

Philosophy of Mind and Metaphysics
Lecture III: Qualitative Change and the Doctrine of Temporal Parts

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I. PRELIMINARIES

- a. Last time, we were concerned about the nature of identity, and we asked questions like “In virtue of what is one thing identical to another?” This time, we’ll presume that we have, or that we one day will have, a pretty good answer to such questions. We’ll thus move on to questions like this: *How is it that one and the same object can possess mutually incompatible qualities, even at different times?* We’ll call the problem that we face when we try to answer this question *the problem of qualitative change*. (Notice that last time’s question calls for an *analysis*, while tonight’s question calls for an *explanation*.)

II. RESPONSES TO THE QUESTION

a. PRESENTISM

- i. **THE VIEW:** According to presentism, “the only statements ascribing qualities to objects that can strictly be true are those that ascribe those qualities now to objects that exist now. On this view, then, the only strictly true statements of the form ‘*a* is *F* at *t*’ [where *a* is an object, *F* is a quality, and *t* is a time] are ones of the form ‘*a* is *F* now’” (pp. 42-3).
- ii. **THE SOLUTION:** Presentism solves the problem of qualitative change in this way: Given that presentism is true, “it follows that it is simply never strictly true to say that one and the same object possesses mutually incompatible qualities at different times, since the only real time is the present” (p. 43).
- iii. **THE PROBLEM:** If presentism is true, “how [are we] to make sense of our everyday talk about past and future times” (p. 43)?

b. TEMPORAL REALISM

i. ‘*a* is *F*-at-*t*’ (a.k.a. the RELATIONAL PROPERTY VIEW)

1. **THE VIEW:** We should build the time we refer to, *t*, into what we predicate of the object *a*. “On this view, then, what is predicated of, or ascribed to, the object *a* is not the simple

quality of F ness, but rather the relational property of being F -at- t " (p. 44).

- a. A *relational* property is a property that a thing possesses in virtue of being related in some way to another thing. For example, the property of being a wife is a relational property since one has that property in virtue of being related in a certain way to someone else.
 - b. A *non-relational*, or *intrinsic*, property is a property that a thing possesses in and of itself, and hence whether or not it stands in certain relations to other things. For example, the property of being cylindrical is an intrinsic property.
2. **THE SOLUTION:** This view solves the problem of qualitative change in this way: If this view is true, "qualitative change is possible because, for example, straightness-yesterday and bentness-today are compatible relational properties, even though straightness-now and bentness-now are incompatible" (p. 44). When we ascribed to a both straightness and bentness, we merely *thought* that we were ascribing incompatible properties. In fact, we were ascribing the perfectly compatible properties straightness-at- t_0 and bentness-at- t_1 .
 3. **THE PROBLEM:** "[R]ather than explaining how qualitative change is possible, [this view] denies that such change ever really occurs, because it denies that the objects concerned possess the intrinsic qualities that such change is supposed to involve" (p. 44).

ii. ' a -at- t is F ' (a.k.a. the TEMPORAL PARTS VIEW)

1. **THE VIEW:** We should build the time we refer to, t , into the subject of the statement ' a is F at t '. We should now regard the subject not as the object a itself, but rather as a particular *temporal part* of a , namely, a -at- t . We therefore ascribe the quality of F ness to a -at- t , a particular temporal part of a , rather than to a as a whole.
2. **THE SOLUTION:** This view solves the problem of qualitative change in this way: If this view is true, we do not ascribe incompatible properties—for example, straightness and bentness—to one and the same object, but rather to two numerically distinct objects, namely, a -at- t_0 and a -at- t_1 .

Granted, these two numerically distinct objects are temporal parts of one and the same object, *a*, but it remains the case that we ascribe the qualities of straightness and bentness to two numerically distinct objects. So, when we ascribed both straightness and bentness to *a*, we merely *thought* that we were ascribing those incompatible properties to one and the same object. In fact, we were ascribing those properties to two quite distinct objects *a-at-t₀* and *a-at-t₁*.

