

Time 2

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The A-Series and the B-Series

- A-properties: *being past, being present, being future.*
- B-properties: *earlier than, later than, simultaneous with*
- A-Series: both A and B properties exist.
- B-Series: A properties cannot exist. Only B-properties exist.

Time Does Not Exist

1. If time is real, either the B-theory or the A-theory of time is the correct characterization of time.
2. The correct characterization of time must allow for change.
3. The B-theory cannot allow for change. [See below]
4. The B-theory cannot characterize time. [From 2-3]
5. An adequate characterization of time cannot be contradictory.
6. The A-theory is contradictory. [See below]
7. The A-theory cannot characterize time. [From 5-6]
8. Time is unreal. [From 4&7]

Argument for Premise 3

Most assume that the existence of time requires the existence of change; if change is impossible, then so is time. This assumption places a constraint on an adequate theory of time, namely, an adequate theory of time must be compatible with the existence of change. This presents a problem for the B-Theory:

1. If change exists, the passage of time must be real.
2. If the B-theory is true, the passage of time is unreal.
3. If change exists, the B-theory cannot be true. [From 1-2]

Why accept (1)? Changes are events that have temporal duration. They also seem to be made up of smaller events with shorter durations. For instance, running a 400m race is an event that has temporal duration, but it is itself made up of shorter lasting events. There is the event of running the first 100m, the event of running the second 100m, and so on. But these events do not seem to 'eternally' occur, i.e., the journalist shouts, 'the sprinter is *now* on the second leg'. Later he shouts, 'the sprinter is *now* on the third leg.' The B-Theory cannot seem to accommodate this obvious feature of the sprinter's run.

Argument for P6

1. If the A-Theory is true, then a particular event E either (a) co-instantiates the properties of being past, present, and future, or (b) does not co-instantiate these properties.
2. It is impossible for E to co-instantiate the properties of being past, present, and future.
3. It is impossible for E not to co-instantiate the properties of being past, present, and future.
4. The A-Theory is not true.

Big questions:

- Do you accept (2)? If so, why? If not, why not?
- Why might we accept (3)? Recall that there is a worry about an infinite regress. What is this worry? A hint: it assumes a distinction between moments of time and the events occurring at those moments.