THE 3D/4D CONTROVERSY AND NON-PRESENT OBJECTS

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The "endurance versus perdurance", or "3D versus 4D", controversy has been much-discussed in recent philosophy. But on the standard way of formulating the 3D and 4D views, both views have unwanted consequences. The aim of this paper is to show that this is so, and to present an improved formulation of the views at issue in the 3D/4D controversy.

I take it that the clearest and best expression of the standard way of understanding the 3D/4D controversy is to be found in the writings of David Lewis. In his book, *On the Plurality of Worlds*, Lewis says this:

> Let us say that something *persists* iff, somehow or other, it exists at various times; this is the neutral word. Something *perdures* iff it persists by having different temporal parts, or stages, at different times, though no one part of it is wholly present at more than one time; whereas it *endures* iff it persists by being wholly present at more than one time. Perdurance corresponds to the way a road persists through space; part of it is here, and part of it is there, and no part is wholly present at two different places. Endurance corresponds to the way a universal, if there are such things, would be wholly present wherever and whenever it is instantiated. Endurance involves overlap: the content of two different times has the enduring thing as a common part. Perdurance does not.[1]

Lewis's remarks suggest the following formulations of the two views in the 3D/4D controversy.[2]

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[1]   Lewis (1986a), p. 202.

[2]   I take it that 3Da and 4Da represent the standard formulations of the 3D and 4D views, and are not just peculiar to Lewis.

> 3Da: Any object that exists at different times is wholly present at each moment at which it exists.

> 4Da: Any object that exists at different times has different temporal parts at the different moments at which it exists.

In order to see what is wrong with 3Da and 4Da, it is necessary to understand a distinct controversy in the metaphysics of time. This controversy is analogous to the well-known dispute between modal realism and modal actualism, where the issue is whether there exist any non-actual objects. The two sides to the modal dispute can be formulated as follows.[3]

> *Modal realism*: Necessarily, there are some non-actual objects.

> *Modal actualism*: Necessarily, there are no non-actual objects.

Modal realists have non-actual objects in their ontologies, while the ontologies of modal actualists are restricted to objects in the actual world.

Notice that, in order to capture what is at issue in this controversy, both parties must agree that 'x exists' and 'x is actual' are not synonymous. Modal realists need to agree to this to ensure that their claim is not trivially false, and modal actualists need to agree to it in order to ensure that their claim is not trivially true. Once the two parties accept that 'x exists' and 'x is actual' are not synonymous, they can agree that their dispute is over the question of whether these two expressions are necessarily co-extensive.

The analogous temporal controversy I have alluded to concerns the ontological status of non-present objects. At issue is whether there exist, at any given time, objects that are not present at that time. The two sides to this temporal dispute can be formulated as follows.[4]

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[3] For an example of a modal realist, see Lewis (1986a). For examples of modal actualists, see Plantinga (1974), Plantinga (1976), Fine (1977), Adams (1979), Adams (1981), and Forbes (1983).

It is possible to formulate weaker versions of the claims of modal realism and modal actualism, simply by deleting the word 'necessarily' from the formulation of each view. But it seems to me that the stronger version of each view is both more interesting and more plausible than its weaker counterpart. In any case, it is the stronger versions of the views that have traditionally been discussed.

[4] For a good discussion of presentism and non-presentism, see Adams (1986). Adams there argues against presentism. For other examples of non-presentists, see

> *Non-presentism*: It is sometimes the case that there are some non-present objects.
>
> *Presentism*: It is always the case that there are no non-present objects.

