Andrew M. Bailey

Published online: 13 November 2010

© Springer Science+Business Media B.V. 2010

Abstract There are predicates and subjects. It is thus tempting to think that there are properties on the one hand, and things that have them on the other. I have no quarrel with this thought; it is a fine place to begin a theory of properties and property-having. But in this paper, I argue that one such theory—bare particularism—is false. I pose a dilemma. Either bare particulars instantiate the properties of their host substances or they do not. If they do not, then bare particularism is both unmotivated and false. If they do, then the view faces a problematic—and, I shall argue, false—crowding consequence.

Keywords Bare particulars · Thin particulars · Substratum · Bundle theory

1 The target view

I will first offer a few warmup remarks and then state bare particularism. Substances are, let us say, *concrete, particular* individuals. I have nothing to say by way of clarifying what it is to be a substance. But here is a list of candidates, things that (if such there be) are substances: tomatoes, angels, dogs, garden hoses, electrons, planets, and persons.

There are competing theories of substance. A constituent ontology is a view according to which every substance has an internal structure. In particular: every substance has proper constituents.

A. M. Bailey (⊠) 100 Malloy Hall, Notre Dame, IN 46556, USA

e-mail: abailey1@nd.edu



¹ 'Constituent ontology' originates in Wolterstorff (1970).

 $^{^2}$ x is a proper constituent of y just in the case that x is a constituent of y and y is not a constituent of x. Here and in the sequel I shall use 'constituent' as a catch-all for any member or non-mereological part.

According to the *bundle theory* of substance, substances have as constituents their properties (and nothing else). A tomato has as constituents its redness, juiciness, roundness, tomatohood, and the like. And indeed, the tomato just *is* (in some sense) the bundle of its properties. On the bundle theory, a substance has a property by having that property as a constituent.

One might object here that this is all nonsense. Things cannot, says the objection, have constituents aside from their mereological parts (constituents that obey mereological axioms like, say, the reflexivity, antisymmetry, and transitivity of parthood). The only notion of internal 'structure' that we've got is that of ordinary parthood. If that's not what's at issue here, then we're just trading in bull. I am sympathetic to this objection. I do not think I have much of a grip on non-mereological constituency (perhaps others do). But I want to give my opponents a fair chance. So I shall try in this paper to give an objection to bare particularism that does not turn on such petering out.³

Like the bundle theory, bare particularism maintains that substances have their properties as constituents.⁴ But bare particularism adds that there's something else too. In addition to its properties, every substance has as a constituent a *bare particular* (a.k.a., 'thin particular' or 'substratum'), which *instantiates* those properties. There are properties, and there are property-subjects too.

Bare particularism, then, is the conjunction of two theses:

- 1. THE CONSTITUENT THESIS. Every substance has at least two kinds of non-mereological (proper) constituents: its properties and its bare particular (property-subject).
- THE HAVING THESIS. Every substance has its properties by having as constituents properties that are instantiated by another of its constituents: its bare particular (property-subject).

Various bare particularists have disagreed about the proper motivation for the view and a few of the details. They disagree, for example, on whether bare particulars stand in an instantiation *relation* (or merely a 'non-relational tie') to properties, and just how it is that bare particulars do their 'individuating' work. But they agree on the above two theses; so their conjunction shall be my target.

⁴ Bare particularism is a minority view. But it has had its share of prominent defenders: Alston (1954), Armstrong (1989, 1997), Russell (1948), and recently, Sider (2006). Other defenses include: Allaire (1963, 1965), Baker (1967), Bergmann (1947, 1964, 1967), Casullo (1982), Davis and Brown (2008), Magelhaes (2007), Martin (1980), Moreland (1998, 2001), Moreland and Pickavance (2003), Oaklander and Rothstein (2000), and Pickavance (2009). For critical treatment, see citations in note 5 and Chappell (1964), Davis (2003), and Mertz (2001, 2003). For comparison of the bundle theory and bare particularism, see Benovsky (2008) and Morganti (2009).



³ For one nice expression of this objection, see van Inwagen (2001, pp. 1–2). But note that some have stated the target view in explicitly mereological terms, such as Sider (2006, pp. 387–388); see also Paul's (2002) mereological formulation of the bundle theory.

