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# A Fourth View Concerning Persistence[*]

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There are currently three views on the table concerning the nature of persistence through time: endurantism (or "three-dimensionalism"), perdurantism (or "four-dimensionalism"), and exdurantism (or stage theory).[1,2] In this paper, I present a fourth theory of the nature of persistence. For now, let us refer to this theory as 'View X'; I will give it a different name later on. View X shares some of the features, advantages, and difficulties of each of the other three views.

Prior to presenting View X, it will be necessary to do some work in the theory of spatial and temporal location. This theory is concerned with certain relations—what I shall call 'locative relations'—borne by material objects to the regions of space and time that they occupy. In Section I of this paper, I discuss certain issues in the theory of spatial and temporal location and make certain relevant distinctions that others have failed to make. Then, in Section II, I present spatial cases that, I claim, provide analogues for the different theories of persistence on offer. Having done so, in Section III, I explicitly formulate four distinct views of persistence (including View X) and defend my formulation of them. Finally, in Section IV, I discuss some advantages

[*] This is an unpublished paper, which readers should feel free to cite. This version, with the exception of this footnote and some light edits to fix typos that might otherwise impede understanding, is the earliest I have been able to find. (Note: When I first uploaded it on 5/16/2024, I erroneously believed this was the most recent version based on the date associated with a file on my father's laptop.) A later version, which is available upon request, was presented to the University of Rochester's Philosophy Department on December 16, 2005. I began the work on persistence through time that resulted in both versions during a Spring 2004 Time Reading Group at UR.

[1] I place 'three-dimensionalism' and 'four-dimensionalism' in scare quotes while leaving 'stage theory' un-scare-quoted because I take the first two to be misnomers—one might hold either of the views commonly referred to by these names while accepting that there are greater or fewer (spatial or spatio-temporal dimensions) than either name suggests. Indeed, one might hold either of these views, hold that it is necessarily true, and hold that possibly, there are only two spatial dimensions and there are some things that persist.

[2] For an informative overview of these three positions, see Haslanger (2003). This is also where the term 'exdurantism' was introduced as another name for the stage theory.

of View X over each of the other three views concerning the nature of persistence, as well as a disadvantage it has. The goal is to show that View X is a viable theory of persistence.

## I. *Theories of Location*

Consider an electron, Ellie. Standardly, electrons are thought to spatially located but unextended. In addition, ordinary ones are not thought to be multiply located. Thus, there is exactly one point-sized region of space (call it 'Pointy') to which Ellie bears an important (and particularly salient) locative relation.[3] It is, I think, the very same relation that I bear to the spatial region jointly taken up by my hands, feet, torso, etc. (although not to any proper subregion[4] or proper superregion of that region). Intuitively, this relation is primitive and unanalyzable.[5] Call this relation '$R_S$'.

Having introduced $R_S$, we may now ask important questions concerning it. For instance: Is it the case that, necessarily, for all material objects o, if o bears $R_S$ to R, then: for all spatial regions R' such that R≠R', it is not the case that o bears $R_S$ to R'? Suppose that we answer in the negative. Then, I claim, we are committed to the possibility of *spatially multiply located* material objects. We may even analyze the property of being spatially multiply located, as follows:

> **Spatial Multiple Location (SML)**: Necessarily, for all material objects o, o <u>is spatially multiply located</u> iff there are spatial regions R and R' such that (i) R≠R', (ii) o bears $R_S$ to R, and (iii) o bears $R_S$ to R'.

