

Causation

Lecture 1: The Asymmetry of Causation

1. Course outline

Causation is asymmetric. Why? You could assume this asymmetry to be a basic fact about the world. But many have tried to offer an explanation or elucidation. What constraints does this put on an adequate theory of causation?

2. Causation and time

Causes are explanations. The current debate about causation focuses on ‘efficient’ causation (recall the Aristotelian distinction between material, formal, efficient, and final causes).

In its simplest form, causation is typically understood to be a relation between two events, the cause and the effect. So, when the cue ball knocks the nine ball into the corner pocket, there is said to be an (actual) event $e1$ of the cue ball striking the nine ball, and an (actual, distinct) event $e2$ of the nine ball sinking into the corner pocket, such that $e1$ is cause and $e2$ effect (cf. Schaffer’s SEP entry on ‘The Metaphysics of Causation’). We can make two observations about causation:

1. Causation has a direction (it is asymmetric). If $e1$ causes $e2$, then $e2$ doesn’t cause $e1$.
2. The direction of causation seems aligned with the direction of time.

Fundamental physics seems to be time-symmetric. A physical process that occurs in one temporal direction, could just have well occurred in the opposite temporal direction.

3. Hume’s conventionalism

Recall Hume’s theory of causation.

We may define a CAUSE to be ‘An object precedent and contiguous to another, and where all the objects resembling the former are plac’d in like relations of precedency and contiguity to those objects that resemble the latter.’ (*Treatise*, Bk. 1, Part III, sec. XIV)

Why is causation asymmetric? Hume: well, causes precede their effects, and temporal precedence is an asymmetric relation. On Hume’s view the direction of causation and its close alignment with the temporal arrow are due to semantic

conventions. Moreover, it simply identifies the direction of causation with the direction of time.

4. Arguments against conventionalism

There is reason to be dissatisfied with Humean conventionalism. At least three phenomena bring out that the direction of causation and its close alignment with the temporal arrow require a metaphysical explanation:

- Simultaneous Causation
- Backward Causation
- Deliberation

5. Primitivism about causation

One option is to assume that causal asymmetry is a primitive feature of reality, and so irreducible. This is ‘non-physicalism’ about causation is problematic too. Primitivism makes causation both epistemologically inaccessible and practically irrelevant.

6. Desiderata for any theory of causation

The limitations of Humean conventionalism view bring into focus two general desiderata for an adequate account of the causal relation:

1. It should explain the fact that the direction of causation is strongly aligned with the direction of time (in our world), but without making this alignment a necessary fact.
2. It should explain the fact that we can act for future ends but not past ends (at least in normal circumstances).