

WHAT IS CONSTITUENT ONTOLOGY?

Michael J. Loux

ABSTRACT

This article focuses on one style of ontological explanation – what the author calls the constituent strategy. Very roughly, a proponent of the constituent approach attempts to explain the character of a familiar particular by way of underived sources of character that function as something like parts, components or constituents of the particular. Then, the author examines some contemporary versions of the constituent approach and considers objections frequently raised against them. The claim is that these accounts are unable to accommodate certain facts: (1) that familiar particulars persist through change; (2) that familiar particulars have some of their properties essentially and others merely contingently; (3) that familiar particulars are concrete individuals; and (4) that numerically diverse particulars can have all and only the same properties.

PART I

A central focus of metaphysical concern is what Russell calls the character of familiar particulars,¹ that is, the fact that individual material objects, plants, animals, and human beings possess properties, fall under kinds, and enter into relations. This talk of possessing properties, falling under kinds, and entering into relations is supposed to be prephilosophical discourse; it is supposed to be the sort of talk we engage in outside the philosophy seminar room. But there is a metaphysical project to which this sort of talk is supposed to give rise – that of providing a theoretical account of the individual facts making up what Russell calls the character of ordinary objects.

The project is, of course, a very old one. By the time of Plato and Aristotle, the general structure of the project is pretty well worked out. Its underlying assumption is that familiar particulars have this or that form of character derivatively. As Aristotle puts it, an ordinary object has a given form of character *kat' allo* (in virtue of something else).² So ordinary objects derive their character from other things, and the objects from which they derive their character are or include things that have their own distinctive forms of character nonderivatively

¹ B. RUSSELL, *Problems of philosophy* (Oxford: Oxford University Press, 1912), 92.

² ARISTOTLE, *Metaphysics* VII, 6, 1031 b 13.

or, as Aristotle again puts it, *kath' hauto* (in their own right).³ The metaphysical project is just that of telling the proper story about how this character derivation works itself out.

Aristotle tells us that there two different and opposed stories we can tell here.⁴ According to the first, the underived sources of character are things that exist, as he puts it, "apart from" or "in separation from" the sensible particulars whose character they underwrite; and a sensible particular has a given form of character by entering into some sort of tie or connexion to the appropriate bearer of underived character. On the second story, the privileged bearers of character are immanent in familiar sensible particulars, immanent in the sense of being something like parts, components, or ingredients of familiar particulars, and a familiar particular has the various forms of character it does because it has the appropriate underived bearers of character as parts, components, or ingredients.

So there are supposed to be two different strategies for explaining the facts making up the phenomenon of character. Those strategies differ in their accounts of familiar particulars. Defenders of Aristotle's second strategy attribute to ordinary objects something like a mereological structure, a mereological structure over and above their commonsense mereological structure. As they see it, ordinary objects are composites or wholes made up of parts or components other than their familiar parts or components, and the claim is that it is in virtue of what we can call its metaphysical parts that a familiar object has the character it does. Defenders of Aristotle's first strategy, by contrast, deny that familiar particulars have this sort of metaphysical structure. They restrict the parts of ordinary object to their commonsense parts. Nonetheless, they insist that ordinary objects stand in a variety of significant nonmereological connexions or ties to things that have character *kath' hauto* or nonderivatively; and they tell us that in virtue of doing so those objects have whatever character they do.

In discussing the metaphysical project of character explanation, Nicholas Wolterstorff identifies the two strategies we meet in Aristotle. He dubs them the 'relational' and 'constituent' approaches.⁵ I will stick with Wolterstorff's labels, but a couple of cautionary notes are in order. First, proponents of Aristotle's first strategy are, by and large, uncomfortable talking of relations here. As they see it, talk of the relations into which an object enters is talk about its character; but, then, they worry that the appeal to relations in the account of character will be regressive. Accordingly, they speak of the nonrelational ties, connexions, or nexus between ordinary objects and the transcendent sources of character. The suggestion that there is a metaphysically significant contrast between relational

³ *Ibid.*

⁴ See *Met.* III, 1, 996a15; *ibid.* 3, 998a21–23; *ibid.* XII, 6, 1080a37–b².