3. THE PROBLEMS: (1) Just what *is* a temporal part? (2) Here again, rather than explaining how qualitative change is possible, the temporal parts solution seems to deny that such change ever really occurs, because it denies that the qualities concerned are possessed by the sort of persisting objects in which qualitative change is supposed to occur.

iii. '*a is-at-t F*' (a.k.a. the ADVERBIAL VIEW)

1. THE VIEW: We should build the time we refer to, *t*, into "the predicative or ascriptive link itself, which is expressed in the original statement by the verb 'is'" (p. 47). Here's the idea, according to Lowe: "at least in the case of objects that exist *in* time, a quality can only be ascribed to an object in some temporal mode, whether past, present, or future: and this is the primary function of the basic tenses of verbs in everyday language. ...the *possessing* of a quality by ... an object is itself a temporally relative affair and so involves, if you like, a relation to a time" (p. 47).
2. THE SOLUTION: This view solves the problem of qualitative change in this way: If this view is true, then qualitative change consists in the fact that one and the same object possesses, relative to different times, different qualities. On this view, the quality *F*ness is a non-relational property (rather than a relational property, as it is on the relational property view) and the object *a* is *a* as a whole (rather than a temporal part of *a*, as it is on the temporal parts view). On the adverbial view, it's the possession of the quality by the object that is a temporally relative affair.
3. THE PROBLEM: Does this proposal *explain* how qualitative change is possible? Or does it simply *assume* that such change does, and therefore can, occur?

III. THE NOTION OF TEMPORAL PARTS

- a. Perhaps something from **ORDINARY LANGUAGE** will help us to understand the notion of temporal parts. “It is true,” Lowe says, “that we sometimes say things such as ‘Tom at six years of age was a promising child’. But it doesn’t seem that in making such a statement we are using the expression ‘Tom at six years of age’ to refer to a certain entity which existed when Tom was six years of age but not at any later time. ... Rather, the statement is just a stylistic variant of the statement ‘At six years of age, Tom was a promising child’, in which the object referred to is *Tom*, and the words ‘at six years of age’ constitute an adverbial phrase modifying the predicate ‘was a promising child’” (p. 51).
- b. Perhaps we can better understand temporal parts if we exploit parallels with our everyday ways of talking about **EVENTS AND PROCESSES**, for we happily say that such things have *parts*. However, it seems that “we cannot unproblematically transfer this way of talking to persisting *objects* ... For these things are not, or at least are not at all obviously, *processes* of any kind...” (p. 51).
- c. Perhaps we can model the notion of a temporal part on the notion of a **SPATIAL PART**, with which we are quite familiar. Yet the spatial parts of persisting objects, which we should think of as their component parts,¹ are themselves just other persisting objects. (The branch of a tree, for example, is not only a component part of a persisting object—the tree—but also itself a persisting object.) But now the model breaks down, for we cannot see the temporal parts of a persisting object as being themselves persisting objects. The temporal parts of an object are supposed to exist *at a time* rather than to persist.
- d. Perhaps we can model the notion of a temporal part on the notion of an **ESSENTIAL SPATIAL PART**, where an essential spatial part of an object is something that helps to determine the object’s very identity, and hence a part of the object that it could not lose without losing its identity. Yet, according to Lowe, this suggestion smacks of incoherence. For if we think of temporal parts on the model of essential spatial parts, then the different temporal parts of a persisting object cannot be identified independently of the persisting object of which they are parts. If a persisting object, *O*, has a temporal part that exists at a certain time *t*, then that temporal part is an entity that can be identified only in terms of its relations to *O* and *t*. Thus, it can be identified only if *O* itself can be identified independently of that temporal part. This means, then, that we cannot think of temporal parts on the model of essential spatial parts—we *cannot* identify a temporal part

¹ An object’s component parts can exist, and can be identified, independently of the object of which they are components.

independently of the object of which it is a part; and from this it follows that temporal parts cannot be essential spatial parts (since such parts are, by definition, things that we *can* identify independently of the persisting object of which they are parts).