

THE GROWING BLOCK

Ted Sider, Metaphysics

1. SPACE - TIME SIMILARITIES

2. DIRECTION OF TIME

3. THE MOVING SPOTLIGHT

We are naturally tempted to regard the history of the world as existing eternally in a certain order of events. Along this, and in a fixed direction, we imagine the characteristic of presentness as moving, somewhat like the spot of light from a policeman's bull's-eye traversing the fronts of the houses in a street. What is illuminated is the present, what has been illuminated is the past, and what has not yet been illuminated is the future. . . (Broad, 84.)

The moving spotlight view: Past, present, and future objects are real. Presentness is not just where the speaker is located. A single moment of time is objectively present. But which moment is present is not "frozen"; the objective present moves. The past-to-future direction of time is the direction of motion of the objective present.

If you can cut the history of [a] thing in a certain moment, such that a slice of its history before that is red and a slice after that is green, we say that the thing ... has changed from red to green at that moment... Can we treat the change of an event from futurity, through presentness, to pastness in the way in which we have treated the change of a thing (say a signal lamp) from red to green? I think it is certain that we cannot. . . (Broad, 85)

4. THE GROWING BLOCK UNIVERSE

[My present] is just the last thin slice that has joined up to my life-history. When it ceases to be present and becomes past this does not mean that it has changed its relations to anything to which it was related when it was present. It will simply mean that other slices have been tacked on to my life history. . . It will be observed that such a theory as this accepts the reality of the present and the past, but holds that the future is simply nothing at all. Nothing has happened to the present by becoming past except that fresh slices of existence have been added to the total history of the world. . . The sum total of existence is always increasing, and it is this which gives the time-series a sense as well as an order. A moment t is later than a moment t' if the sum total of existence at t includes the sum total of existence at t' together with something more. (Broad, 87.)

Broad's "growing block universe" theory: Past and present objects exist; there are no future objects. Time's passage is the addition of "new layers of being" to the block universe. The present is the edge of the block universe to which new layers are added. The past-to-future direction of time is the direction pointing to the present edge of the block universe.

5. JUDGMENTS ABOUT THE FUTURE

Many English peasants, in the Middle Ages, must have made the judgments 'Puck exists' or 'Puck has turned the milk.'... What fact made their judgments false? The answer is that it is the negative fact that no part of the universe was characterised by the set of characteristics by which they described Puck to themselves. (Broad, 90.)

6. BECOMING

We cannot... analyse *will* away, as we can *has been* and *is now*... although the future is nothing and although judgments which profess to be about the future refer to nothing, they are not about nothing. They are about ... becoming; and, so far as I can see, they make an unique and not further analysable kind of assertion... (Broad, 93.)