Subverting Campbell’s Materialist Conclusion

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Published online: June 24 2016
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Abstract

Keith Campbell and Jonathan Schaffer propose an ontology in which entities consist in collocated collections of tropes, and tropes are individuated by location. This would imply that immaterial entities are not possible. In this paper, I attempt to subvert this materialist conclusion by giving two arguments against the key individuation principle it requires. I show that the locational individuation principle can be formulated so as to survive the first, but not the second argument.

I. Introduction

Keith Campbell has defended a trope theory of properties in his paper “The Metaphysic of Abstract Particulars.”¹ This trope theory is a fundamentally realist theory of properties.² It is to be distinguished from a universalist theory of properties because each property, on the trope theory, is taken to be a particular entity. If I have two red pencils A and B, the trope theory takes the redness of A and the redness of B to be distinct individuals. By contrast, the universalist theory of tropes takes the redness of A and the redness of B to be merely instances of the same thing. The dispute between trope theorists and universalists then is over whether properties are one entity, multiply realized and located, or many entities which simply resemble.

Campbell gives several arguments in support of his trope theory. He argues that tropes are required for the analysis of causation. He argues that tropes help to solve issues in the philosophy of perception, the problem of concrete individuals, and the philosophy of change. He also argues that tropes are suggested by our current best physical theories, specifically General Relativity. I don’t propose to say anything about these arguments here. Rather, I will discuss an argument Campbell makes against the

² Though Campbell does not explicitly state this in his paper, I take him only to be defending a realist theory of the sparse conception of properties. Nothing in this paper turns on this point.
possibility of non-spatiotemporal entities, or at least certain kinds of non-
spatiotemporal entities. I hope to challenge Campbell’s argument by casting doubt on
the key individuation principle required by the argument.

II. The Materialist Argument

I quote Campbell in summary of his argument:

It is through location that tropes get their particularity. Further, they are
identified, and distinguished from one another, by location. […] So the theory
seems to be committed to the thesis that every reality is a spatio-temporal one.
This would make a clean sweep of transcendent gods, Thomist angels, Cartesian
minds, Kantian noumena, and Berkeley’s entire ontology. (486)

It seems that we can lay out Campbell’s argument as follows:
(1) Tropes are individuated by location. (PR)
(2) There cannot be tropes that are not located. (1)
(3) Immaterial entities are constituted by tropes. (PR)
(4) Immaterial entities are not located. (Def)
(5) If x is not located, then no trope constituting x is located. (PR)
(6) No trope constituting any immaterial entity is located. (3,4,5)
(7) There cannot be any immaterial entities. (2,6)

The premises of this argument seem fairly plausible, given Campbell’s trope theory.3
(3) is a straightforward consequence of the view that every entity is constituted by a
bundle of tropes. (5) is true because any trope located at a spacetime point p, if it were a
part of an immaterial entity, would thereby locate that entity at p, violating the criteria
for immateriality given in (4).

3 The move from (1) to (2) actually deserves closer examination. All that strictly seems to follow
from (1) is:
(2’) There cannot be any individuated tropes that are not located.
Whether (2) follows from (2’) is actually an interesting and controversial question. Those who
would deny this inference would hold that there could be un-individuated things, such as ‘stuffs’.
This possibility is denied by those who advance the Quinean slogan “no entity without identity”.
For further discussion, see Parsons, Terence (1987). “Entities without identity.” Philosophical
Perspectives 1: 1-19.

Denying the move from (1) to (2), however, is not a suitable way to subvert Campbell’s
materialist conclusion. If (2’) were substituted for (2), it would still follow that there cannot be
any individuated immaterial entities. This would eliminate individual Cartesian minds, individual
angels, etc. I will therefore follow Campbell in supposing that (2) follows from (1).
Campbell however recognizes that this argument seems “too swift, too dismissive.” Many competent philosophers have defended not just the possibility, but also the actuality of immaterial entities. And I certainly do not see any metaphysical impossibility in the existence of some proposed immaterial entities. Campbell thinks that he can allow for the possibility of immaterial entities, at least insofar as there is some analogue of spatiotemporal location through which they can be individuated:

There is, in fact, a less drastic possibility open. That is, to the extent that there can be non-spatial particulars, to that extent there must be some analogue of the locational order of space. And in that case, there will be an analogue of location to serve as the principal of individuation for non-spatial abstract particulars. (486)

Campbell elaborates on just what these analogues might be elsewhere. For example, a platonic cardinal number would be individuated by “the mathematical ‘place’ of its corresponding ordinal.” This seems acceptable. So, at this point, Campbell would reject (4) and replace it with:

(4’) Immater*ial entities are not located, where immaterial* beings are a subset of immaterial beings that cannot be located even by any analogue of spatiotemporal location. He can therefore accept the possibility of all immaterial beings that are not immaterial* beings.