We may also ask questions concerning the relationship between the spatial locative relation $R_S$ and the parthood relation. So, for instance, we may wonder whether it is possible for a material object to bear $R_S$ to an extended region of space R while failing to have proper parts at

[3] Other locative relations include *being in*, *being located at*, and the relations discussed in Parsons (unpublished a).
[4] On the notion of a subregion here being employed, every region counts as a subregion of itself. Similar remarks apply to the notion of a superregion. A region of space or time R is a *proper* subregion of a region R' iff R is a subregion of R' and R≠R'. Analogously, a region of space or time R is a *proper* superregion of a region R' iff R is a superregion of R' and R≠R'.
[5] I do not mean to deny here that there are other important relations, some analyzable, that Ellie bears to Pointy. Some of these may even be relations that Ellie bears to other spatial regions as well. However, the relation in question seems to be a *particularly important* one.

any subregion of R. Suppose that we think that it is. Then, I think, we are committed to the possibility of *spatially extended material simples*. We may analyze *this* property as follows:

> **Spatially Extended Simplicity (SES)**: Necessarily, for all material objects o, o is a spatially extended simple iff there is a spatial region R such that (i) R is extended, (ii) o bears $R_S$ to R, and (iii) for every subregion R' of R, there is no proper part p of o such that p bears $R_S$ to R'.[6]

Given these analyses of what it is for a material object to be a spatially extended simple and what it is for an object to be a spatially multiply located simple, we are able to make distinctions that others have failed to make. So, for instance, we are able to distinguish between a material simple's being spatially multiply located at two spatial regions R and R' and that material simple's being an extended simple located at the extended spatial region composed of R and R'. Thus, $R_S$ is somewhat like the relation of being married: one can bear it to two things without bearing it to the thing that is composed of those two things.

Others have failed to make the distinction between a simple's being multiply located and its being an extended simple. So, for instance, Josh Parsons replies to one argument for perdurantism by claiming that we have good reason to think that '[s]ome [material] simples have extension; they entend'.[7] Thus, it would seem that for Parsons something is entended (or *entends*) iff it is a spatially extended simple. However, when introducing entension, he says that

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[6] One might think that, as the phrase is generally used, a material object would count as a spatially extended simple only if that thing had *no* spatial proper parts, not just no proper parts at any subregion of a region to which it bears $R_S$. I agree that this is a potential precisification of the notion of a spatially extended simple. On this precisification, the property picked out by 'is a spatially extended simple' might be analyzed as follows:

> **Spatially Extended Simplicity* (SES*)**: Necessarily, for all material objects o, o is a spatially extended simple iff there is a spatial region R such that (i) R is extended, (ii) o bears $R_S$ to R, and (iii) o has no proper parts.

We may note that (SES) and (SES*) differ in at least some cases. So, for instance, if it is possible for a multiply located material object to have proper parts that bear $R_S$ to some of the subregions of one of the spatial regions to which it bears $R_S$ while failing to have proper parts that bear $R_S$ to any of the subregions of another spatial region to which it bears $R_S$, then (SES) will count such a material object as a spatially extended simple and (SES*) will not. I fail to have firm intuitions concerning whether such an object ought to count as a spatially extended simple, and so I am unable to decide between (SES) and (SES*).

[7] Parsons (2000)

it is 'filling space by being wholly located in each of several places'.[8] This suggests (in contrast) that 'entension' is meant to be another term for being spatially multiply located. Hence it seems that Parsons fails to adequately distinguish between the state of affairs of a material simple being extended and the state of affairs of its being multiply located.

This failure is the cause of difficulties since most discussions concerning persistence begin by constructing spatial analogues to the case of persistence. Thus, since Parsons employs a case involving entension as an analogue for a case of persistence (on a particular view concerning persistence)[9] and since his notion of entension conflates the notions of being a spatially multiply located material simple and being an extended material simple, his case is not analogous to any particular case of persistence (under any conception). Having distinguished being a spatially multiply located material simple from being an extended material simple, however, we may distinguish two spatial cases that are analogous to cases of persistence on two different theories of persistence. It is to this task that I turn in the next section.

