

*On the Incompatibility of Enduring and Perduring Entities**

TRENTON MERRICKS

Mind 104 (1995): 523-531.

Presentism is the doctrine that the present time is ontologically privileged. According to the presentist, all that exists, exists at the present time; and an object has only those properties it exemplifies at the present time. Those who reject presentism hold that all times are on an ontological par, and the present time is special only because it is the time at which we (or our current time slices, current utterances, current actions or current thoughts, etc.) are located; the present time, according to this position, is merely *this* time. *This* place (the place in which I now sit) is simply one place among many; likewise, says one who denies presentism, the present time is simply one time among many. I shall call the view opposed to presentism, since it treats being present as simply being this time, “the indexical view of the present” or “indexicalism” for short.¹

One might be suspicious that presentism, as I have described it, is trivially true, and thus my attempt to describe a substantive philosophical thesis has failed. For one might think that simply knowing English and its use of tense is enough to tell us that an object *has* all and only those properties it has at the present moment. Since no one moved by this concern will be helped by my saying that presentism is the doctrine that all that *really* exists is what exists at the present time and all the properties an object *really* has (I mean *really* has) are the ones it has at

*Thanks to Marian David, Anthony Ellis, Jaegwon Kim, Eugene Mills, Alvin Plantinga, Philip Quinn, Michael Rea, Peter Vallentyne, James van Cleve, and Dean Zimmerman for helpful comments on this paper.

¹Presentists are also known as those who “take tense seriously” or believe in “temporal becoming”. Indexicalists are also known as those who think time is “static”, think of time as “spacelike”, or “do not take tense seriously”.

the present time, I shall try a different approach entirely. I shall ignore this objection and go on to argue that each theory of the present rules out a different account of persistence. Hopefully, seeing the sort of controversial inferences each account sanctions in the arguments below will clarify the ways in which each is a substantive philosophical thesis.

I

I will argue that:

(1) Presentism entails that there are no perduring, four-dimensional objects.

and

(2) Indexicalism entails that there are no enduring, three-dimensional objects.

I will conclude by demonstrating that the conjunction of (1) and (2) leads to an even more striking claim—the claim that a single world cannot contain both temporally extended, perduring events and three-dimensional, enduring objects.

In order to see why (1) is true, we must first consider the following:

(3) An object cannot have another object as a part if that other object does not exist.

(3) states that one object cannot have a second object as a part if there is no second object. (3) is also entailed by the thesis that *being a part* cannot be exemplified by what does not exist. (3) is, I think, unimpeachable. After all, who could deny that, for example, the question of whether the universe has among its parts massive crystalline spheres which contain the heavenly bodies

is closed once it is shown that no such spheres exist?²

A four-dimensional object is composed of “temporal parts”, some of which are three-dimensional and exist but a moment.³ A four-dimensional object lasts over time by way of having distinct temporal parts existing at distinct times.⁴ This sort of lasting or persisting is

²(3) is entailed by the position known as “serious actualism”, according to which an object can exemplify a property only in worlds in which it exists. Some have objected to serious actualism by claiming that an object exemplifies *non-existence* in worlds in which it doesn’t exist. The merits of this as a counterexample to serious actualism aside, it should be noted that no one has objected to serious actualism by maintaining that *being a part* can be exemplified by an object in worlds in which it doesn’t exist.

³Some of a four-dimensional object’s temporal parts also have temporal extent, and these temporal parts therefore have temporal parts of their own. Some perdurantists, such as Whitehead, think that all of an object’s parts have some duration—none last for but an instant—and thus all parts of an object are four-dimensional. In this paper I assume perduring objects would have some three-dimensional, instantaneous parts, but nothing rides on this. Below I argue that presentism combined with perdurance commits one to the view that perduring object have parts that do not exist, and the argument for this would work even if one thought that all temporal parts had some duration. In fact, the defense of (1) might be even easier if one took a view like Whitehead’s: assuming that the present time has no temporal duration, if all objects and parts do have temporal duration, then no objects or parts exist at the present time. The relevance of these remarks will be clear below. See (Whitehead 1920, p. 56). Mark Heller (1990, pp. 4-6) also discusses reasons the perdurantist might want to deny that a perduring object has three-dimensional temporal parts.

