## Consistent stories of travel into the past

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#### 1. Inconsistent time travel stories

# 2. Ways of saving what look like inconsistent 'changing the past' stories (or movies) from inconsistency

- (i) Parallel universes or "timelines"
- (ii) Branching universes
- (iii)'Time machines' are really machines for 'resetting' the state of the universe (with the exception of the 'time traveller' to the state it was in at some earlier time.
- Note that if you knew your 'time machine' worked in one of these ways, you might well not have the motivations that characters in these stories typically have.

#### 3. The interesting kinds of consistent 'time travel' stories/movies

These describe events that can be embedded in a single spacetime, with no 'resetting' phenomena or similar "cheats".

#### 4. The central controversy

If the history of events taking place in spacetime were like *that*, would that really be properly described as a case *time travel*? Or would it, e.g., be a situation in which an adult person pops into existence in the Jurassic Epoch., dies forty years later, and a *different* person is born in 1972 and is annihilated 33 years later after he has come to be exactly like the guy back in the Jurassic?

This is *part* of what has to be true if what's happening in these stories is really properly described as time travel. We also need a way of making sense of remarks like 'In a few minutes, I will be in the Jurassic Epoch', as uttered by the guy in 2006, on which such remarks can be true.

#### 5. Lewis's theory of people

A person is an aggregate of person-stages which can be put in order in such a way that the stages that come later in the order have psychological properties that are similar enough to, and caused by, the psychological properties of the stages immediately prior to them in this order (and in which no two stages are *too* dissimilar psychologically).

On this view, the guy in the Jurassic *can* be the same person as the guy in 2006, provided we have *backwards causation* from events in 2006 to events in the Jurassic.

### 6. Lewis's theory of 'personal time'