### III. Immaterialist Intuitions

The problem, though, is that some immaterial* beings seem possible. Campbell discusses angels, and proposes that we might be able to individuate them by such features as “the intensity of their powers, or the dates of the events they remembered, or the speed of their decision-taking.” But it seems quite possible that two distinct angels could have exactly the same powers, remember the same events, and make decisions at the same speed. So angels may be immaterial* beings.

Further, it in general seems possible to me that there could be two fully indiscernible immaterial entities, intrinsically the same in every respect, yet still distinct. This intuition seems to have fully the same force as the intuition that Campbell has that there could be a world with just two uniform spheres in a non-absolute space. If this is so, then there are possibly immaterial* beings, for no indiscernible pair of immaterial beings could be individuated by an analogue of spatiotemporal location.

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5 Campbell actually dismisses these as “too extrinsic” to plausibly individuate the angels.
IV. Locational Individuation Formulated

So my modal intuitions tell me that there could be immaterial* beings, thus Campbell’s argument must have gone wrong somewhere. But I don’t intend to challenge Campbell’s trope theory. Rather, I will try to cast doubt on the individuation principle expressed by (1). It will be helpful here to have this individuation principle expressed formally. I take this formulation from Schaffer (249):6

**SI:** x and y are distinct tropes iff they are either not exactly resembling, or at distant locations (D(x,y)>0).

It might be thought that SI is immediately defeated by inter-world trope relations. Most conceptions of possible worlds hold that each world is spatiotemporally disconnected from each other possible world. Consider, then, two possible worlds: the actual world, W1, and a possible world, W2, exactly similar to the actual world but with the counterfactual supposition of a 5 degree drop in temperature today. I have one blue pen on top of my desk and one blue pen in my desk drawer in W1. Therefore, there is also a blue pen on top of my counterpart’s desk and a blue pen in my counterpart’s desk drawer in W2. On the trope theory, there is a trope of blueness for each of these pens in W1 and W2. Certainly the trope of blueness associated with the pen on my desk in W1 is distinct from the trope of blueness associated with the pen in my counterpart’s desk drawer in W2. However, SI says that these tropes are not distinct. For both tropes are blueness tropes, hence they do resemble, and they are not at distant locations, for they are in no spatiotemporal relation at all.

Schaffer accounts for this by distinguishing between inter- and intra-world principles of individuation. By SI, it is meant only that, “within a given world, no two exactly resembling tropes are at zero distance.” On Schaffer’s account, tropes at different worlds are always distinct, though tropes can have counterparts at different worlds.

V. The Multiverse Objection to Locational Individuation

While this is an acceptable stopgap for inter-world trope relations, SI will also be defeated by the possibility of an intra-world multiverse. What I have in mind is the idea that a given possible world might consist in many spatiotemporally disconnected universes. This seems to be a metaphysical possibility, and even an epistemic possibility for the actual world.7

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7 It should be emphasized however that these must be genuinely spatiotemporally disconnected universes; not just any multiverse will do. The multiverse posited by the ‘many-worlds interpretation’ of quantum mechanics, for example, would not defeat SI as each of the ‘many-
If the actual world, or any possible world, consists in multiple spatiotemporally disconnected universes, then SI will fail as an intra-world principle of trope individuation. For any two distinct but resembling tropes p and q across two universes within a world, SI will say that p and q are not distinct. For p and q do resemble, and it is not the case that D(p,q)>0.

VI. Locational Individuation Reformulated

This issue can, I think, be resolved for the defender of a locational individuation of tropes. All we need to do is amend SI slightly:

SI$\Gamma$: x and y are distinct tropes if they are either not exactly resembling, or not collocated (¬(D(x,y)=0)).

Now if we feed in p and q into SI$\Gamma$, p and q will come out distinct, as they should, because p and q are not collocated. Indeed, for any x and y across two spatiotemporally disconnected universes, x and y are not collocated, hence are distinct according to SI$\Gamma$. In addition, SI$\Gamma$ will still have the result that, within a given continuous track of spacetime, no two exactly resembling tropes are at zero distance.

Another advantage of SI$\Gamma$ is that it will serve as both an intra- and an inter-world principle of individuation. For, unlike SI, it rightly gives the result that strict trans-world identity is impossible, as no pair of tropes in different worlds are collocated. It is still open to the trope theorist, however, to adopt a counterpart theory on which tropes in different worlds can be ‘the same’ in a looser sense.

Unfortunately, SI$\Gamma$ still has the consequence that there cannot possibly be any immaterial* entities. The problem is that immaterial* tropes are not collocated with themselves (they are not located at all, even analogously). Thus, if we have a Cartesian mind with an immaterial* trope of happiness, we could give that trope two names, say Y and Z. Y is, of course, identical to Z. But according to SI$\Gamma$, Y and Z and distinct, because they are not collocated. This contradiction shows that SI$\Gamma$ is incompatible with the possibility of immaterial* beings.