⁵ See N. WOLTERSTORFF, "Bergmann's Constituent Ontology", *Nous* 4 (1970): 109–134; and "Divine Simplicity", *Philosophical Perspectives* 5 (1991): 531–552.

and nonrelational hookups is likely to arouse suspicions. At least, it arouses Wolterstorff's suspicions; and while himself a defender of the nonimmanentist strategy, he insists that any regress to which the strategy might give rise is nonvicious.⁶ Second, it is not as though what Wolterstorff calls the constituent strategy does without relations in its account of familiar particulars. On that strategy, the various items that count as constituents of a familiar particular are related (or, if one prefers, tied) to one another in ways that help explain the structure and nature of the whole they make up; and obviously defenders of that strategy must concede that a whole or composite stands in something like mereological relations to the underived sources of character that count as its constituents. Neither sort of relation or tie is the kind of relation or tie at work in what Wolterstorff calls his relational strategy, but they are relations or ties nonetheless.

It is easy to give examples of the two strategies to which Aristotle and Wolterstorff call our attention. Although the later Russell (the Russell of *Inquiry into Meaning and Truth* and *Human Knowledge: Its Scope and Limits*) endorses an immanentist or constituent approach, the Russell of *The Problems of Philosophy* seems inclined to a relational account of character. He tells us that where familiar particulars agree in character, "they all participate in a common nature or essence", and he insists that the nature in question "cannot itself exist in the world of sense". Indeed, it exists "nowhere and nowhen".⁷ Russell, of course, is not alone. Among recent ontologists, P. F. Strawson, Roderick Chisholm, and Alvin Plantinga all seem to favour a relational account;⁸ and, as I have already mentioned, Wolterstorff himself does as well. On the other hand, it is difficult to understand the metaphysical discussions of Locke, Berkeley, or Hume without construing them as exercises in constituent ontology; and more recent proponents of the constituent approach include, besides the later Russell, Gustav Bergmann, David Armstrong, Hector Castañeda, and, most recently, Laurie Paul.⁹ But, of course, these examples of relational and constituents ontologists aren't the ones that initially come to mind.

⁶ N. WOLTERSTORFF, *On Universals* (Chicago: University of Chicago Press, 1973), 101–104.

⁷ RUSSELL, *Problems of Philosophy*, 92.

⁸ See P. F. STRAWSON, *Individuals* (London: Methuen, 1959), chapters 5 and 6; R. CHISHOLM, "Properties and States of Affairs Intentionally Considered", in *Person and Object* (La Salle, IL: Open Court, 1976); and A. PLANTINGA, *The Nature of Necessity* (Oxford: Oxford University Press, 1974).

⁹ See B. RUSSELL, *An Inquiry into Meaning and Truth* (London: Allen and Unwin, 1940); B. RUSSELL, *Human Knowledge: Its Scope and Limits* (London: Allen and Unwin, 1948); G. BERGMANN, *Realism. A critique of Brentano and Meinong* (Madison: University of Wisconsin Press, 1967); H. CASTAÑEDA, "Thinking and the Structure of the World", *Philosophia* 4 (1974): 3–40; D. ARMSTRONG, *A World of States of Affairs* (Cambridge: Cambridge University Press, 1997); L. PAUL, "Logical Parts", *Nous* 36 (2002): 578–596; and L. PAUL, "Logical Parts", *Nous* 36 (2002): 578–596.

The paradigms of the two approaches are found in the work of their two great sources – Plato and Aristotle.

