Fine's 'Acts, Events and Things' April 18, 2001

1. Van Inwagen's modal argument against the doctrine of temporal parts

D-minus = the temporal part of Descartes that includes all but the last year of his life.

If Descartes had ceased to exist a year earlier than he in fact did, then Descartes would have traced out the same spatiotemporal region as D-minus. Necessarily, if x traces out the same spatiotemporal region as y, then x = y. Therefore, if Descartes had ceased to exist a year earlier than he in fact did, then Descartes would have been identical to D-minus.

Why can't there be two things that *would* have been identical under certain circumstances? Van Inwagen's argument for this seems to beg the question by using the definite description 'the thing that would have been Descartes if Descartes had ceased to exist a year earlier'.

An argument for the necessity of identity:

x=y (Assumption) Necessarily, x=xTherefore, Necessarily, x=y (by Leibniz's Law).

An argument for the necessity of distinctness: **Possibly**, x=y (Assumption) Necessarily, if x=y, then necessarily, x=y (previous result) Therefore, possibly necessarily x=yTherefore, necessarily x=y (S5 axiom) Therefore, x=y

2. Fine on the 'extensional view'

i.e. the doctrine of temporal parts. He gives a good description of the way in which this view is "metaphysically appealing":

It conforms to what one might call an extensional picture of physical reality, 'extensional' not in the logician's new-fangled sense but in the traditional sense that relates to talk of a body's extension. In effect, each material thing is conceived of in terms of its occupancy or extension in space and time, so that things with the same spatio-temporal extension are judged to be the same. Such a view then seems to take the mystery out of the material thing as something additional to the matter. For we may think of the material things as providing us with a way of talking about different matter at different times. (p. 98-99)

3. An 'extensional' solution to modal paradoxes

- Just as there are many different moments of time, one of which is the present time, so there are many different possible worlds, one of which is the actual world.
- Material objects are spread across possible worlds just as they are spread through time, having different 'modal stages' at different possible worlds. 'x could have been F' is true iff x has a modal stage that is F.
- It sometimes happens that two material objects trace out the same spatiotemporal region at the actual world. But when this happens, the objects always trace out different regions at other possible worlds. When we look at all the possible worlds at once, we can see that the objects don't really coincide; it is only when we restrict our attention to this one world that they look to coincide.

4. Objections to extensionalism

- (i) The theory can't give an account of the relation of constitution which the matter bears to the statue.
- We could try 'x constitutes y at t iff x and y are parts of each other at t' but that would make constitution symmetric; it would be equally true to say that the statue constitutes the matter.
- We could try 'x constitutes y iff x is part of y simpliciter'; but that would make the statue constitute the matter and not vice-versa.
- What about 'x constitutes y iff y is part of x simpliciter'?
- (ii) 'Nor can we say that the statue is a temporal segment of the matter, for as long as the matter continues to exist, the temporal segment will be there, regardless of what the sculptor does' (p. 101)
- This objection seems to assume a certain view about the essences of temporal parts: namely that if x is the temporal part of y from t_1 to t_2 , then necessarily, if y exists between t_1 and t_2 , then x exists and is the temporal part of y during that time. This could easily be denied!

5. The theory of qua objects

For each description , whenever an object x is , there is a new object x qua . We say that x is the basis of this qua-object, and is the gloss.

Fine states three principles concerning these qua-objects.

Existence: The qua object *x* qua exists at a given time (world-time) iff *x* exists and has at the given time (world-time).

— It follows from this that x qua is always , and is essentially .

Identity: (i) Two qua objects are the ssame only if their bases and glosses are the same. (ii) A qua object is distinct from its basis (or from the basis of its basis, should that be a qua object, and so on).

It already follows from Existence that x qua is distinct from x, unless x itself is always and essentially . It doesn't follow from Existence that Socrates qua human is distinct from Socrates, or that [Mrs Thatcher qua

Prime Minister] qua Prime Minister is distinct from [Mrs Thatcher qua Prime Minister].) *Identity* plugs the gap.

Inheritance: At any time (world-time) at which a qua object exists, it has those normal properties possessed by its basis.

— "Normal" properties are non-formal properties that are confined to a single time and world. So for example the qua object *me* qua *living* in New York is in the same place as me, the same weight as me, also giving this lecture, thinking the same thoughts as me...