⁴My use of “persists”, “perdures” and “endures” follows the convention introduced by Mark Johnston and David Lewis. See (Lewis 1986, p. 202). I will use “perduring” and “four-dimensional” (and their cognates) interchangeably; likewise with the expressions “(persisting)

called “perduring”. So the central thesis of perdurance or four-dimensionalism is that objects which last over time have parts—temporal parts—which exist at many different times and that not all of their parts exist at any single time; thus, not all of a perduring object’s parts could exist at the single time which is present. If presentism is true, then those parts of an object which do not exist at the present time do not exist at all. So if presentism is true, a perduring object has some parts—the vast majority of its parts, in fact—which do not exist. But this possibility has been ruled out by (3). We can, therefore, conclude that if presentism is true, there are no perduring objects. (Note that if indexicalism is true, it doesn’t follow from the fact that a four-dimensional object has parts which fail to exist at the present time, that those parts fail to exist; this is just the sort of inference that indexicalism denies.)

That objects last over time by perduring is, of course, only one of two competing views. Its competitor is that objects have no temporal parts and last, not by perduring, but by *enduring*. Enduring objects lack temporal extent and have three dimensions instead of four. If a three-dimensional enduring object lasts from one time to another, then there is a three-dimensional object existing at one of those times which is literally identical with a three-dimensional object existing at the other. And although presentism combined with perdurance runs afoul of (3), no similar problems need afflict the combination of presentism and endurance. For the endurantist claims that at any single time at which an object exists, all of that object’s parts exist at that time; this claim is captured by the slogan that an enduring object is “wholly

three-dimensional” and “enduring”. However, these expressions are not equivalent. Perhaps there could be souls “spread out in time”; if so, it would be possible that an object perdure without having spatial dimensions, and thus without having four dimensions. Likewise, there might be an extensionless point that endures but, since it lacks extension, does not have three dimensions. Conversely, physicists might discover (or it might be possible) that space has more than three dimensions, in which case enduring physical entities would have as many dimensions as space, and perduring entities would have one more than that.

present” at each time at which it exists. The endurantist might claim, of course, that an object can change parts, and that what was once a part of an enduring object no longer exists. But presentism combined with (3) is consistent with an enduring object’s having had something as a part which no longer exists. This is because, according to presentism, it does not follow from the fact that O had p as a part at some time in the past that O has p as a part. Of course, the *perdurantist* cannot deny that a perduring object has parts which do not exist at the present time. To deny this is simply to deny that a perduring object has temporal parts; it is to renounce perdurance.⁵

So we can see that (1)—the claim that presentism entails that there are no perduring objects—is true. And the inconsistency of perdurance with presentism is not a product of some revisable or tangential feature of perdurance, but rather follows from the very nature of perdurance—the claim that not all the parts of an object which lasts over time exist at a single time.

The first step in arguing that indexicalism entails that there are no enduring objects (i.e., that (2) is true) is to note that, obviously, objects undergo change. It is no part of the doctrine

⁵Suppose the perdurantist were to follow the endurantist’s lead here, and say that all of a perduring object O’s parts exist at the present time, because although O *had* some past temporal part as a part, O now does not *have* that temporal part as a part. Suppose, that is, that the perdurantist says that the only parts O *has* (as opposed to the parts it had or will have) are the ones that exist at the present time. Then it would follow that O has only those parts that exist now, that is, that O has all and only the parts its present time-slice has. But then O collapses into its present slice—they have, for instance, exactly same parts—and O therefore turns out to be a non-persisting temporal part, and not a persisting object. Or conversely, if the perdurantist demands that, no matter what, O be a persisting entity, we get the conclusion that a three-dimensional thing—a thing with parts that exist at only one time—persists. (This collapse of what persists into what exists at the moment is, of course, exactly what the *endurantist* wants.)

that objects endure to deny this truism, so any endurantist should accept the following:

(4) It is possible that an enduring object O is F, and that at some time in the past O was not-F.

