Deasy's Modal Moving Spotlight

Ted Sider
Philosophy of Time

1. The view

A theory There is an absolute distinction between present and non-present times

Permanentism Always, everything is always something ($\mathsf{A}\forall x\mathsf{A}\exists y\, x = y$)

Spotlight Exactly one fundamental property is temporary, and it is monadic

Priorean tensed language (in order to state the thesis of Permanentism)

Presupposition of an ontology of times

Bizarre wording of Permanentism: Williamsonian scruples about 'exists'; compare Williamson's Necessitism"" necessarily, everything is necessarily something ($\Box\forall x\Box\exists y\, x = y$)

What are these "former dinosaurs" like? They are not dinosaurs; they have no mass; etc.

Fundamental property of presentness (May or may not be a property of times, as opposed to points of spacetime)

Other temporary properties

About Presentness For each property F expressed by an ordinary predicate, there is a permanent relation R such that F is the temporary property of bearing R to a present time

2. Parsonian reduction of tense

P(Ted is sitting)

$= \exists t_0 \exists t(\text{present}(t_0) \wedge t < t_0 \wedge \text{at } t(\text{Ted is sitting})$

("*Ted is sitting at some time before the present time*")

(quantificational analysis of P)

$= \exists t_0 \exists t(\text{present}(t_0) \wedge t < t_0 \wedge (\text{present}(t) \boxdot\!\!\rightarrow \text{Ted is sitting})$

("*there is a time before the present, such that Ted would have been sitting if it had been present*")

(counterfactual analysis of 'at')

Circularity concern about counterfactual analysis of 'at': counterfactuals normally hold because of certain facts about the actual world; but the relevant facts here would be the very facts being explained.

3. Modal analysis of 'at'

$$\text{At } t, p = \exists q\Big(q \wedge Cq \wedge \Box\big((q \wedge \text{present}(t)) \rightarrow p\big)\Big)$$

= "p is necessitated by some true proposition not about fundamental presentness together with the proposition that t is present"

4. Relations to times?

> the predicate 'is sitting' expresses the temporary (monadic) property of sitting-at a present time (p. 3)

This might suggest this:

$$\text{Ted is sitting} = \exists t(\text{present}(t) \wedge \text{at } t, \text{Ted is sitting})$$

But this seems "circular". (E.g., violates Dorr's (2016) "only logical circles" principle.)

Alternative: relations to times:

$$\text{Ted is sitting} = \exists t(\text{present}(t) \wedge \text{sits-at}(\text{Ted}, t))$$

5. Temporalism

Temporalism says that some propositions have their truth values temporarily, i.e.: $\exists p\ p \wedge \mathsf{S}{\sim}p$.

For Deasy, *some* propositions don't change their truth values, e.g., sits-at(Ted,t). But others do:

> $\exists t\big(\text{present}(t) \mathit{and} \text{sits-at}(\text{Ted}, t)\big)$
>
> ("Ted sits-at some present moment")

(This, in fact, is the proposition that Ted is sitting, according to Deasy.)

6. Fundamentality and "A-intuitions"

Deasy's A theory disagrees with the B theory about presentness at the fundamental level.

In a sense they don't disagree over the nature of sitting, assuming that Deasy accepts the relations-to-times picture above.

Change, on Deasy's picture, ultimately is a matter of change in what moment is present, which is understood as follows:

$$\mathsf{P}(\text{present}(2021))$$

Apply the quantificational analysis of 'P':

$$\exists t_0 \exists t_1 \big(\text{present}(t_0) \wedge t_1 < t_0 \wedge \text{at } t_1, \text{present}(2021)\big)$$

Next apply the modal analysis of 'at':

$$\exists t_0 \exists t_1 \Big(\text{present}(t_0) \wedge t_1 < t_0 \wedge \exists q \Big(q \wedge C q \wedge \Box\big((q \wedge \text{present}(t_1)) \rightarrow \text{present}(2021)\big)\Big)\Big)$$

I.e.:

> "there is some time t_1 before the present moment, such that t_1's being present, together with some true proposition not involving presentness, entails 2021's being present"

This is true simply because 2021 is before the moment that is present (let $t_1 =$ 2021; the q is irrelevant). Some A theorists may see this as "thin".In order for 2021 to *have been present*, nothing additional *in actuality* is demanded. We count it as having previously been present simply because it is before the moment that *is* present.

> Some might object that change over time requires, not just the truth of Temporalism, but the fundamental truth of Temporalism. Given that Temporalism involves the tense operator 'It is sometimes the case that' ('S'), this objection implies that there is change over time only if some of the properties of propositions expressed by tense operators are fundamental. But why should we think that nothing changes if the properties of propositions expressed by tense operators are not fundamental? Unlike the view that nothing changes if the facts don't change (that is, if Temporalism is false), the justification for this view is not at all clear. (p. 7)

7. What are times?

Initial setup:

- A *time* is a hypersurface
- Fundamental presentness attaches to times

But this doesn't guarantee, e.g., uniqueness of the present moment.

New setup:

- Fundamental presentness attaches to points of spacetime
- *The present* is the set of all and only things that possess fundamental presentness
- A *time* is anything that is either i) The present, or else ii) a hypersurface that is parallel to some hypersurface which is identical to The present

But even the new definitions allow, e.g., that the present moment encompasses some times that are before others.

References

Dorr, Cian (2016). "To Be F is to Be G." *Philosophical Perspectives* 30(1): 39–134.