While appropriate, the mention, in this context, of Aristotle and Plato can lead us to misunderstand the opposition between our two strategies. We tend to associate the labels ‘Platonism’ and ‘Aristotelianism’ with two opposed views in the debate over universals, the contrast being that between metaphysical theories that reject and those that endorse what is called the Principle of Instantiation, the claim that necessarily every universal is instantiated. But our opposition is not restricted to views about universals. One can deny the existence of universals altogether and still count as a relational or constituent ontologist. Certainly, contemporary trope theorists want to construe themselves as constituent theorists, but they typically deny that there are such things as universals; at least, they typically deny that among the ontologically fundamental items there are such things as universals. If we understand tropes in the standard way, then we will agree that trope theorists endorse the reality of properties or attributes; but note: one can endorse either of our two ontological strategies while denying that there are properties or attributes, even when understood trope-theoretically as particulars. Aristotle gives examples here. He characterises Plato’s successor, Speusippus, as a relationist who construes numbers as separated substances responsible for the character of familiar sensibles,¹⁰ and Aristotle takes the theories of his materialist predecessors, both those who endorse a gunk ontology and those who believe in physical simples, as exercises in constituent ontology.¹¹ Presumably, we are to understand these early materialists as construing the relevant material constituents as prior to any properties they might induce.

But even when we restrict ourselves to philosophers who accept the existence of universals, it is not as though the Principle of Instantiation is what divides relational and constituent theorists. It is true that constituent ontologists regularly deny the possibility of uninstantiated universals. Think of Aristotle, Bergmann, and Armstrong.¹² It is likewise true that relational ontologists typically insist on the existence of uninstantiated or possibly uninstantiated universals. But neither pairing is mandatory. If one thinks that constituent ontologists must accept the Principle of Instantiation, then one is likely confusing the existence and instantiation of a universal. Constituent ontologists are committed to holding that for a first order universal to be instantiated is for it to be a constituent in some familiar particular; but that commitment does not preclude uninstantiated

¹⁰ See *Met.* XIII, 6, 1080b 15–16, for what is almost certainly a reference to Speusippus.

¹¹ See, for example, *Met.* III, 3, 998a 30–31, where Empedocles functions as a stand-in for all the materialists.

¹² See ARISTOTLE, *Categoriae*, 11, 14b 7–14; G. Bergmann, *Realism. A critique of Brentano and Meinong* (Madison: University of Wisconsin Press, 1967), 43 and 88; D. Armstrong, *Universals* (Boulder, CO: Westview, 1989) 75–82.

universals. Nor is it the case that accepting the existence of uninstantiated universals makes one a relationist. It is rather supposing that for a thing to instantiate a universal is for it to enter into some *sui generis* nonmerological tie or connexion (participation, say, or exemplification) to an underived source of character. One can concede the existence of uninstantiated universals without entertaining that supposition. But not only can a constituent ontologist reject the Principle of Instantiation; it is also possible for a relational metaphysician to endorse the Principle of Instantiation and deny the possibility of uninstantiated universals. Consider a metaphysician who couples a relational account where universals are transcendent sources of character with a general doctrine of self-predication for universals. We are often told that the middle Plato, at least, was a philosopher who held precisely that combination of views.

In any case, it is a mistake to identify our opposition with an opposition over the nature of universals. Another mistake here is to suppose that the two strategies Aristotle and Wolterstorff point to are mutually exclusive and collectively exhaustive. In fact, they are neither. There are treatments of character that are neither relational nor constituent. I am thinking of the views of what I have elsewhere called austere nominalists. They reject the assumption underlying our target project, insisting that we take the facts expressed by our prephilosophical character ascriptions to be metaphysically primitive. The Quine of “On What There Is” is one obvious example.¹³ Furthermore, a genuinely substantive account of those same facts can instantiate both of our strategies. Consider a theory that construes tropes as constituents of familiar objects responsible for their character, but takes those tropes themselves to be instantiations of what we might call trope types, where those types are, as Aristotle puts it, “separate from” familiar sensible particulars. But notice: such a theory manages to exemplify both strategies only because it is a two step theory. At each stage of explanation, the ontologist must choose between the two explanatory strategies.

PART II

So there is a genuine opposition here. The philosopher seeking a substantive explanation of the character of familiar particulars seems forced to choose between some version of the immanentist or constituent strategy and some version of the relational strategy. When he points to the two strategies, Wolterstorff tells us that the latter is currently the dominant approach. He is, I think, correct in this. Over the whole history of metaphysics, the constituent approach is arguably the more popular; but in recent years, the relational approach has occupied centre stage. Its influence is felt in virtually every compartment of contemporary philosophy, where talk of exemplifying properties contingently or necessarily,

¹³ See W. V. O. Quine, “On What There Is”, in *From a Logical Point of View* (Cambridge, MA: Harvard University Press, 1954), 10ff.

possibly or actually provides the accepted framework for the formulation of just about any philosophical issue.