The endurantist must understand (4) as stating that the object that existed at a previous time and was not-F *is identical with* that object which exists at the present time and is F. But then, it has often been objected, it follows that that object both is F and is not-F.⁶ The obvious response to this objection is that it rests on a fallacious inference from O's failing to exemplify F at some time other than the present to O's failing to exemplify F. The inference is fallacious because, so this response goes, O exemplifies only those properties that it has at the present time. So if presentism is true, we can see that the endurantist can easily avoid contradiction in the face of change.

Suppose, however, one rejects presentism for indexicalism. The "obvious response" that keeps (4) from leading the endurantist into contradiction is no longer available. Given indexicalism, we can conclude that if a single object is F at one time, and is not-F at another, then that object both is and is not F. But that is, of course, contradictory. Granting the obvious, that objects undergo change, we can see that endurance and indexicalism are inconsistent. We can thus see that (2) is true. This argument for (2) is the rather familiar argument that change, endurance, and the indiscernibility of identicals lead to absurdity. My only addition is to make explicit the role played by indexicalism.⁷

⁶This objection has been raised and defended by, among others: D. M. Armstrong (1980, pp. 68-69), Michael Jubien (1993, pp. 24-27) and David Lewis (1986, pp. 202-204).

⁷In defense of the claim that my "addition" to the argument only makes explicit what it already contains, note that Lewis explicitly rejects presentism in his defense of the argument. For Lewis's attack on the view that "the only intrinsic properties of a thing are those it has at the present moment", see (Lewis 1986, p. 204).

The perdurantist is not forced into absurdities by indexicalism and the possibility of change. The claim that a *perduring* object is F at the present time but is not-F at some past time amounts to the claim that O's present temporal part is F, and that it has a past temporal part that is not-F. This leads to nothing contradictory.⁸ This way of making change consistent with indexicalism trades on the fact that a perduring object may have a property at a particular time in virtue of having a temporal part which has that property at that time. Because the endurantist denies objects have temporal parts, she must deny an object has a property in virtue of its temporal part having that property. Therefore, the way in which the perdurantist reconciles indexicalism and change is not open to the endurantist.

Some have tried, however, to reconcile endurance and indexicalism. Not, of course, by making use of the perdurantist's strategy, but instead by claiming that all properties that an enduring object seems to gain or lose are really either disguised relations to times or time indexed. So, according to the defender of this position, no enduring object is ever, strictly speaking, simply red. Rather, it stands in the *being red at* relation to a certain time t, or it exemplifies the time indexed property *being red at time t*.⁹ There is, of course no contradiction in saying a single object exemplifies both *being red at time t* and *not being red at t**, or in saying that a single object stands in the *being red at* relation to one time but not to another.

But it is *not* the case all of the properties that an object seems to gain or lose are really

⁸In some cases of change of a perduring object, it may not be the *instantaneous* time slice that does the work, but rather one of the perduring object's larger, temporally extended parts. So one might say that O is now exactly ten days old, but tomorrow will not be, and that this means that the temporally extended temporal part of O which starts at the time of O's birth and ends now lasts exactly ten days, but not so for the part that stretches from birth to tomorrow.

⁹Or, according to "adverbialism", it exemplifies being red *in a tly manner*. For a clear articulation and defense of adverbialism see Sally Haslanger (1989).

relations to times or time indexed.¹⁰ A short list of those properties which are not—they are known as “temporary intrinsics”—includes shape, color, size, and mass. I defend this claim elsewhere. Rather than rehearse those arguments here, let me simply note that if the arguments found in Merricks (1994) are successful, then we can embrace temporary intrinsics and, with them, (2).