## II. *Spatially Analogous Cases*

Consider a normal spatially extended material object. That object is (presumably) neither spatially multiply located nor a spatially extended simple. In addition, it seems that the object has parts at every subregion of the (extended) spatial region to which it bears $R_S$.[10] Now consider the temporal analogue of this ordinary case of spatial extension: a material simple that is temporally extended and has parts at every temporal subregion of the (extended) temporal region to which it bears an important (temporal) locative relation—$R_T$, the temporal analogue of $R_S$. According to

[8] ibid.
[9] ibid.
[10] Or, at least, that it has parts at every non-composite subregion of the region to which it bears $R_S$, where a region of space or time is non-composite iff it has no proper subregions. One who worries about the Doctrine of Arbitrary Undetached Parts (DAUP) might accept the latter without accepting the former. See van Inwagen (1981) and Parsons (2004) for discussion of (DAUP). Those who think that the latter (but not the former) is true might still think that such a case is analogous to cases of persistence. They would then accept the view that Wasserman (2004) calls 'weak perdurantism'.

perdurantism, an object persists just in case it is such an analogue to this ordinary case of spatial extension.[11]

Spatial analogues can also be constructed for cases of persistence given other theories. However, constructing the spatial analogue for exdurantism involves doing something that is not required for constructing analogues for the other theories: employing some heavy philosophical theory. Consider David Lewis's counterpart-theoretic treatment of *de re* modal statements.[12] According to Lewis, a *de re* modal claim concerning an object o that bears $R_S$ to a spatial region R is made true by facts concerning objects which bear the counterpart relation to o, all of which are objects distinct from o that bear $R_S$ to spatial regions distinct from R. Exdurantism is an analogue to this view, according to which *de re* tensed claims concerning an object o that bears $R_T$ to a (point-sized) temporal region R are made true by facts concerning objects distinct from o which bear the *temporal* counterpart relation to o and each of which bears $R_T$ to a region distinct from R. Thus, something persists through time just in case it has temporal counterparts.

Now consider endurantism. A case of persistence is (on this view) analogous to the case of a spatially multiply located object.[13] That is, it is a case in which an object bears $R_T$ to multiple distinct regions of time (in particular, point-sized regions of time). So, on endurantism, an object persists through time just in case it endures. That is, just in case it bears $R_T$ to distinct point-sized regions of time.

It should be obvious where this discussion is going. There is another spatial analogue to be considered. Take a spatially extended material simple. There is an extended region of space,

[11] This is not quite right. For suppose that, instead of bearing $R_T$ to an extended region of time, an object merely bore $R_T$ to a point-sized composite region of time (for instance, a region of time whose only parts are two simple point-sized regions of time). I think that, on perdurantism, such an object would have to have temporal parts, although it is not extended. Remarks such as these apply to my characterizations of the other three views as well.

[12] See Lewis (1986)

[13] Or so I claim. As I will point out below (in Section III), this claim is controversial. However, I will provide some considerations there to support it.

R, to which that material simple bears $R_S$. However, it has no proper part that bears $R_S$ to any subregion of R. An analogous case—one in which an object bears $R_T$ to an extended region of time but has no proper part that bears $R_T$ to any subregion of that region—is a case of persistence on View X. In fact, on View X, all cases of persistence are like this.

Now that we have offered spatial analogues for cases of persistence on the four different views of persistence with which this paper is concerned, we may do two things. First, we may give a better name to View X, the view that this paper is introducing. Seeing that all of the other views concerning persistence have names ending with the suffix '-durantism', I suggest that (in keeping with this convention) we call View X 'transdurantism'. Second, we may offer formal statements of the four views concerning persistence. It is to the latter task that I proceed in the next section.

## III. *A Formal Presentation of the Views and a Defense*

I will now formally state perdurantism, exdurantism, endurantism, and transdurantism. Having done so, I will offers some reasons to think that I have correctly identified the views in question. In particular, I will respond to some worries that what I have here labeled 'transdurantism' is really endurantism, whereas what I have identified as endurantism is really the new view. I will cite some people who have (it seems) taken endurantism to be something like the view here called 'transdurantism', and I will argue that my characterization of endurantism is closer to the views of prominent endurantists than is transdurantism.