As we have seen, there are constituent theorists actively at work on the current metaphysical scene, but not only are they in the minority; their efforts are typically viewed with puzzlement or suspicion, if not downright disdain. One seldom meets with an explicit statement of the grounds of the prejudice here. But if probed, contemporary metaphysicians will suggest that the constituent approach is, at bottom, incoherent. Its central claim, they will say, embodies something like a category mistake. The claim is that the items that have character nonderivatively are components or parts of familiar particulars. Those items, however, are abstract entities. Familiar particulars, by contrast, are concrete objects; and, we are told, no concrete object can be composed of or made out of abstract entities.

More than anything else, I think, this line of thinking explains why contemporary metaphysicians have been so ready to endorse the relational approach. To endorse the opposing immanentist or constituent approach, the thinking goes, is to make the category mistake just set out: it is to endorse the incoherent idea that abstract entities can be parts, ingredients, or components of concrete particulars. But as influential as this line of argument may be, it is not altogether convincing. It is just not clear that the distinction between abstract and concrete will bear the weight the line of argument assigns it. For the objection at work here to succeed, we need some principled way of drawing the distinction so that the things philosophers want to call abstract turn out abstract and those they want to call concrete turn out concrete. We need, that is, criteria that give the right results; but, further, those criteria must be such that by reflecting on them we can see why a concrete entity cannot have abstract entities as components or constituents.

But what are the criteria here? We might suppose that an entity is concrete iff it has a spatial location and that it is abstract iff it is not concrete.¹⁴ One difficulty is that this way of drawing the distinction either gives the wrong results or presupposes controversial philosophical claims that are independent of the issues at hand. Traditional dualists tell us that minds are nonspatial beings; but, then, our criteria force us to hold either that individual minds are abstract entities or that materialism is true. One might try to repair things by saying that an object is concrete iff it either has a spatial location or is made up of temporal parts and abstract iff not concrete.¹⁵ Minds have temporal parts, don't they? But do they all? Orthodox theists will certainly deny this; but, then, the revised criterion either

¹⁴ See P. SIMONS, "Particulars in Particular Clothing", *Philosophy and Phenomenological Research* 54 (1994): 553–575 for this sort of criterion.

¹⁵ See E. J. LOWE, "The Metaphysics of Abstract Objects", *Journal of Philosophy* 92 (1995): 509–524; and chapter 10 of E. J. LOWE, *The Possibility of Metaphysics* (Oxford: Oxford University Press, 1998) for an account along these lines.

gives the wrong result by holding that at least one person is an abstract entity, or it forces us to hold an independently controversial claim – atheism. And atheism isn't the only controversial claim associated with the revised criterion. The account works for finite mental substances only if they really do have temporal parts; but presentists, philosophers who insist that only what exists now or in the present is real, will deny that there are such things as temporal parts. So the account works only if some form of four dimensionalism is true.

But there is a further difficulty, one that arises for both ways of drawing the distinction. Properties, we may assume, are abstract entities. Unfortunately, many constituent ontologists will insist that the properties constitutive of a familiar particular have a spatial location: they are where the particular is.¹⁶ And these same constituent ontologists will typically go on and say that a single property can wholly and completely occupy more than one spatial location at a time – indeed, as many locations as the familiar particulars it goes to constitute. Of course, the relationists who want to accuse constituent theorists of a category mistake will deny that properties have spatial location; but if the issue of spatial location is one that, in general, divides constituent and relational ontologists, the assumption that properties have no spatial location can hardly play a role in an argument designed to adjudicate between the two approaches.

