

## Causation

### Lecture 3: Manipulability

#### 1. Manipulability and Agency

Gasking (1955) claims that: one says “A causes B” in cases where one could produce an event or state of the A sort as a means to producing one of the B sort. He explains the “cause-effect” relation in terms of the “producing-by-means-of” relation:

We learn by experience that whenever in certain conditions we manipulate objects in a certain way a certain change, A, occurs. Performing this manipulation is then called: “producing A”. (1955, 486)

More generally, here’s the central idea of a manipulability account of causation:

An event A is a cause of a distinct event B just in case bringing about the occurrence of A would be an effective means to bring about the occurrence of B.

#### 2. Asymmetry, Agency, and Means-End Deliberation

This way an agency account has at a number of ways of explaining causal asymmetry and temporal alignment. Gasking seems to make these necessary features.

This account fits in with the principle that an event, A, at time t2 cannot be the cause of an event B at an earlier time, t1. It is a logical truth that one cannot alter the past. One cannot, therefore, by manipulations at t2 which produce A at t2 also produce B retrospectively at t1. (1955, 483)

Price and Menzies (1993) defend a (probabilistic) agency theory that construes causation as a secondary quality. They can allow the temporal asymmetry to be contingent.

it is particularly well placed to explain the nature of causal asymmetry, and its prevailing orientation in time. For it is able to say that the asymmetry of causation simply reflects (or better, perhaps, *projects*) that of the means-end-relation. (1992, 515)

### 3. Four Objections

**Circularity:** Agency theories of causation tend have a reductive aim: to explain causation in non-causal terms. But isn't 'producing A' or 'bringing about A' a straightforwardly causal notion?

**Unmanipulables:** There are or could be events which are not manipulable. And yet, many of these intuitively seem to be causes of other events.

**Epistemology, not Metaphysics:** Manipulation helps us establish causal claims (e.g. experiment in science). However, this shows merely an epistemic and not a metaphysical role for manipulation.

**Anthropomorphism:** Agency theories of causation imply, absurdly, that (a) there would be no causation in an agent-free world, or (b) different causal relations in a world with different agents.

### 4. Non-reductive approaches: Interventions

When we reflect on what is doing the work in the agency theories, we see it's 'surgical changes': locally introduced changes of variables that result in further changes of some other variables. Woodward (2003):

any process, whether or not it involves human activities, will qualify as an intervention as long as it has the right causal characteristics. The idea that we want to capture is roughly this: an intervention on some variable X with respect to some second variable Y is a causal process that changes the value of X in an appropriately exogenous way, so that if a change in the value of Y occurs, it occurs only in virtue of the change in the value of X and not through some other causal route. (2003, 94)

The notion of an intervention allows us to capture the core intuition of agency theories, but without relying on agency.

### 5. Interventionism and Asymmetry

Removing the agent (as irreducible intervener) from the picture, however, seems to rob the agency theory of the earlier way of accounting for the asymmetries (i.e. in terms of projection, 'secondary qualities'). Is there room for asymmetry in the sterilised version of the account?

### References

**Gasking**, D. 1955. 'Causation and Recipes' *Mind* 64(256); **Price**, H. 1992. 'Agency and Causal Asymmetry' *Mind* 101(403); **Woodward**, J. 2003. *Making Things Happen* Oxford: Oxford University Press

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