2 The classic objection

Many have complained about bare particulars by means of what I will call the 'Classic Objection'. The Classic Objection goes like this: bare particulars would be things without any properties at all. And that's both nonsensical and impossible. So much the worse for bare particularism.⁵

Consider a red, round, and juicy tomato t. It is a substance. So—on bare particularism—it has as a proper constituent a bare particular; let's call that thing b(t). We may put the Classic Objection as a question about b(t). Does b(t) have properties? Some bare particularists have answered negatively. Thus this version of the theory:

Bare particulars have no properties. There is nothing absurd about something's having no properties. Talk of a *substance* without properties is, of course, problematic. But bare particulars are not substances. They're constituents of substances, and as such need not have any internal character.⁶

This response is straightforward. But it is a complete non-starter. Say I: *everything* has properties. I shall not here argue for this claim, but it seems to me to be true. And it's not just substances that have properties. Properties have them too. And so do bare particulars—if such there be. If bare particularism has it that something does not have *any* properties, then so much the worse for the theory. Luckily for the theory, most of its proponents have not insisted on such an implausible move.

Bare particularists have not been happy with the Classic Objection. Most have gone out of their way to demonstrate that bare particulars do, indeed, have properties, though they have also qualified this claim some rather strange ways. Some have suggested that bare particulars merely lack *essential* properties:

Particulars are nude in that they have no natures, that is, they are not necessarily connected to any specific property or set of properties. A nude

⁷ Objection. The claim that *everything* has properties is plausible only on an abundant theory of properties. And that's bad. Reply. Fair enough. Luckily, my main complaint with the view (to be explicated below) does not assume any particular theory of properties. To the extent that the Classic Objection assumes an abundant theory of properties and that this assumption is problematic, my new objection to the theory is a superior one.



⁵ Most begin discussion of bare particularism and the Classic Objection by referencing Plato's receptacles, Aristotle's 'prime matter', and Locke's substrata 'I know not what'. The usual citations: *Timaeus* 48c–53c, *Metaphysics* 1029a20–33, *Essay* II, xxiii, Sect. 2. The Classic Objection shows up in many discussions of bare particularism; some of these include Anscombe (1964, p. 38), Armstrong (1989, pp. 94–96), Campbell (1990, p. 9), Davis (2004, pp. 267–268), Hoffman and Rosenkrantz (1994, pp. 46–52), Loux (1978, pp. 149–152), Lowe (2003, p. 86), Mertz (2001, p. 48), Sellars (1952, 1963, p. 282), Quilter (1985), and Simons (1994, pp. 565–567).

⁶ This is a hard bullet. But sometimes bare particularists seem willing to bite it. Thus Bergmann (1967, p. 24), 'Bare particulars neither are nor have natures. Any two of them are not intrinsically but only numerically different. That is their bareness.' Bergmann says in his (1964, p. 153) that bare particulars are 'only numerically different', a remark Magalhaes takes to imply that Bergmann's bare particulars lack properties altogether (2007, p. 125).

particular has no nature, and is to be distinguished from the naked particular which has no properties.⁸

Armstrong has suggested that bare particulars are bare because they are neither identical to nor—'taken apart from their properties'—do they have them as constituents:

The thin particular is a, taken apart from its properties (substratum). It is linked to its properties by instantiation, but it is not identical with them. It is not bare because to be bare it would have to be not instantiating any properties. But though clothed, it is thin.

However, this is not the only way that a particular can be thought of. It can also be thought of as involving its properties. Indeed, that seems to be the normal way that we think of particulars. This is the thick particular. But the thick particular, because it enfolds both thin particulars and properties, held together by instantiation, can be nothing but a state of affairs...

Therefore, in one sense a particular is propertyless. That is the thin particular. In another sense it enfolds properties within itself. In the latter case it is the thick particular and is a state of affairs. I think that this answers the difficulty raised by the Antinomy of Bare Particulars [the Classic Objection].