In any case, the contrast between abstract and concrete is problematic. Some philosophers respond to the problems by resorting to lists or inventories. As Peter van Inwagen suggests, the motivating theme is much like that Strawson and Grice expressed with regard to the analytic/synthetic distinction.¹⁷ Even if we cannot identify criteria for drawing it, the distinction gets vindicated by the fact that we tend to agree about which items fall under the respective headings. Properties, propositions, and relations are all abstract; whereas, persons, plants, animals, and atoms are all concrete. I have sympathy with this move. Nonetheless, I cannot resist pointing out that there is less agreement about the classification than sanguine philosophers might have us believe. Trope theorists, for example, disagree about whether tropes are abstract or concrete; but most trope theorists want to deny that, in the final analysis, there is anything besides tropes.¹⁸ Likewise, metaphysicians disagree about the status of events: some think they are concrete; others, abstract.¹⁹ Still, there are ontologists who insist that events exhaust the

¹⁶ See, for example, A. DONAGON, "Universals and Metaphysical Realism", *Monist* 47 (1963): 211–247.

¹⁷ See P. VAN INWAGEN, "A Theory of Properties", *Oxford Studies in Metaphysics* 1 (2005): 107–138.

¹⁸ D. C. WILLIAMS, "Elements of Being". Part One. *Review of Metaphysics* 7 (1953): 3–18; and P. SIMONS, "Particulars in Particular Clothing", *Philosophy and Phenomenological Research* 54 (1994): 553–575 take opposing sides on the status of tropes.

¹⁹ See, for example, D. DAVIDSON, "Events as Particulars". *Nous* 4 (1970): 25–31; and R. M. CHISHOLM, *Person and Object* (La Salle, IL: Open Court, 1976) for this opposition.

inventory of what there is. Again, we are all familiar with the claim that states of affairs or facts are the ultimate realities; nonetheless, there is disagreement about whether such things are abstract or concrete.²⁰ Let us assume, however, that such disagreements can be resolved and that there is a genuine distinction here, one given by the traditional inventories. A difficulty remains. Once we acquiesce in the Strawson/Grice strategy, we are left without any account of just what makes a thing abstract or concrete; and in the absence of that sort of account, we lack the resources for showing why it should be problematic to think that concrete entities are composed of or constituted by abstract entities.

At this point, the objector will likely retrench and make one kind of concrete entity – material particulars – the focus of the objection. The parts of a material particular, the revised objection will go, are one and all material; but only at the risk of a category mistake can we suppose that things like properties are material objects. Constituent ontologists, however, want to claim that the properties of a material particular count as its components or constituents, so we once again get the conclusion that constituent ontologists are guilty of some sort of category mistake.

As we have noted, it is not quite accurate to say that all constituent ontologists want to make the properties of a material particular its constituents;²¹ nonetheless, many do. But none of those who do will find the revised objection any better than the original. The difficulty, they will claim, is that the revised objection mistakenly identifies the constituents of a material particular with its commonsense parts. Constituent ontologists, however, are anxious to distinguish the two; and while conceding that the latter must be material, they will deny that this is true of the former. As early as Aristotle, we meet with this distinction. He distinguishes between “the parts that measure a thing according to quantity” and “the parts of which its substance is composed” (1034 b 33–35). The former are the commonsense parts of a thing; the latter, its constituents or what we might call its metaphysical parts. Now, parts of both sorts are less than, fall short of the wholes they compose; but Aristotle is telling us that the two sorts of parts fall short in different ways. Each of the commonsense parts of a thing is spatially less than the thing: the primary place each occupies is a proper part of the primary place occupied by the whole. Accordingly, the part can be used to provide a spatial measure of the whole, so that we can speak of the whole as being so many feet long, so many cubits wide, or so many hands high. Aristotle’s talk about the substance of a thing, by contrast, is talk about its being what it is, its being the kind of thing

²⁰ CHISHOLM, *Person and Object*, and ARMSTRONG, *A World of States of Affairs*, hold opposed views on the status of states of affairs.

²¹ Another exception is Aristotle who denies that the accidents predicated of a substance are among its constituents. They are constituents of the associated incidentals, but they are not predicated of them. See M. J. LOUX, *Metaphysics*, 3rd ed. (London: Routledge, 2006).

it is. Hence, the idea at work in talk about the substantial or metaphysical parts of a thing is that each such part involves or induces a form of being that is less than or a component of the overall form of being displayed by the whole thing. While Aristotle would concede that the commonsense parts of a thing are one and all material, he would insist that its substantial or metaphysical parts can include an item that is not properly material at all.