Now that you have been given a brief look into the future, here is my formal presentation of each of the four views of persistence:

**Perdurantism**[14]: Necessarily, for all material objects o, o persists through time iff there is a composite temporal region R such that:
i. o bears $R_T$ to R, and

[14] My formal presentation of perdurantism is inspired by Sider (2001).

ii. For every proper subregion R' of R, there is a proper part o' of o such that (a) o' bears $R_T$ to R', and (b) for all proper parts o'' of o such that o'' bears $R_T$ to some subregion of R', o' overlaps o''.

**Exdurantism**: Necessarily, for all material objects o, o persists through time iff there are distinct non-composite temporal regions R and R' and temporal counterparts o' and o'' of o such that o' bears $R_T$ to R and o'' bears $R_T$ to R'.

**Endurantism**: Necessarily, for all material objects o, o persists through time iff there are distinct non-composite temporal regions R and R' such that o bears $R_T$ to R and o bears $R_T$ to R'.

**Transdurantism**: Necessarily, for all material objects o, o persists through time iff there is a composite temporal region R such that:

i. o bears $R_T$ to R, and
ii. For every proper subregion R' of R, there is no proper part o' of o such that (a) o' bears $R_T$ to R', and (b) for all proper parts o'' of o such that o'' bears $R_T$ to some subregion of R', o' overlaps o''.

It seems rather clear to me that the views that I have called 'perdurantism' and 'exdurantism' *are*, respectively, the views commonly known by those names. Although there have been few exdurantists thus far, their view is nicely summarized by Sally Haslanger when she says: 'According to the *stage theory*, ordinary persisting objects are stages that persist not by enduring or perduring, but by having distinct stage counterparts at other times.'[15] My account of exdurantism merely fills out what 'times' are in greater detail (they are non-composite temporal regions) and what it is for an object to be at a time (it is for that object to bear $R_T$ to that time).

Similar remarks apply concerning my account of perdurantism. Perdurantism is generally said to be the thesis that objects persist through time the way that they extend through space.[16] It seems to me that this is not quite right, for a few reasons. First, if perdurantists and the other parties to this debate are trying to offer an analysis of what it is for an object to persist through time, then what really ought to be said is that an object's persisting through time *just is* its being extended through time in the way that objects are extended through space—i.e., by having parts

[15] Haslanger (2003), p. 318. Italics hers.
[16] ibid., p. 318.

at every subregion of the region through which they are extended. But, second, it seems to me that even this is not sufficient. For even an unextended region of space or time may be a composite region (i.e., one with proper subregions).[17] And if something bears $R_S$ (or $R_T$, respectively) to such a region, then it seems intuitively correct in a perdurantist mindset to say that thing has proper parts at every proper subregion of that region. My presentation of perdurantism corrects these mistakes and, in addition, it helps to clarify the notion of something's being a proper part of something else at a time.

Despite getting perdurantism and exdurantism correct, however, there are some worries concerning whether or not I am right about what endurantism says. There are two reasons for these worries. First, many have complained that there has yet to be any good account of endurantism given by endurantists. Rather, it is claimed, they tend to rest content with saying things like 'An object persists through time by being wholly present at each time at which it exists.'[18] Thus, perhaps my evidence for thinking that endurantism is the view that I have claimed is not very strong.

Second, some who have attempted to state endurantism have ended up stating a view that is, in many respects, similar to that which I am calling 'transdurantism'. So, for instance, Ryan Wasserman gives the following statement of 'strong endurantism' (what I have been calling 'endurantism'):

> *Strong Endurantism*: For any object *x*, if *t* is the temporal interval exactly occupied by *x* then there is no sub-interval of *t*, *t*-, such that *x* has a proper temporal part at *t*-.[19]

[17] Take two non-composite unextended regions of space, R and R'. Then presumably the region that has those subregions as parts and does not overlap any region of space distinct from R and R' will also be unextended. However, it will be composite. Thus, it will be an unextended (or point-sized) composite region of space. Similar remarks apply to time.
[18] For this charge see Haslanger, op.cit., and Wasserman, op.cit.
[19] Wasserman (2004), p. 33.