Before leaving the argument from change for (2), I would like to look at a species of this argument which trades on a central claim of endurance: that an enduring object is wholly present at each time at which it exists. If an enduring object exists at time t and fills place P , then *all* of its parts are located within place P at time t . It is possible, however, for an enduring object to move; it is possible that at one time t such an object be in place P , and that at another time t^* it be in place P^* (which does not overlap P). Now if we assume that indexicalism is true, it seems we can conclude that an enduring object can have all of its parts in one place, P , and also have all of its parts in a distinct, non-overlapping place, P^* . This absurdity follows from the possibility of motion combined with indexicalism and the view that an object is wholly present at each time at which it exists. So if indexicalism is true, we should reject the claim that an object is wholly present at each time at which it exists; that is, if indexicalism is true, we should reject endurance. Of course, nothing untoward follows from the motion of a *perduring* object if indexicalism is true; for a perduring object’s being in a place at a time implies not that all of its parts are in that place at that time, but rather that one of its temporal parts is in that place at that time. So a perduring object could be in both place P and P^* ; this just means it could have one part in P and a distinct part in P^* .

We can see that perduring objects are not compatible with a presentist theory of time, and also that indexicalism is inconsistent with endurance. While this conclusion, that (1) and (2) are true, is one that many would not be surprised to discover, I will argue in the next section

¹⁰This point has been emphasized by Lewis (1986, p. 204).

that it leads directly to a conclusion that is very striking indeed.¹¹

II

Note that the reasons for endorsing (1) and (2) are not specific to enduring and perduring *objects*. The arguments here are general enough to include not only objects, but events (and any other kind of entity that might have either three or four dimensions). Suppose someone held that events endure; suppose that is, that someone held that an event was wholly present at each time at which it existed.¹² We can quickly see that enduring events are inconsistent with indexicalism by adapting one of the arguments for (2). Suppose a particular event—for example, *a moving feast*—is wholly present, one day, in place P; unsurprisingly, the feast moves and the next day is in place P*. If the moving feast endures, then when it is in P* it is wholly in P*, and, therefore, has no part in P; therefore, if the feast endures and indexicalism is true, then all of the feast's parts are in place P, and none of the feast's parts are in place P.¹³ This is unacceptable. It is easy

¹¹For another and more extended defense of (1) and (2) I recommend W.R. Carter and H. Scott Hestevold (1994).

¹²An odd supposition perhaps, since, so far as I know, no one explicitly defends such a claim. There is, however, no reason in principle why such a claim could not be defended. Suppose events are property exemplifications (such as O's being red). Why couldn't *O's being red* be wholly present at more than one time?

¹³The notion of an event undergoing the sort of change that seems to result in contradiction might seem a little implausible; one might insist that objects move, but that events do not. See for example Lombard's (1986, pp. 127-130) defense of this claim. But this is a sensible claim only if one assumes (as Lombard does) that events do not endure, but instead have temporal parts. If events endure, then they should be able to undergo the sort of change that objects do—that is, the sort of change that raises problems when combined with indexicalism.

to see that the more general objection in terms of change and indexicalism could also be adapted to show that changing events, as well as changing objects, cannot endure if the indexical view of the present is true. After all, an event can no more both be F and not-F than can an object.¹⁴ So we can conclude:

(2*) Indexicalism entails that there are no enduring entities.

‘Entities’ here and below is meant to be broad enough to include, at least, both objects and events.

Suppose that presentism is true, and all that exists exists at the present time. Assume for reductio that an event is four-dimensional and has many (temporal) parts which do not exist at the present time. Add that something cannot be a part (including a temporal part) if it does not exist. From all this we get the very sort of contradiction that resulted from trying to combine presentism and perduring objects. So we can conclude:

(1*) Presentism entails that there are no perduring entities

We now have all the resources necessary to prove that there are not (and cannot be) both three-dimensional and four-dimensional entities.

(1*) Presentism entails that there are no perduring entities.

(2*) Indexicalism entails that there are no enduring entities.