Others have suggested that bare particulars have properties in a different way than things of other ontological kinds have properties. The suggestion is, I take it, that there is more than one exemplification or instantiation relation:

...distinguish two senses of being 'bare' along with two different ways something can have a property. In one sense, an entity is bare if and only if it has no properties in any sense. Bare particulars are not bare in this sense... When a substance has a property, that property is 'seated within' and, thus, an expression of the 'inner nature' of the substance itself... By contrast, bare particulars are simple and properties are linked or tied to them.' 10

A substratum might have underlain quite different properties from those which it in fact does and still be the same substratum; since it includes no properties, its identity does not depend on being associated with one set of universals rather than another. But a concrete individual could not possibly fail to include any of its properties and still be exactly the same individual which it is; its self-identity depends on its constituents.

A bare particular is called "bare", not because it comes without properties, but in order to distinguish it from other particulars like substances and to distinguish the way it has a property (F is tied to x) from the way, say, a substance has a property (F is rooted within x).

Alston makes a similar move in his (1954, pp. 257-258):

We would certainly ordinarily say that the pencil exemplifies the color yellow, in addition to the ultimate substratum of the pencil, if any, exemplifying the color... we could now proceed to draw various distinctions between the two [exemplification] relations. For example the first relation is external, the second internal... In terms of this distinction we can characterize a "bare" particular



⁸ Baker (1967, p. 211). See also Alston (1954, p. 257):

⁹ Armstrong (1989, p. 95).

¹⁰ Moreland and Pickavance (2003, pp. 3-4). See also Moreland (1998, p. 257):

I find the above moves wildly obscure. I do not understand what it would be for some particular to be literally bare of essential properties. I do not understand what it is to consider something 'taken apart from' its properties. I do not understand what it would be for there to be two exemplification relations. Indeed, exemplification is mysterious enough with just *one* such relation!

3 The new objection

Luckily, we need not unravel such mysteries here. And my objection to bare particularism shall not turn on my own inability to understand the dark sayings of its defenders. For there is a more pointed variation of the Classic Objection that I shall now press (the 'New Objection'). We need not ask of bare particulars whether they have properties; I suggest that we instead ask whether they have the ordinary properties of their host substances. The New Objection is indeed new. The Classic Objection assumes that bare particulars would be things lacking properties altogether (an assumption challenged by many bare particularists cited above). The New Objection does not make this contentious assumption and is thus equipped to move the debate forward in an interesting way. The New Objection grants that bare particulars might (as its proponents maintain) indeed have properties but suggests that we may still ask *which* properties bare particulars have. And in pursuing this question we will, I shall argue, uncover a substantial cost of the theory.

Consider again our tomato t and its bare particular b(t). Is b(t) red, round, and juicy? Let us call this query in its more general form the:

QUESTION. Do bare particulars have the ordinary properties of their host substances?

There are two options. They correspond, unsurprisingly, to affirmative and negative answers to the Question. Both options, I shall argue, are untenable. So the theory is doomed.

As seen above, some bare particularists have suggested that there are two ways of having properties. Since the Question involves the having of properties, these theorists will find my Question ambiguous. To these theorists, I pose my Question as follows. There is some sense in which t instantiates redness, roundness and juiciness. It is, after all, red, round, and juicy. Call that sense 'regular-old-instantiation'. Is b(t) red, round, and juicy? Does it, that is, stand in the relation (or 'non-relational-tie') of regular-old-instantiation to redness, roundness, and juiciness?

¹¹ I assume here that if 'instantiates' is ambiguous between two ways of having a property, so also the 'is' of predication is ambiguous. If 'is' is not ambiguous, then I need not say more on this matter. For bare particularists like Moreland will simply accept that bare particulars are not red or round or juicy. They will, in other words, accept a negative answer to the Question and hence fall prey to the first horn of the New Objection.



Footnote 10 continued

as something which underlies universals but includes non; the latter feature constituting its "bareness" as constrated with a concrete individual.

Suppose a negative answer to the Question. Thus b(t) is not red, round, and juicy; it does not instantiate those properties. Sure, it is *tied to* or *related to* redness, roundness, and juiciness in interesting ways. But it does not exemplify them. So b(t) is not itself red, round, or juicy. Similarly, b(t) does not exemplify *being a tomato*, so b(t) is not a tomato.