Unlike Aristotle (who is a presentist), David Lewis uses a temporal parts framework as the backdrop for his characterisation of what I am calling the constituent approach and speaks of nonspatiotemporal parts; and while he thinks that the spatiotemporal parts of a material object are every bit as material as the object itself, he takes it to be a defining feature of the constituent approach that nonmaterial things like properties can count as the nonspatiotemporal or metaphysical parts of a material object.²² Lewis, of course, does not himself favour a constituent approach to character. Indeed, he denies that we need to give a substantive account (whether of the relational or constituent variety) of the phenomenon; but he recognises that constituent ontology does not, from the very start of the project, harbor a category mistake.

And the idea that there is a contrast between the commonsense material parts of a thing and its metaphysical parts or constituents is shared by every practitioner of the constituent strategy;²³ nor is it any accident that this is so. Recall that the proponent of this strategy makes the constituents of a thing responsible for its overall character; but its commonsense mereological structure is just one aspect of that character. And not just the arrangement of a thing’s commonsense parts is due to a thing’s constituents. Constituent ontologists will say that the intrinsic nature of the parts themselves is due to the constituents of the whole, or they will say that those parts have constituents of their own that account for their nature. In either case, we have the result that, in the story the constituent ontologist tells, constituents or metaphysical parts turn out to be prior to commonsense material parts.

We may concede that the distinction serves to answer the revised objection, but if we are to take the constituent approach seriously, we will want to know more about constitution. As a start, we can identify its formal properties. If we restrict ourselves to what might be called the proper constituents of a thing, we can agree that the relation of constituent to whole is irreflexive, asymmetrical, and transitive. Functionally, it is a relation of composition, so it might be tempting to identify it with other more familiar composition relations, but the temptation should be resisted. It is not the relation tying the members of a set to the set:

²² See D. LEWIS, “New Work for a Theory of Universals”, *Australasian Journal of Philosophy* 61 (1983): 343–377.

²³ See, for example, L. A. PAUL, “Logical Parts”, *Nous* 36 (2002): 578–596, where we find talk of “qualitative” or “logical parts”.

familiar particulars aren't sets. Nor is it the relation tying properties to the conjunctive property whose conjuncts they are. Many constituent ontologists refuse to restrict the constituents of familiar particulars to their properties; and even those that do accept the restriction will typically deny that familiar particulars are themselves properties, whether molecular or atomic. More plausible is the suggestion that the constituent/whole relation is a case of the relation of composition at work in what is properly called mereology, the logic of parts and wholes; but even this suggestion has its problems. The relation in question (called summing or fusion) is just too generous; and in this respect it agrees with both set-theoretical composition and the composition involved in property conjunction. In all three cases, if it is possible for a given plurality of objects to compose the relevant whole, then the plurality does compose it. Not so in the case of the objects constituting a familiar particular. It is possible for those objects to exist without constituting the particular: they play their constitutional role only contingently, and constituent ontologists routinely take this fact to underlie the contingency of the constituted particular.

Now, some constituent ontologists will claim that we can supplement the concept of fusion with restrictions which ensure that the only composites are those we meet in the case of actually existing ordinary objects.²⁴ But whether they endorse a thoroughly mereological interpretation of the constituent/whole relation, constituent ontologists will agree that if a plurality of objects, $a \dots n$, constitutes a particular, x , then it does so only contingently. Nonetheless, they will also agree that the resulting whole, x , has necessarily the property of having all and only $a \dots n$ as constituents. Call this claim Constituent Essentialism. It needs to be distinguished from what is called Mereological Essentialism, the claim that a thing has each of its commonsense parts necessarily. It is plausible to think that constituent ontologists are free to disagree about the latter claim; but what I have called Constituent Essentialism is something like a framework principle for constituent ontologists. They hold that familiar particulars are nothing but composites of their constituents; but, then, it is difficult to understand how a constituent ontologist could hold that it is possible for a particular to have constituents other than those it does. Given a different group of constituents, we would have the existence of a different composite and, therefore, a different familiar particular.

