (2010) for an argument that moves like Extended Elimination conflict with intuitive *locality* constraints on theories of composition.

something or not? To many, it seems not. Luckily, proponents of materialism need not resort to Extended Elimination in answering the Thinking Parts Argument. For Maximality suggests another route of response.

Extended Maximality, let us say, is the thesis that, *all* mental properties are maximal. Extended Maximality pairs nicely with promiscuous materialism. The promiscuous materialist grants the existence of things like MiniMe (and many others besides). But she has in Extended Maximality the resources to deny the alleged pernicious consequence—that MiniMe is thinking. MiniMe exists all right, but he is a proper part of another thing—me—that does think. So, the story goes, the Thinking Parts Argument does not show that materialism conflicts with the obvious truth that there is exactly one being thinking my thoughts. Extended Maximality is not without its costs (though see above for mitigating replies to the obvious objections). But it is not without its benefits either; it supplies an answer to the Thinking Parts Argument without resort to a restricted theory of composition.

Let us take stock. The Simple Argument poses a challenge to many theories of human nature. I have argued that it is unsound by presenting two materialist-friendly ways out, two explanations of the Datum that are compatible with materialism. Each has some degree of plausibility. One pairs nicely with chaste materialism, the other with promiscuous materialism. I have also argued that similar moves can be made in the case of the Thinking Parts Argument. I conclude that materialists of all stripes have reason to rejoice.¹⁹

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¹⁹ Thanks to anonymous referees, Alex Arnold, David Barnett, Scott Hagaman, Al Plantinga, Mike Rea, Brad Rettler, Alex Skiles, Jeff Speaks, Leopold Stubenberg, Cathy Sutton, Peter van Inwagen, and an audience at the Central APA for comments and criticism.

References

- Barnett, David (2008). 'The Simplicity Intuition and Its Hidden Influence on the Philosophy of Mind' *Noûs* 42: 308-335.
- _____ (2010). 'You Are Simple' in *The Waning of Materialism* (George Bealer and Robert Koons, eds). Oxford: Oxford University Press.
- Dorr, Cian (2005). 'What We Disagree About When We Disagree About Ontology', in *Fictionalism in Metaphysics*, Mark Kalderon (ed). Oxford: Oxford University Press.
- Hoffman, Joshua and Gary Rosenkrantz (1997). Substance: Its Nature and Existence. London: Routledge.
- Horgan, Terrance and Potrč, Matjaž (2008). Austere Realism: Contextual Semantics Meets Minimal Ontology. Cambridge: MIT Press.
- Kim, Jaegwon (2005). *Physicalism, or Something Near Enough*. Princeton: Princeton University Press.
- Merricks, Trenton (1998). 'Against the Doctrine of Microphysical Supervenience', *Mind* 107: 59-71.
- _____(2001). Objects and Persons. Oxford: Oxford University Press.
- Olson, Eric (1995). 'Why I have no Hands', Theoria 61: 182-197.
- _____ (2007). What Are We? Oxford: Oxford University Press.
- Plantinga, Alvin (2007). 'Materialism and Christian Belief', in *Persons: Human and Divine*, Peter van Inwagen and Dean Zimmerman, eds. Oxford: Oxford University Press.
- Sider, Theodore (2001). 'Maximality and Intrinsic Properties', *Philosophy and Phenomenological Research* 63: 357-364.
- _____ (2003). 'Maximality and Microphysical Supervenience', *Philosophy and Phenomenological Research* 66: 139-149.
- _____ (forthcoming). 'Against Parthood', Oxford Studies in Metaphysics, Vol. 8.
- Unger, Peter (1979). 'There Are No Ordinary Things', Synthese 41: 117-154.
- Vander Laan (2010). 'A Relevance Constraint on Composition', *Australasian Journal of Philosophy* 88: 135-145.
- van Inwagen, Peter (1990). Material Beings. Ithaca: Cornell University Press.
- (1994). 'Composition as Identity', Philosophical Perspectives 8: 207-220.

_____ (2006). 'Can Mereological Sums Change Their Parts?' Journal of Philosophy 103, 12.

Zimmerman, Dean (2003). 'Material People' in *The Oxford Handbook of Metaphysics* (Michael J. Loux and Dean Zimmerman, eds): 489-526. Oxford: Oxford University Press.