Just as the two parties to the modal dispute must agree that 'x exists' and 'x is actual' are not synonymous, so must the parties to the temporal dispute agree that 'x exists' and 'x is present' are not synonymous - non-presentists in order to ensure that their claim is not trivially false, and presentists in order to ensure that their claim is not trivially true. Once the two parties accept that 'x exists' and 'x is present' are not synonymous, they can agree that their dispute is over the question of whether these two expressions are always co-extensive.[5]

There is a great deal at stake in the non-presentist/presentist dispute. For suppose that presentism is true. Then there do not exist any objects that are not present. Thus, for example, there is no such thing as Socrates; i.e., Socrates is not in the currently correct ontology. Thus, there are no singular propositions about Socrates, and nothing stands in any relation to Socrates. These are counter-intuitive consequences, to say the least, and they will require a good deal of explaining away and/or softening on the part of the

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Smart (1963), Quine (1960), Quine (1987), Lewis (1986a), and Lewis (1986b). For examples of presentists, see Prior (1967), esp. ch. VIII, Prior (1968), and Chisholm (1989), p. 163.

As in the modal realist/modal actualist dispute, it is possible to formulate weaker versions of the claims of non-presentism and presentism, simply by deleting the expressions 'it is sometimes the case that' and 'it is always the case that' from the formulations of the views. But, as in the modal case, it seems to me that the stronger version of each view is both more interesting and more plausible than its weaker counterpart. The stronger versions also seem to be the ones that have been discussed in the literature.

[5] Many philosophers would agree that 'x exists' ought to be taken as primitive, but it might be wondered how we are to understand 'x is present'. My own view is that 'x is present', like 'x exists', should be taken as primitive. Moreover, I think we can shed some light on the meaning of the latter expression by giving examples such as these: you and I are among the things that are present now, but Socrates, if there is such a thing, is not; and Socrates was among the things that were present at noon on January 1st in the year 400 BC, while you and I were not.

presentist.[6] The non-presentist, in contrast, can say that objects like Socrates, while not present right now, nevertheless exist now. They are in his or her ontology, and can be appealed to in the analysis of talk that appears to be about them.[7]

Now it seems to me that one's position in the 3D/4D controversy should not commit one to either side of the dispute between non-presentism and presentism. But if the 3D/4D controversy is captured by 3Da and 4Da, then it turns out that both parties to the 3D/4D dispute are committed to presentism. For consider (or try to consider) some non-present object, like Socrates. It is clear that Socrates is not wholly present right now.[8] But that means that anyone who endorses 3Da is committed to saying that Socrates does not exist right now, i.e., is not included in the currently correct ontology. Similar remarks would apply to any other putative, non-present object. Thus 3Da entails presentism.

4Da, meanwhile, is in the same boat. For according to 4Da, objects that exist at different times do so by having different temporal parts at the different times at which they exist. But Socrates certainly does not have a temporal part right now. Thus anyone who endorses 4Da is committed to saying that Socrates does not exist right now, i.e., is not included in the

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[6] For discussions of ways of dealing with some of the counter-intuitive consequences of presentism, see Prior (1967), esp. ch. VIII, Prior (1968), and Chisholm (1989), p. 163.

[7] A qualification is in order here. Which non-present objects a non-presentist will have in his or her ontology will depend on the particular version of non-presentism in question. One version of non-presentism is *eternalism*, the view that there is one correct ontology, containing objects past, present, and future, and that this one correct ontology never changes over time. Another version of non-presentism is Adams's view (which should perhaps be called "*past-and-presentism*"), according to which the correct ontology, at any given time, contains objects that are past, relative to that time, and objects that are present, relative to that time, but no objects that are future, relative to that time (see Adams (1986)). But it should be clear that the non-presentist, no matter what version of non-presentism he or she subscribes to, will be able to avoid at least some difficulties facing the presentist, simply in virtue of having more objects in his or her ontology than the presentist has.

[8] I will have something to say below about the meaning of 'x is wholly present'.

currently correct ontology. Similar remarks would apply to any other putative, non-present object. Thus 4Da entails presentism.

It should be possible to formulate all of the relevant views in such a way that neither the 3D view nor the 4D view entails presentism. It seems to me that the best way to achieve this is to formulate presentism and non-presentism as above, and then to formulate the 3D and 4D views as follows.