So it is a structural fact about constituent ontologies, first, that the items constituting a given particular do so only contingently and, second, that the particular has the constituents it does necessarily. Constituent ontologists will typically add that it has those constituents uniquely; or, at least, they will add that it has uniquely the property of having just those constituents in just the order in which they are found there; and they will claim that this, like the claim

²⁴ See again PAUL, "Logical parts".

I have dubbed Constituent Essentialism, is a framework principle for this style of metaphysical explanation. On this view, all there is to a familiar particular is its constituents; but, then, it should be impossible for numerically diverse objects to be made up of identical constituents identically arranged. I will call this claim the Principle of Constituent Identity and will formulate it as the claim that necessarily, for any objects, x and y , if x and y have all and only the same constituents in precisely the same order, x and y are identical.

PART III

Towards characterising the concept of constitution at work in immanentist theories, I have said that the relation of constituent to whole is a compositional relation that is irreflexive, asymmetrical, and transitive. Furthermore, I have said that while the constituents of a thing only contingently constitute it, the thing has its constituents in the appropriate order both necessarily and uniquely. This characterisation is very general. The concept of constitution I have delineated is one ontologists of quite different stripes will be comfortable making the centrepiece of their disparate theoretical frameworks. But that is how it should be. Theories as different as Berkeley's phenomenalism and Aristotle's hylomorphism count as constituent ontologies. In our own day, the constituent strategy has taken three main forms. There are (1) theories that construe a familiar particular as a bundle of compresent, but repeatable properties, the properties we prephilosophically associate with the particular;²⁵ (2) theories that posit, in addition to the repeatable properties making up a thing, a categorically different kind of constituent, a constituent that serves as subject, possessor, or bearer of those properties;²⁶ and (3) theories that restrict the constituents of a familiar object to nonrepeatable properties or what have become known as tropes.²⁷

Now, I have argued that attempts by relationists to show the enterprise of constituent ontology incoherent fail. But even those who would deny that the enterprise is fatally flawed from the start find problems in the various theories that make up the recent history of constituent ontology. To set the stage for the discussions that will follow, let me close by reminding you of some of these problems.

Persistence through change has been thought to present problems for constituent theorists. Where a thing changes, the argument goes, there is a variation in the properties associated with the thing. Constituent theorists, however, construe the properties associated with a thing as its constituents; but, then

²⁵ See CASTAÑEDA, "Thinking and the Structure of the World"; L. A. PAUL, "The Context of Essence", *Australasian Journal of Philosophy* 82 (2004): 170–184; and PAUL, "Logical Parts".

²⁶ See BERGMANN, *Realism*, and ARMSTRONG, *A World of States of Affairs*.

²⁷ See WILLIAMS, "Elements of Being"; SIMONS, "Particulars in Particular Clothing", and K. CAMPBELL, *Abstract Particulars* (Oxford: Blackwell, 1990).

they are committed to denying that the composite emerging from a change is numerically identical with the composite that entered the change. Persistence, however, requires identity, so we get the conclusion that constituent ontologists cannot accommodate our prephilosophical belief that ordinary objects persist through change.

What underlies the problem here is, of course, constituent ontologists' commitment to what I have called Constituent Essentialism. It is because they take a composite to have its constituents necessarily that they must deny identity through change. But not only does that doctrine preclude identity through change; it seems as well to make it impossible for constituent ontologists to do justice to the distinction between the properties essential to a familiar particular and those that are merely contingent. All the properties of a thing appear to turn out essential on the constituent approach.