He even goes on to say that 'on the strong endurantist's way of looking at things, persisting objects are what we may call *temporally extended simples*'.[20] Others who seem to (at least) hint at such a conception of endurantism include Parsons[21] and Haslanger[22]. If these philosophers are correct about endurantism, then clearly I am wrong.[23]

In response to the first of these worries, I agree with those who think that the endurantists have not said enough concerning what it is for an object to endure and concerning what it is for an object to be wholly present at a time. However, I think that there is some suggestive evidence concerning what they take enduring and being wholly present to be. And this evidence, I claim, favors my interpretation of endurantism over an interpretation on which endurantism is just what I have called 'transdurantism'.

One relevant piece of evidence is that endurantism is often called 'three-dimensionalism'. This suggests that, on endurantism, material objects that persist through time are three-dimensional objects—that they are extended through the three dimensions of space but are not extended through time. This is inconsistent with the claim that endurantism is just the view that I have called 'transdurantism', because the latter claims (roughly) that an object persists through time *only if* it is extended through time. Thus, just this choice of name for endurantism favors my interpretation of it (according to which it is not the case that persisting objects are extended through time) over the alternative interpretation. In addition, supposing that, on endurantism, objects that persist through time are unextended through time, my interpretation seems to get

[20] ibid., p. 33.
[21] Parsons (2000), (unpublished a), and (unpublished b).
[22] Haslanger, op.cit.
[23] There are others whose views concerning endurantism conflict with mine. For example, Hawley (2001), pp. 26-7, claims that little can be said concerning what it is for an object to endure except that it exists at more than one time and statements concerning what parts it has must be relativized to a time.

right what it would be for such an object to be wholly present at a time. It would be for all (or the whole) of that object—i.e., *that object*—to bear $R_T$ to that time.

Other evidence for my interpretation is present in the work of Peter van Inwagen, who is (as we might say) the arch-endurantist. When discussing theories of persistence through time he presents both perdurantism (which he calls 'Theory 2') and endurantism (which he calls 'Theory 3'). Only the following part of his presentation is relevant here (where R is a three-dimensional spatio-temporal region "swept out" by a flatlander named 'Descartes' and $R_1$ and $R_2$ are non-composite subregions of R):

> [On Theory 2,] [w]hen you use the name "Descartes" you always refer to the 2+1-dimensional whole that occupies R…
> [On the other hand, on Theory 3,] [a]ll the regions like $R_1$ and $R_2$—instantaneous "slices" of R—are occupied by the very same two-dimensional object.[24]

It seems, then, that on van Inwagen's interpretation of endurantism, Descartes (who is a persisting object) is a two-dimensional object that bears the relation to each of $R_1$ and $R_2$ that the perdurantist says that he bears to R. Thus, my interpretation of endurantism lines up with that of van Inwagen, since it also would have it that Descartes is a two-dimensional object and that he bears $R_T$ to each of $R_1$ and $R_2$, the same relation that the perdurantist holds that he bears to R. The alternative interpretation, of course, gets this wrong.

The evidence I have presented, then, seems to favor my interpretation of endurantism over the alternative. This evidence thus constitutes my response to the second worry concerning my interpretation of endurantism. I also think that there are other reasons to favor my formulation of the different views concerning persistence. However, I will not go into these reasons here. Instead, I will turn in the next section to a discussion of transdurantism.

[24] van Inwagen (1990), p. 113.

## IV. *Transdurantism's Advantages and Disadvantages*

Now that we have a clear account of what transdurantism is and have differentiated it from each of the other three views concerning persistence, we may outline some of its advantages and deficiencies vis-à-vis the other theories. In doing so I hope to show that transdurantism is a viable theory of persistence through time.