This is problematic. Bare particularism offers, among other things, a theory of property-having. This is the role of bare particulars; they are supposed to *instantiate* the properties of their host substances. They are those constituents of substances that have properties. They are property-subjects. But on a negative answer to the question, b(t) does not exemplify *being a tomato*, even doing just that is precisely the ontological work b(t) was introduced by the bare particularist to do. There is, to put the point modestly, a tension here. Says Alston:

We must ask concerning any situation involving this relation (e.g., *a* exemplifying Greemness) what the relata are. One of them is a universal. What is the other? It will obviously not do to reply—a grum (defined as an instance of greemness); for this would amount to saying that the relatum in question is that which stands in the instancing relation to Greemness; true enough but hardly enlightening. It still leaves open the question—what is it that stands in the instancing relation to Greemness? ...the only alternative left appears to be a 'bare' particular, or what I prefer to call a substratum. Once we see the need for supplying an entity to which the universal involve bears the relation of being exemplified, we can see that only a *bare* particular would do the job.¹²

I have posed a Question. A negative answer will not do. For to give a negative answer to the Question is to deny the Having Thesis. It is, in other words, to abandon bare particularism. Consider again our tomato t and its bare particular b(t). t is red, round, and juicy. It has as constituents redness, roundness, and juiciness (as per the Constituent Thesis). But its properties are not its only constituents; it has as a constituent a property-subject too, b(t). And it has redness, roundness, and juiciness as properties because those properties are instantiated by b(t) (as per the Having Thesis). A standard motivation for bare particularism is the thought that we *need* bare particulars to be there to have properties. Properties do not just hang out; they are instantiated by things, and bare particulars are what we posit to do be those things. A negative answer to the Question undermines this motivation for bare particularism, leaving unanswered the question of what—if anything—instantiates the properties of t. But it also implies that bare particularism is false. For bare particularism is true only if bare particulars instantiate the properties of their host substances (as per the Having Thesis).

A negative answer to the Question is not promising. We'd best turn to a positive one. Magalhaes agrees:

But at another level, those who impugn bare particulars on these grounds [the Classic Objection] are guilty of wholly ignoring the actual idea that has been expressed by those who championed such things. It's simply not true, as others

¹² Alston (1954, p. 255). For similar remarks, see Allaire (1963, pp. 1–2), Benovsky (2008, pp. 175–176), Lowe (2003, pp. 85–86), Russell (1948, p. 97), Sider (2006, p. 389).



have also noted, that bare particulars are bare in this sense...far from being propertyless, the bare particular is *precisely that which has properties*¹³

We'd best say that bare particulars have properties, and indeed that they have *all* the ordinary properties of their host substances. So b(t) is red, round, and juicy. First, a representative of the positive answer. Then some arguments against it. Says Sider:

Thought about this issue must begin with the obvious and flat-footed response: no, thin particulars are not bare. They have properties. For what it is to have properties, according to the substratum theory, is to instantiate universals.

Since I am venting, let me belabor the point. If the objection is that thin particulars have no properties, then the objection is just wrong. Thin particulars have properties. They really do! Thin particulars may be red, round, juicy, *whatever*.¹⁴

Sider seems to be here relying on the following:

PRINCIPLE. For every property F and ordinary substance x, if x has F then b(x) has F.

This Principle is, I take it, the force of 'whatever' in the above quotation. Sider's thought fits well with the Having Thesis and the motivations for bare particularism discussed above. And Principle is, I think the thing to say in light of the Classic Objection and the New Objection. For suppose Principle is true. Then bare particulars are not really all that *bare*. They are not like Locke's mysterious 'I know not what.' They are as rich and teeming with properties as the substances in which they move and have their being. So what could the problem with them be? Are not such beings ontologically innocent?

They are not.

Overpopulation is far from ontologically innocent, and Sider's bare particulars overpopulate this already-crowded world. I offer in defense of this claim the following:

THE CROWDING ARGUMENT. Consider *t*. There's only one tomato in its vicinity. There's only one round, juicy, red thing nearby. If our tomato's bare particular (property-subject) is also round, juicy, and red, then there are two such things nearby, or our tomato's bare particular (property-subject) is in fact identical to the tomato. So there is a crowding problem (too many tomatoes!). That, or we must deny the Constituent Thesis or Principle. If we deny the Constituent Thesis, then we've denied Bare Particularism. If we deny Principle, then we've nothing plausible to say against the New Objection (negative answers to the Question have already been ruled out). Thus, the conjunction of the

¹⁴ Sider (2006, p. 388), emphasis added. This statement of Sider's is not obviously compatible with his suggestion that bare particulars are points of spacetime. For critical discussion, see Schmidt (2008).