Two comments here. First, although closely related, the two problems are different. The first bears on variation and persistence through time; the second, on variation and persistence through what we might call the modal dimension. The second problem concerns the various ways a particular could have been otherwise; for the formulation of that problem it is not required that the particular realise the relevant possibilities by actually undergoing a change. In any case, the actual practice of constituent ontologists implies that the two problems are different. Where they deal with both, constituent ontologists deal with them in different ways.²⁸

Second, while conceding that our second problem may arise for both bundle theorists and trope theorists, one might deny that the same holds for substratum theorists. After all, do they not tell us that the ultimate bearers of properties are particulars that are bare or thin? Yes, but our second problem bears not on the relationship between a substratum and the properties compresent with it, but on the relationship between the whole familiar particular and the properties that constitute it. For the substratum theorist, no less than the bundle or trope theorist, that relationship is governed by Constituent Essentialism.

So our first two problems would seem to create difficulties for all three forms of constituent ontology. But each of the different patterns faces problems of its own. Trope theorists, for example, face problems about the individuation of items from their favoured category.²⁹ Although they speak freely and almost casually about this or that trope, the fact is that it is not altogether clear just what a trope is. Take the colour of the desk top on which I am now writing. Presumably, it is a single discrete trope. But what happens when I cut the desk top in two? Do I thereby bring two colour tropes into existence? If I do, then what was beforehand not a trope now is one; but how can what was not a trope become one? Well,

²⁸ See, for example, PAUL, "Logical Parts", and "The context of Essence".

²⁹ These problems are clearly presented in CAMPBELL, *Abstract Particulars*, chapter 6.

perhaps, we should say that the two colour tropes were there beforehand. The difficulty, of course, is that I could go on and cut each of the two new sections of the original desk top in two. So were there really four rather than just two colour tropes there before the first division? It is not clear that any answer we might give here is satisfactory.

Defenders of theories of the first sort I mentioned tell us that familiar particulars are bundles of repeatable properties. On their theory, the "materials" out of which a familiar particular is composed are one and all properties, but what they compose is an individual that has those properties, what we might call a propertied individual. But they owe us an explanation of just how we are supposed to get the propertied individual from "materials" that are restricted to properties. How is it that we get a ϕ -er, a thing that is ϕ , from the property ϕ -ness? The response, doubtless, will be that individuals arise out of the agglomeration of properties. We begin, so to speak, with one property, add another, add still another, and what ultimately emerges is an individual having all those properties. But why should we suppose that agglomeration yields the multi-propertied individual? Why not suppose instead that what results from the agglomeration is, say, just the conjunctive property whose conjuncts are all the various properties that have been agglomerated?³⁰

And there is a more familiar problem that dogs traditional bundle theorists. They tell us that a thing's character hinges on its repeatable properties. Those properties are its constituents. They further tell us that different familiar particulars can share a given form of character and that where this happens a single property is a constituent of the numerically different particulars. As constituent ontologists, however, they are committed to what I have called the Principle of Constituent Identity. But, then, they are committed to some strong version of the Identity of Indiscernibles, the principle that necessarily if an object, a , and an object, b , have all and only the same properties, a is numerically identical with b . The difficulty, of course, is that there appear to be counterexamples to the appropriate version of that principle.³¹

Substratum theorists appeal to the apparent counterexamples in defence of their own version of the constituent approach.³² They argue that what the possibility of diverse, but qualitatively indiscernible objects shows is that each ordinary object has a constituent that is idiosyncratic to a single composite and that functions as the literal possessor of the properties that enter into the composite. But, they insist that only constituents that have no properties essentially are suited to play the diversifying role here. So we get the doctrine of

³⁰ To my knowledge, the only bundle theorist who explicitly responds to this problem is CASTAÑEDA, "Thinking and the Structure of the World".

³¹ See, for example, M. BLACK, "The Identity of Indiscernibles", *Mind* 61 (1952): 153–164.

³² See, for example, E. B. ALLAIRE, "Bare Particulars", *Philosophical Studies* 14 (1963): 1–8.

the bare or thin particular; and most philosophers think that there are serious problems attaching to that doctrine.³³

So even if there is no single *a priori* objection that shows the constituent project to be doomed from the start, there are problems aplenty for constituent ontologists. If they are to convince us of the viability of their project, they need to address these problems. Let's see how they fare.

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³³ I discuss this issue in my *Metaphysics*, chapter 3. For a reply, see T. SIDER, "Bare Particulars", *Philosophical Perspectives* 20 (2006): 387–397.

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