One advantage that transdurantism has over both perdurantism and exdurantism is that a transdurantist needn't be committed to a counterpart-theoretic account of *de re* modality. So, for instance, suppose that exdurantism is true and consider some instantaneous stage, s, such that s is what is referred to by 'Ted' *right now*. Clearly, *that very stage* needn't have existed for 'Ted is a philosopher' to be true. So, a *de re* modal statement concerning Ted (i.e., s) is made true by an object distinct from Ted. Thus, if exdurantism is true, then counterpart theory is true.[25]

But counterpart theory is true if perdurantism is true, as well. Or at least so van Inwagen has argued.[26] For consider Descartes, an ordinary persisting object. As we all know, Descartes was born on March 31st, 1596, and died on February 11th, 1650. Thus (worries concerning whether Descartes was around prior to his birth or after his death aside), on the perdurantist's view, Descartes bears $R_T$ to an approximately 54-year-long region of time. Call this region of time 'Lifespan'. In addition, according to the perdurantist, for every proper subregion R of Lifespan, there is a proper part d of Descartes such that d bears $R_T$ to R and overlaps all proper parts of Descartes that bear $R_T$ to any subregion of R. So, consider the subregion of Lifespan from March 31st, 1596, to February 11th, 1640, and call it 'Lifespan-minus'. On the perdurantist's view, there is a proper part of Descartes, Descartes-minus, that satisfies the conditions above, including bearing $R_T$ to Lifespan-minus.

[25] Ted Sider and Katherine Hawley, the major proponents of exdurantism thus far, both accept counterpart theory.
[26] van Inwagen (1981), pp. 90-4.

However, consider the following two counterfactual conditionals: (a) 'If the world had been annihilated on February 11th, 1640, Descartes-minus would have existed and borne $R_T$ to Lifespan-minus' and (b) 'If the world had been annihilated on February 11th, 1640, Descartes would have existed and borne $R_T$ to Lifespan-minus'. Given that perdurantism is true, both of these seem to be true. However, on the standard analysis of counterfactuals, (a) is true just in case there are no worlds closer to the actual world in which the world is annihilated on February 11th, 1640, and it is not the case that Descartes-minus exists and bears $R_T$ to Lifespan-minus than the closest worlds in which the world is annihilated on February 11th, 1640, and Descartes-minus exists and bears $R_T$ to Lifespan-minus. Parallel remarks apply to (b). If so, however, then the closest worlds in which the world is annihilated on February 11th, 1640 are, as long as we accept transworld identity, ones in which two distinct objects (Descartes and Descartes-minus) are co-located. Thus, since distinct material objects cannot be co-located[27] and (a) and (b) both seem true, we must give up the standard analysis of counterfactuals for one in terms of counterparts. Doing so will allow us to say that the worlds relevant to evaluating the counterfactuals are not ones in which Descartes and Descartes-minus are co-located, but rather ones in which the counterpart of Descartes bears $R_T$ to Lifespan-minus and the counterpart of Descartes-minus bears $R_T$ to Lifespan-minus. And all that needs to be true for that to be the case and for co-location to be impossible is that the counterpart of Descartes is identical to the counterpart of Descartes-minus.[28]

Since the transdurantist rejects the analysis of *de re* modal claims in terms of claims concerning instantaneous stages, the argument from such an analysis to counterpart theory does

[27] This is, of course, the weakest point in the argument. Many would reject the claim that the co-location of distinct material objects is impossible. So, for example, those who are attracted to both perdurantism and constitution theory would be able to avoid counterpart theory on that basis.

[28] I would like to thank Joshua Spencer for suggestions concerning my presentation of van Inwagen's argument.

not apply to her. In addition, the argument from perdurantism to counterpart theory is not compelling for the transdurantist either, since she rejects the existence of Descartes-minus and any other purported temporal parts of Descartes. Thus, although the exdurantist and the perdurantist are each arguably committed to a counterpart-theoretic analysis of *de re* modal claims, the transdurantist is not. Since many (including myself) find counterpart theory unattractive, I count this as an advantage of transdurantism.