¹⁴The susceptibility of enduring events in an indexical world to this last, most general, problem depends on the fact that events have temporary intrinsic properties (not so for the more limited claim about events and their parts).

(5) Either presentism or indexicalism is true.¹⁵

Therefore,

(6) Either there are no perduring entities or there are no enduring entities

Therefore,

(7) It is not the case that there are both perduring entities and enduring entities.

It is, I think, intuitively very plausible that there could be enduring entities such as, for instance, baseballs alongside perduring events, such as baseball games. And it seems intuitively plausible that there could be a three-dimensional object that has a four-dimensional history. But if (7) is true, these intuitions have been shown to be misguided.

Not only is an ontology that combines three-dimensional and four-dimensional entities intuitively appealing, it is also one that some philosophers explicitly defend. Among them are: David Wiggins (1980, p. 25n12) and Lawrence Lombard (1986, pp. 127-131), both of whom claim that objects such as cats and dogs endure, but events perdure; and Peter van Inwagen (1990, pp. 142ff) who thinks that organisms endure, but argues that they participate in perduring events called “lives”. These philosophers are not idiosyncratic in their defense of perduring events—that events perdure has achieved the status of philosophical orthodoxy, even among those who eschew four-dimensionalism for objects. So it should be clear that (7) has serious consequences for ontology in general, and, in particular, for which theories of events are

¹⁵I assert this without argument. As I have presented the doctrines here, presentism and indexicalism are so general as to pretty clearly exhaust the options. (5) might even follow from each of the following tautologies: either the present time is ontologically privileged or it is not and either all times are on an ontological par or they are not. At any rate, if anyone has a real alternative to either presentism and indexicalism, then the argument of this paper can be understood as arguing for either (7) or the denial of (5). That conclusion would still be interesting.

consistent with an ontology of three-dimensional objects.

Finally, I would like to direct attention to (7)'s impact on the debates surrounding personal identity. If one claims that persons are perduring entities composed of "person-stages", then, since perduring persons are inconsistent with enduring objects, one is committed to a thoroughgoing four-dimensionalism. Conversely, if one thinks that at least some objects, such as bodies or houses or metaphysical simples, endure, then one may not endorse the fashionable view that persons are composed of person-stages. The question of personal identity over time, i.e., personal persistence, cannot be approached independently of the question of persistence of objects and events in general.

Department of Philosophy
Virginia Commonwealth University
915 West Franklin Street
Richmond, Virginia 23284-2025
U.S.A.

TRENTON MERRICKS

REFERENCES

- Armstrong, D.M. 1980: "Identity Through Time", in Van Inwagen 1980, pp. 67-78.
- Carter, William S. and Hestevold, H. Scott 1994: "On Passage and Persistence". *American Philosophical Quarterly*, 31, 4, 269-284.
- Haslanger, Sally 1989: "Endurance and Temporary Intrinsic". *Analysis*, 49, 3, pp.119-125.
- Heller, Mark 1990: *The Ontology of Physical Objects*. Cambridge: Cambridge Press.
- Jubien, Michael 1993: *Ontology, Modality, and the Fallacy of Reference*. Cambridge: Cambridge Press.
- Lewis, David 1986: *On The Plurality of Worlds*. Oxford: Basil Blackwell.
- Lombard, Lawrence 1986: *Events: A Metaphysical Study*. London: Routledge & Keegan Paul.
- Merricks, Trenton 1994: "Endurance and Indiscernibility". *Journal of Philosophy*, 91, 4, pp. 165-184.
- Van Inwagen, Peter, ed. 1980: *Time and Cause: Essays in Honor of Richard Taylor*. Dordrecht: D. Reidel.
- 1990: *Material Beings*. Ithaca, N.Y.: Cornell Press.
- Whitehead, A.N. 1920: *The Concept of Nature*. Cambridge: Cambridge Press.
- Wiggins, David 1980: *Sameness and Substance*. Cambridge, Mass.: Harvard Press.