

PHIL 4603: Metaphysics
Prof. Funkhouser
Thomson, "Parthood and Identity across Time"

I.

- Thomson begins by presenting the Leonard-Goodman Calculus of Individuals. Run through the definitions and axioms so that you understand this logic of parthood. Note, in particular, the concept of a *fusion*.

- In Thomson's example of a Tinkertoy house, it appears that the house (H) is identical to the fusion of Tinkertoys on the shelf (W).

II.

- Even if we do not accept fusions, surely there is the wood, W' , that makes up the Tinkertoy house. And doesn't $H=W'$? (And, $H=W'=W$.)

III.

- But if we replace a piece of wood, it seems that H is still there (on the shelf) but W (and W') is not. Therefore, H is not identical to W (or W'). But this conclusion contradicts what was said in II.

- Mereological essentialism holds for fusions.

- What gives? Thomson refuses to believe that H cannot survive the replacement of one Tinkertoy. So, she clearly rejects mereological essentialism for Tinkertoy houses. She suggests that one of the identity claims from section II will have to go.

But Thomson also considers the temporal parts solution. A temporal part is just what the name suggests: a part of something that has temporal extension. They are analogous to spatial parts of objects: parts of objects that have spatial extension. If we admit temporal parts into our ontology (just as one might admit, say, arbitrary undetached spatial parts), then there is such a thing as H-from-1:00-to-1:30 and W-from-1:00-to-1:30. These temporal "parts" are identical. This temporal part is a part of both H and W. H and W overlap from 1:00 to 1:30, but their temporal parts are distinct, presumably, both before and after this time.

IV.

- On pp. 303–305 Thomson provides 4 metaphysical theses that she takes as characterizing belief in temporal parts.

- Let's discuss this passage:

... my chair is a temporal part of itself, and this means there is a time T such that my chair exists through T and such that no part of my chair exists outside T and so, in particular, such that my chair exists through and only through T and no part of it exists before T. Now my chair was made out of wood: four wooden legs, a wooden seat, and a wooden back were screwed together to make that chair. So the legs, seat, and back existed before the chair existed; so neither the legs, seat, nor back of the chair are parts of the chair. What an absurd result to have arrived at!

“No doubt it sounds odd,” says the friend of temporal parts with a sigh. “But it can be lived with. For keep this in mind: if the legs, seat, and back of the chair are not themselves parts of the chair, they do at all events overlap the chair since they have temporal parts that are temporal parts of the chair.” (pp. 305–306)

V.

- For the temporal parts theorist, change is understood as difference among temporal parts. For example, something that changes from cold to hot has cold temporal parts preceding hot temporal parts.

On this view objects can overlap at a time, but only in virtue of sharing *one* temporal part at that time.

- Continuant: a fusion of successive temporal parts.

Q: Are temporal parts ontologically prior to the continuants that they compose?

- 2 reasons to think that temporal parts exist:

1. They solve many problems about identity through time.
2. An analogy to space suggests their existence.

For example, just as we can speak of spatial halves of a piece of chalk, we can speak of its temporal halves. But Thomson says that though we can break a piece of chalk into its spatial halves, we cannot break a piece of chalk into

temporal halves.

- Let's discuss Thomson's "crazy metaphysic" paragraph:

I said this seems to me a crazy metaphysic. It seems to me that its full craziness comes out only when we take the spatial analogy seriously. The metaphysic yields that if I have had exactly one bit of chalk in my hand for the last hour, then there is something in my hand which is white, roughly cylindrical in shape, and dusty, something which also has a weight, something which is chalk, which was not in my hand three minutes ago, and indeed, such that no part of it was in my hand three minutes ago. As I hold the bit of chalk in my hand, new stuff, new chalk keeps constantly coming into existence *ex nihilo*. That strikes me as obviously false. (p. 307)

VI.

- Thomson claims that parthood is a three-place relation among two objects and a time. The temporal parts theorist makes it a two-place relation (getting rid of the time slot). Thomson claims that the Calculus of Individuals must be modified to account for parthood being a three-place relation. ' $x < y$ ' cannot express parthood, because only two of the places are present (the two objects). In short, the definitions and axioms will need to be indexed to a time.

In particular, fusions are indexed to times, so that there is no such thing as *W simpliciter*, but only *W* indexed to a time. And there are times for which the indexed *W* does not meet the new identity axiom for identity with *H*. So, the indexed *W*s are not identical to *H*. Instead, the Tinkertoy house always has the wood it is made of at that time as a part (and *vice versa*).

VII.

- Problem: What if *W* and *H* never diverge? In such a case *W* always meets the new identity axiom for identity with *H*, and therefore "they" are identical. Compare this with Gibbard's Lump1/Goliath story. To avoid this conclusion Thomson would have to admit modality into the new identity axiom, as she describes on p. 311.