

Renmin University Short Course
Time and Persons

Lecture I: The Static Image of Reality

Introduction to the Series

1. the many phil. puzzles concerning time
 - Augustine (396 AD): “What is time? Provided no one asks me, I know.”
 - time is fleeting (Augustine’s puzzle) – ‘tends towards nonexistence’
 - our experience’s imperfect fit with real time
 - more radical illusions of length of events
 - time’s arrow
 - ancient paradoxes of time and space (Zeno)
2. the two general approaches to time’s basic nature: *static* and *dynamic*
3. relativistic physics as deciding the case empirically?
4. activity of science and the constraints this imposes on theorizing about our reality

The Static View of Time

1. time ‘spatialized’ in a seamless 4D manifold
 - the block universe again: P, P, F equally real. Change = variation along time axis
 - ‘now’ like ‘here’ – self-locating speaker, not observer-independent
 - acc. to most: no *intrinsic* direction either (Maudlin excep); seek to *explain* it
2. properties as purely ‘categorical’ (qualities that are not intrinsic propensities)
 - if temporal becoming is not fundamental, neither is ‘making to happen’/causing
 - causation reduces to patterns in the manifold (causal reductionism)
3. objects spread out in time as 4D ‘worms’ with temporal (as well as spatial) parts
4. supersubstantialism
 - object as *located* at spacetime region - distinct entity (substantialism)
 - object *as* spacetime region - identity (supersubstantialism)

Arguments in Favor of Static Theory of Time

[see Ted Sider, *Four-Dimensionalism*]

1. truthmaker argument against *presentism* (the leading dynamic account)
2. ‘temporary intrinsics’ argument against *non-presentist* dynamic theories
 - objects have different properties at different times – how to analyze this without lapsing into contradiction?
 - easy solution for static view: distinct temporal *parts* as bearing distinct properties...
3. enduring objects and vagueness
4. supported by special and general theories of relativity theory
 - there is no privileged fact of what events are occurring simultaneously, so there can be no objective, privileged *now* containing all and only present events

Arguments Against Static View of Time

1. implausible analysis of change as variation over co-existing time parts
2. spatialized time leads to causal reductionism (which is implausible)
3. spatialized time contradicts certain aspects of personhood

Lecture II: The Dynamic Image of Reality

Objective/Fundamental Temporal Becoming: Three Dynamic Time Theories

1. 3D eternalism
 - eternalism: like 4D view, past and future objects exist.
But extra feature: objective becoming
2. presentism
 - No reality to past or present.
Everything that exists, exists now, the instantaneous present.
3. growing block
 - Hybrid view: all that has happened exists, but nothing *future* does (yet).
Reality is expanding over time, not just spatially, but along the time axis as well.
The present is the *leading edge* of reality.

Dynamic Time and the Nature of *Object Persistence Through Time*

1. properties as dispositional/relational (contra causal reductionism)
2. enduring 3D objects
 - a. on 3D eternalism/the 'moving now'
 - wholly located at multiple times
 - having-properties-relative-to-times: *being red t₁-ly*
 - b. on presentism
 - persists through time, while undergoing change
 - has properties *simpliciter* (*being red*)
 - some objects cease to be, others come to be
 - c. on growing block
 - wholly located at multiple times
 - having-properties-relative-to-times: *being red t₁-ly*
 - located at *growing* number of times

Assessing the 3D Eternalist and Growing Block Theories of Time and Persistence

1. assessing 3D eternalism
 - Adds something to 4D view that doesn't make any *further* difference to reality?
 - How would you at any moment know that you *are present*?
 - Modification: past events/objects are *different* from presently occurring ones...
 - Further problem, even on modified account: the reality of the future and fatalism
2. assessing growing block
 - main advantage: avoiding fatalism by denying reality of future
 - any *disadvantages* in relation to 3D eternalism?

Assessing The Presentist Theory of Time and Persistence

[see Dean Zimmerman, "Presentism and the Spacetime Manifold"]

1. The Truthmaker Objection
 - Option 1: reject truthmaker doctrine. free-floating truths.
 - Option 2: Past-tinged, 'Lucretian' properties: *having been x at time t*
2. The Argument from Relativity Theory
 - reply: a physically undetectable privileged reference frame is *consistent* w/ theory:
a foliation or slicing of 4D manifold into a series of 3D spacelike hypersurfaces.

Lecture III: The Emergence of Persons in a Dynamical Reality

The Philosophical Case for the Fundamentality of Human Persons

1. the significance of persons in ordinary thinking
 - *enduring* sources of value, rights, and obligation...
2. persons and the activity of science *redux*
3. distinctive properties of persons
 - perceptual awareness (“qualia”), self-awareness (peculiar reflexivity and unity), intellect (intentionality), and will (self-directed purposive activity)

The Emergence of Human Persons in a Dynamic Universe

1. evolutionary history and organic development: embodiment and complexity
2. The Game of Life...
3. weak emergence =_{def} ‘novel’ patterns of behavior in a composite, organized system that, outside this organizational context, are not exhibited by the system’s components.
5. strong emergence =_{def} weakly emergent patterns *that are not determined to occur by the basic natural laws that govern the system’s components when not so organized.* (New laws that make a fundamental difference to the world’s evolution.)
6. application of strong emergence: a general theory of human persons

Student Presentations

The final 80 minutes of this third seminar will be devoted to short student presentations on topics that were discussed in the seminar or that are closely related to a discussed topic. Possible presentation topics are listed below, but feel free to propose another topic.

1. Take up one of the arguments against the 4D/static view and propose a response to it.
2. Take up one of the arguments against the 3D eternalist view and propose a response to it.
3. Take up one of the arguments against the growing block view and propose a response to it.
4. Take up one of the arguments against the presentist view and propose a response to it.
5. Argue for a perspective on how physical theory does/does not constrain how we ought to think about the metaphysics of time.
6. Discuss whether the 4D idea that persons ‘perdure’ – are composed of temporal parts – is inconsistent with important features of our ordinary thinking about persons.
7. Explain and defend a solution to one of the ancient paradoxes of time and motion.
8. Explain a current idea concerning ‘quantum gravity’ (reconciling quantum mechanics with general relativity) and how, if accepted, it alters the way time is understood in physics.
9. Explain the ‘grandfather paradox’ for the idea of time travel.
10. Discuss the philosophical significance of our *experience* of time.