> 3Db: Any object that is present at different times is wholly present at each moment at which it is present.

> 4Db: Any object that is present at different times has different temporal parts at the different moments at which it is present.

Both 3Db and 4Db are consistent with the possibility that objects continue to exist when they are not present, so both views are consistent with non-presentism. 3Db and 4Db are likewise consistent with the possibility that objects cease to exist when they cease to be present, so both views are also consistent with presentism.

It might be thought that the non-presentist/presentist dispute can be captured in such a way that 3Da and 4Da do not entail presentism, if we simply use 'x exists' and 'x exists at t' to mark something like the above distinction between existence and presence. Here is the idea. Let 'x exists at t' be used in such a way that you and I exist now, while Socrates does not exist now, but did exist at noon on January 1st in the year 400 BC. And let 'x exists' be used in such a way that everything that there is in the correct ontology (including objects that do not exist now, like Socrates, if there are such objects) exists, whether it exists now or not. Then non-presentism can be understood as the claim that there exist things that do not exist now, and presentism can be understood as the claim that each thing that exists is a thing that exists now.

Unfortunately, this approach won't work. The presentist wants to be able to say that the set of all things that exist – the set of all things that should be included in the correct ontology – changes over time. This means that neutrality between presentism and non-presentism requires that the expression we use as synonymous with 'x is a member of the largest possible domain' and 'x is included in the correct ontology' must be subject to temporal relativization. So if the chosen expression is 'x exists', then, when it is temporally relativized, the result will be 'x exists at t', which will then be

equivocal between x is a member of the largest possible domain at t and x is present at t.

A better approach to formulating presentism and non-presentism so that 3Da and 4Da do not entail presentism would be this. We could agree that 'x exists' is *not* synonymous with 'x is a member of the largest possible domain', and select some other expression, such as 'x subsists', to play that role. We could then formulate non-presentism as the claim that it is not always the case that everything that subsists exists, and presentism as the claim that it is always the case that everything that subsists exists.

Given that the distinction between 'x subsists' (or some suitable alternative) and 'x exists' is spelled out as above, 3Da and 4Da are adequate formulations of the 3D and 4D views. But unfortunately that distinction is never, to my knowledge, spelled out in this way by the relevant authors. Moreover, there is an independent reason not to adopt any expression other than 'x exists' as synonymous with 'x is a member of the largest possible domain', namely, that 'x exists', as it is ordinarily used by philosophers, has already been assigned that role.

There is one final question concerning the formulations of the 3D and 4D views that I would like to address in this paper, namely, the question of what 'x is wholly present' could possibly mean. This expression is crucial to both 3Da and 3Db, but many find it somewhat mysterious.

It seems to me that it is best understood in terms of temporal parts. Recall that we needed to talk about temporal parts in order to formulate both 4Da and 4Db. And the notion of a temporal part is, I think, fairly well understood. I think that the best elucidation of it is to be found in a paper by Theodore Sider, who gives a definition that can be paraphrased as follows.[9]

> x is a *temporal part* of y at t =df (i) x exists only at t; (ii) x is a part of y at t; and (iii) x overlaps at t everything that is a part of y at t.

Given this, we can define 'wholly present' as follows.

> x is *wholly present* at t =df (i) x is present at t and (ii) it's not the case that there is a y such that y is a *temporal part* of x at some time other than t.

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[9] Sider (1994). See also Thomson (1983) for a similar definition.

If we adopt this definition for the purposes of understanding 3Db, the formulation of the 3D view recommended above, then we will be construing the 3D view as saying that an object that is present at different times does *not* achieve that distinction by having different temporal parts at the different times at which it is present. The 3D view will thus be the explicit denial of the principal claim of its natural rival, the 4D view. This seems appropriate to me, since the 3D view was, after all, originally formulated as an alternative to talk about temporal parts and the 4D view.[10]

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