Transdurantism may also have an advantage over endurantism. For the transdurantist, unlike the endurantist, need not claim that ordinary seemingly monadic properties (for example, being straight) are really relations to times (i.e., being straight at). Instead, the transdurantist can do something similar here to what is done by the perdurantist, who says that if a persisting object is referred to by 'Ted' and 'Ted is straight' is true when uttered at some time t, it is true in virtue of the fact that the temporal part of Ted that bears $R_T$ to t has the non-relational monadic property being straight. Since the transdurantist rejects the existence of any temporal parts of Ted, of course, she cannot say exactly this. What she can say, though, is that when a persisting object is referred to by 'Ted' and 'Ted is straight' is true when uttered at some time t, it is true in virtue of the fact that some stuff that bears $R_{T*}$ (the stuff-analogue of $R_T$)[29] to t and bears the stuff-constitution relation[30] to Ted has the non-relational monadic property being straight.[31]

Of course, the transdurantist may be uncomfortable with a stuff ontology,[32] in which case I suggest that she reject this account of predication. However, in that case, it seems that the

[29] It may be that $R_{T*}$ just is the same relation as $R_T$. I have no problem with this view and, in fact, (insofar as I am sympathetic to stuff theory) I am sympathetic to it.
[30] The stuff-constitution relation is not the relation that constitution theorists are usually interested in. Rather, it is the relation some stuff bears to a thing just in case that stuff "makes up" that thing. Thus, it is similar to a number of other relations, such as the membership relation and the parthood relation.
[31] See Markosian (forthcoming)
[32] It is unclear that the transdurantist (or anyone who accepts extended simples) is thereby *committed* to stuff theory. If they are, then this clearly constitutes a disadvantage of transdurantism vis-à-vis the other theories of persistence. If

relativization technique will work out just as well for the transdurantist as it does for the endurantist. Thus, in this area the transdurantist either has an advantage over the endurantist or is in the same boat as the latter.

There is one disadvantage of transdurantism that I wish to discuss. On my formulation of endurantism, the endurantist has an easy reply to an argument from analogy to perdurantism. This argument might be formalized as follows:

1. Time is analogous to space.
2. Objects that persist extend through time.
3. Objects that extend through space have proper parts at every subregion of the spatial region through which they extend.
4. Therefore, (1), (2), and (3).
5. If (1), (2), and (3), then perdurantism is true.

**Conclusion**: Therefore, perdurantism is true.

The endurantist reply to this argument is to deny premise (2). (This is, of course, also the exdurantist reply.) But, since the transdurantist's theory commits her to (2) (roughly), such a reply is not open to her.

However, there are some premises in this argument that the transdurantist might be suspicious of. Take premise (3). Is the contention that this premise is stating a necessary truth or merely a contingent one? Suppose the former. Then the transdurantist might object to this premise on the grounds that it is possible that there are spatially extended simples. However, if we suppose the latter, the transdurantist has three potential replies. First, she might reject the premise, thereby committing herself to the existence of spatially extended simples. Second, and much less gutsily, she might say that, on this reading of premise (3), premise (5) turns out being false. Finally, the transdurantist might reject premise (5) on other grounds, claiming that,

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not, however, the appeal to stuff is still open to the transdurantist—for example, to solve the problem concerning predication discussed in the text.

although premise (3) states a necessary truth and both premises (1) and (2) are true, the analogy between space and time is not strong enough to support the consequent of premise (5).

It seems, then, that transdurantism has at least one advantage over perdurantism and exdurantism, one that it shares with endurantism. In addition, it may also have an advantage over endurantism that it shares with both perdurantism and exdurantism. Finally, it has the resources to respond adequately to the argument just offered for perdurantism. Given this situation, I contend that, at the very least, it is *prima facie* plausible that transdurantism is a viable theory concerning persistence. I suggest that it be investigated further.

***Concluding Remarks***

The purpose of this paper was to introduce a new theory of persistence, transdurantism. Along the way, however, some work was done in the theory of spatial and temporal location, and new formulations of each of the views of persistence was offered. By doing that work and by providing those formulations, I hope to have clarified the relation between theories of spatial and temporal location and parthood and the debate over the nature of persistence through time. Even if I have failed to do this, however, I have still provided a case for thinking that there is a place for transdurantism among the major theories of persistence through time. And that is all I set out to accomplish.[33]

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