VII. The Swapping Objection to Locational Individuation

Let me then present a different objection to the locational individuation of tropes. It concerns the possibility of what is known in the literature as swapping. Consider again the two blue pens I have at my desk. We may ask the question of whether it is possible that the trope of blueness of the pen on top of my desk be swapped with the trope of worlds’ are part of the same wave function and are in spatiotemporal relations. I thank Jonathan Schaffer for discussion on this point.
blueness of the pen in my desk drawer. D.M. Armstrong and Schaffer maintain that this is an empty possibility, not really a genuinely distinct alternative. While it is true that a trope swap would change nothing in the “empirical or causal situation”, this does not show that it does not represent a distinct possibility. If the world were a dream in the mind of God,\textsuperscript{8} that would change nothing in the empirical or causal description of the observed world, but it is a genuine alternative to reality objectively being as it is observed. The locational individuation of tropes would make swapping not a genuine possibility. Allow the proponent of the locational individuation of tropes to help themselves to a counterpart theory of transworld identity, based upon similarity with respect to resemblance and distance relations. Consider two tropes A and B at locations x and y respectively in a possible world W1, and consider a swapped possible world W2 where A is at y and B is at x. Ignoring that we have given them the same name, the counterpart of A at W1 is in fact not A at W2, for B at W2 is more similar to A at W1 with respect to its distance and resemblance relations. Hence there has effectively been no swap. These are not two distinct possibilities.

This seems to me count against individuating tropes by location. I think that taking seriously Campbell’s conception of tropes as fully capable of independent existence requires that swapping be possible. Campbell maintains that the trope theory, in positing tropes as fundamental, requires that disassociated tropes, such as “free-floating sounds and smells” be at least possible. This seems to show that swapping, over time, is possible. Hereafter I will refer to a state-of-affairs in a world W at a time tx as Sx. Consider again the tropes A and B at locations x and y respectively in a possible world W at S1. Now suppose that A and B are both resembling free-floating sounds. Suppose that each free-floating sound moves along incrementally over 5 discrete moments of times and each comes to inhabit the location of the other trope, such that at S5, A is at y and B is at x. Suppose that all of the other distance relations in W are the same at S5 as they were at S1 (though they may be different at S2-S4). Plainly, S1 and S5 must be recognized as genuinely distinct states-of-affairs. The correct description of W is one in which A and B incrementally moved into each other’s location. At each time on the interval of t1 through t5, A and B are moving closer to y and x respectively. At t5, when A reaches y, it does not somehow suddenly become B, magically preventing the gradual swap.

But just how are the states-of-affairs S1 and S5 to be distinguished if we individuate tropes locationally? All of the resemblance and distance relations between tropes at S1 seem to be the exact same as all of the resemblance and distance relations between tropes at S5. The proponent of S1 has the means to distinguish between S1 and S5, however, by pointing out that distance relations are spatiotemporal, not merely spatial.

Since the tropes at S1 are temporally closer to the tropes at S2 than are the tropes at S5, S1 and S5 can be distinguished within W.

The problem is that once S1 and S5 are admitted as distinct and possible states-of-affairs, there seem to be possible worlds where they cannot be distinguished by temporal relations. Consider a world consisting only of S1 and world consisting only of S5. These worlds seem to be possible. We could run subtraction arguments on W to the conclusion that there are possible worlds consisting of only S1 and only of S5. In these worlds, the distance and resemblance relations among all of the tropes are truly the same: there are no differences in temporal relations by which the locationalist can distinguish S1 from S5. The locationalist should now point out that tropes A and B are in fact not swapped in these worlds on their account. By the same reasoning we used to show that the locationalist account disallows swapping, we can show that the counterpart of A in the world containing only S1 is in fact B in the world containing only S5. For again, B in the S5 world, being located at x, is more similar to A in the S1 world with respect to its distance and resemblance relations than is A in the S5 world, which is located at y. My point, however, is exactly that this result of the locationalist account is false. If we accepted that A and B were swapped between S1 and S5 in W, why would it be plausible to suppose that these states metaphysically collapse just by existing alone? I am suggesting that the locationalist account has gotten this result wrong.

VIII. Primitive Quantitative Individuation

What we rather need to account for swapping is an individuation principle through which the distinction between A and B is simply taken as primitive. Witness what Schaffer (248) rejects:

QI: x and y are distinct tropes iff they are primitively quantitatively distinct.

9 See Baldwin, Thomas (1996). “There might be nothing.” Analysis 56 (4): 231–238. The argument would roughly be:
1. For all S in W except for [S1 or S5], S could fail to exist.
2. For all S in W except for [S1 or S5], the non-existence of S does not necessitate the existence of any other S.
3. For all S in W except for [S1 or S5], the non-existence of S does not necessitate the non-existence of [S1 or S5].
From these premises we could conclude that there is a possible world consisting solely of S1, and a possible world consisting solely of S5. I do not intend to elaborate on or defend this argument here. I merely note it to add more weight to the already plausible suggestion that there are possible worlds consisting of only S1 and only of S5.
But if this is so then tropes are not to be individuated by location. The immaterialist can then simply reject (1) in Campbell’s materialist argument, and allow for the possibility of individuated immaterial tropes through primitive quantitative distinction.