¹³ Magalhaes (2007, p. 124), emphasis added.

Constituent Thesis and Principle is false. Either way, bare particularism is false. ¹⁵

Objection. There are two ways of having properties. One way of having a property is by being tied to it. Another way is by having as a constituent a bare particular so tied to a property. So it's not that there are two things that instantiate redness, say. Rather, it's that there's one thing, t, that instantiates₁ redness, and another thing b(t) that instantiates₂ redness.

Reply. I wish this strange view would not keep popping up. But it cannot save bare particularism from the Crowding Argument. For if the relation (or non-relational tie) that ties bare particulars to properties is properly said to be a 'way of having properties', then it must obey at least this rule: if x is tied to F, then x is (for some 'is' of predication or other) F. The same goes for the relation that substances bear to their properties. Suppose that b(t) instantiates redness, juiciness, and tomatohood in a different way than t does. No matter. For it still follows that there are two things—t is not, as per the Constituent Thesis, identical to b(t)—that are (for some predicative sense of 'are') red, juicy tomatoes. But there are not two such tomatoes. Not in the neighborhood of t, at any rate. So the Crowding Argument still poses a problem.

Objection. The Crowding Argument seems to operate on a principle of simplicity, urging us not to posit extra red, round, and juicy things in our ontology. All other things being equal, this is right. But all other things are not equal. For we need these red, round, juicy bare particulars to do work for us; they earn their keep by being property-subjects.

Reply. I have not motivated the Crowding Argument by appeal to simplicity. I motivate it instead with the simple thought that there's only one tomato in the neighborhood of *t*. That this is true of some tomato is, I say, as obvious a fact as any. Whether or not bare particulars earn their keep is thus not relevant here. There just are not all that many tomatoes.

And its gets worse. For it overpopulate the world with things of every kind, *including we thinking human persons*. I have mental properties and have the property of sitting in a particular chair and typing. So by the Constituent Thesis and Principle, there's something (sitting in my chair, typing on my keyboard) distinct

¹⁶ What else would it be to instantiate properties, except to stand in a relation (or non-relational tie) that follows this rule? Note, for example, that Sider himself seems to accept this consequence, moving freely between 'thin particulars have properties. They really do!' to 'Thin particulars may be red, round, juicy...' He moves freely, that is, between talk of *x's having property F* to talk of *x's being F*.



 $^{^{15}}$ I here assume that if x is a proper constituent of y that x is distinct from y. The assumption is one the bare particularist should here grant: if bare particulars (each a proper constituent of some substance) are not distinct from their host substances, then the theory loses any interest.

I have put the Crowding Argument in terms of tomatoes. But any kind of thing will do. Since writing his (2006), Sider has converted to mereological nihilism, according to which there are not any composite objects. So I suppose he now denies the existence of tomatoes. See Sider (2010). This does not harm my argument: simply replace 'tomato' in the Crowding Argument with a sortal Sider believes in (e.g., 'electron'), while replacing 'red', 'juicy', and 'round' with predicates expressing properties that apply to, e.g., electrons.

from me that has exactly the mental properties I do, thinking all of the things I am thinking. Similarly, I have the property *being a substance*. So there's something distinct from me that's a substance. These are, I say, not just *costly* consequences. They're false.

Objection. Sometimes we learn—by accepting premises and the conclusions that follow from them—of new entities. The lesson to learn from the Crowding Argument is not that Principle or the Constituent Thesis is false. Rather, it's that there are twice as many tomatoes as we thought there were. This consequence is not so hard to swallow, since it does not imply that there are twice as many *substances* as we thought there were. There are just twice as many *things* (the point extends to more than just tomatoes, of course). And for what it's worth, each of these things overlaps (by being a proper constituent of) something we already believe in; so it's not *that* extravagant.¹⁷

Reply. This is hard to swallow. Believe it if you can, but I cannot. And I can make one more attempt to show that the view is untenable. F is a definite property, let us say, iff: if anything x has F, than anything that has F is identical to x. We will need an example substance; I volunteer. I shall assume that I have some definite property. But from this assumption, and from the conjunction of Principle and the Constituent thesis, we may derive a contradiction:

- 1. For every substance x, there is some property-subject associated with x, but distinct from x, call it b(x). (from the Constituent Thesis)
- 2. I am a substance. (premise)
- 3. So I have a property-subject, b(me), such that b(me) is not identical to me. (from 1 and 2)
- 4. So for every property F, if I have F then b(me) has F. (from 3, Principle)
- 5. For some definite property F, I have F. (premise)
- 6. So for some definite property F, b(me) has F. (from 4, 5)
- 7. So for some definite property F, b(me) has F and I have F (from 5, 6)
- 8. So b(me) is identical to me (from 7, definition of 'F is a definite property')
- 9. So b(me) is both identical to and not identical to me. (from 3, 8)

What's to say? I am a substance, if anything is. And surely there's *some* definite property I have. I am, for example, the thinking thing in my room. I instantiate the definite property *being the thinking thing in the room*. So Premise (2) and (5) are not up for grabs. And the argument concluded with a contradiction; something must

But an increase in the number of objects we recognize as existing is a familiar consequence of accepting mereology. It is not that when we embrace mereology we discover many new entirely distinct (or, one might say, *entirely* different) objects; rather, we discover many new partly overlapping objects, i.e., we discover proper parts, which are objects in their own right.



¹⁷ Compare Paul (2002, pp. 592–593):

^{...}Does not my theory of logical objects imply that when we count the number of objects in the world, we will find far more objects than we ever dreamt we had? The easy answer to this question is yes—we have more objects than we common-sensically thought we had.

give. So either the Constituent Thesis or Principle is false. But if the Constituent Thesis is false, then bare particularism is false. And if Principle is false, then cannot give an affirmative answer to the Question, and are left where we started. 18

4 Conclusion

To sum things up. I have advanced a New Objection to bare particularism. Bare particulars instantiate the ordinary properties of their host substances, or they do not. If they do not, then bare particularism is both unmotivated and false. If they do (and this is the only really viable answer to the Question), then we are faced with absurd consequences (too many tomatoes, or a contradiction) or we must deny a critical tenet of bare particularism. We may deny Principle, and thus have nothing plausible to say to the Question. Or we may deny Constituent Thesis and in so doing, deny bare particularism.

What, then, should we say about bare particulars? That's a good question. And here's my answer. There aren't any.

Acknowledgments Thanks to the van Plantingwagena reading platoon, an anonymous referee, audiences at Biola, Calvin, and Syracuse, and to Jeff Brower, Sam Grummons, James Lee, Mike Rea, and Ted Sider for helpful comments and conversation. Special thanks to Alex Skiles for convincing me to write this paper, and to Brad Rettler for good coffee and great conversation.

References

Allaire, E. B. (1963). Bare particulars. Philosophical Studies, 14, 1-8.

Allaire, E. B. (1965). Another look at bare particulars. Philosophical Studies, 16, 16-21.

Alston, W. P. (1954). Particulars-bare and qualified. Philosophy and Phenomenological Research, 15, 253–258.

Anscombe, G. E. M. (1964). 'Substance', *Proceedings of the Aristotelian Society*, supplementary volume 38, reprinted in *Metaphysics and the Philosophy of Mind* (vol. 2 of *The Collected Papers of G. E. M. Anscombe*). Minneapolis: University of Minnesota Press.

Armstrong, D. M. (1989). Universals: An opinionated introduction. Boulder, CO: Westview Press.

Armstrong, D. M. (1997). A world of states of affairs. Cambridge: Cambridge University Press.

Baker, R. (1967). Particulars: Bare, naked, and nude. Noûs, 1, 211-212.

Benovsky, J. (2008). The bundle theory and the substratum theory: Deadly enemies or twin brothers? *Philosophical Studies*, 141, 175–190.

Bergmann, G. (1947). Russell on particulars. Philosophical Review, 56, 59-72.

Bergmann, G. (1964). Logic and reality. Madison, WI: University of Wisconsin Press.

Bergmann, G. (1967). Realism: A critique of Brentano and Meinong. Madison, WI: University of Wisconsin Press.

Campbell, K. (1990). Abstract particulars. Oxford: Blackwell.

Casullo, A. (1982). Particulars, substrata, and the identity of indiscernibles. *Philosophy of Science*, 49, 591–603.

Chappell, V. C. (1964). Particulars re-clothed. Philosophical Studies, 15, 60-64.

Davis, R. B. (2003). Partially clad' bare particulars exposed. Australasian Journal of Philosophy, 81, 534–548

¹⁸ If Principle and the Constituent Thesis are supposed to be *necessary* truths, then we may run the above argument with weaker premises. We need only assume that *possibly*, some substance has a definite property. The contradiction would still follow.



Davis, R. B. (2004). The brave new bare particularism. The Modern Schoolman, 81, 267-273.

Davis, R. B., & Brown, D. S. (2008). A puzzle for bare particulars? Axiomathes, 18, 49-65.

Hoffman, J., & Rosenkrantz, D. S. (1994). Substance and other categories. Cambridge: Cambridge University Press.

Loux, M. (1978). Substance and attribute. Dordrecht: D. Reidel.

Lowe, E. J. (2003). Individuation. In: M. J. Loux & D. W. Zimmerman (Eds.), The Oxford handbook of metaphysics. Oxford: Oxford University Press.

Magalhaes, E. (2007). Time for Bergmann's bare particulars'. In: C. Hochberg, R. Huntelmann, C. Kanzian, R. Schantz, & E. Tegtmeier (Eds.), Ontology and analysis: Essays and recollections about Gustav Bergmann. Paris/Piscataway, NJ: Ontos Verlag Transaction Books.

Martin, C. B. (1980). Substance substantiated. Australasian Journal of Philosophy, 58, 3-10.

Mertz, D. W. (2001). Individuation and instance ontology. Australasian Journal of Philosophy, 79, 45–61.

Mertz, D. W. (2003). Against bare particulars: A response to moreland and pickavance. Australasian Journal of Philosophy, 81, 14–20.

Moreland, J. P. (1998). Theories of individuation: A reconsideration of bare particulars. *Pacific Philosophical Quarterly*, 79, 251–263.

Moreland, J. P. (2001). Universals. Montreal and Kingston: McGill-Queen's University Press.

Moreland, J. P., & Pickavance, T. (2003). Bare particulars and individuation. Australasian Journal of Philosophy, 81, 1–13.

Morganti, M. (2009). Are the bundle theory and the substratum theory really twin brothers? *Axiomathes*, 19, 73–85.

Oaklander, L. N., & Rothstein, A. (2000). Loux on particulars: Bare and concrete. The Modern Schoolman, 78, 97–102.

Paul, L. A. (2002). Logical parts. Noûs, 36, 578-596.

Pickavance, T. (2009). In defense of 'partially clad' bare particulars. *Australasian Journal of Philosophy*, 87, 155–158.

Quilter, J. (1985). What has properties? Proceedings of the Russellian Society, 10, 32-49.

Russell, B. (1948). An enquiry into meaning and truth. London: Allen and Unwin.

Schmidt, M. (2008). On spacetime, points, and bare particulars. Metaphysica: International Journal of Ontology and Metaphysics, 9, 69–77.

Sellars, W. (1952). Particulars. Philosophy and Phenomenological Research, 13, 184-199.

Sellars, W. (1963). Science, perception, and reality. London: Routledge & Kegan Paul.

Sider, T. (2006). Bare particulars. *Philosophical Perspectives*, 20, 387–397.

Sider, T. (2010). Against parthood. http://tedsider.org/papers/nihilism.pdf.

Simons, P. (1994). Particulars in particular clothing: Three trope theories of substance. *Philosophy and Phenomenological Research*, 54, 553–575.

van Inwagen, P. (2001). *Ontology, indentity, and modality*. Cambridge: Cambridge University Press. Wolterstorff, N. (1970). Bergmann's constituent ontology. *Not*s, 4, 109–134.

