

CAUSATION (Part II), Lecture III

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1. Manipulability theory. Douglas Gasking ('Causation and Recipes', 1955) suggests that we should say that *A* causes *B* just in case we know of a way to produce an event or state of the *A* sort as a means to producing one of the *B* sort. This is something we learn by experience: we may learn how to produce *A*, and we may also learn that in the right circumstances we can bring about *B* by producing *A*. This observation suggests an explanation of the cause–effect relation in terms of the bringing-about-by-means-of relation. *An event A is a cause of a distinct event B if and only if bringing about the occurrence of A is an effective means to bring about the occurrence of B.* This is the central idea of a manipulability account of causation. Von Wright writes: “to think of a relation between events as causal is to think of it under the aspect of (possible) action” (1971).

2. Means and ends. Here is an example. Imagine a glowing bar of iron. What was the cause of its glowing? We know this must have been an increase in its temperature. But why is this the cause? And how do we know it? Because you can make an iron bar glow by raising its temperature to 500 °C or over. We have procedure for raising iron's temperature (e.g. putting it in fire); we know how to *produce* that result. We do not have a direct procedure that makes iron glow; we can only make iron glow *by means of* heating it. The event of heating is a cause of the iron's glowing because it is a means to make iron glow.

3. Asymmetry of cause and effect. Gasking explains the asymmetry of causation in terms of the asymmetry of means–end structures. To be sure, whenever iron glows you may infer that it is hot: glowing seems sufficient for its being >500°C, just as its being >500°C is sufficient for glowing. If we think of the cause as an 'inference ticket' for the effect, then the effect may just as much be an inference ticket for the cause. Yet the glowing isn't a cause of the heating. This is because we are not able to make iron hot by making it glow (we don't have a direct procedure to make iron glow). This is not a necessary fact about heating and glowing: we can imagine a world in which it is the other way round. Imagine a world where people have a direct procedure to make things glow. They discover that if you apply this to iron, it will become very hot. They can then conceive of the glowing as a cause of the rise in temperature. This gives us an explanation of the direction of any causal relation as a contingent fact.

4. Freedom. Gasking doesn't purport to explain the fact that causes precede effects in terms of our agency. Frank Ramsey, on the other hand, does. From the perspective of a deliberating agent the past must appear to be fixed. This has to do with the presupposition of freedom (think of Strawson). If you take up the role of free agent, you must conceive of the past as (probabilistically) independent of what you do now or later. For example, if you are deliberating whether to watch Netflix tonight, then you must assume that the fact that you had a lousy day is independent of your choice: it's a free choice. On the other hand, if I observe you, I may take your decision to go on a Netflix binge in the evening as good evidence that you had had a lousy day so far. I may know that if you had a lousy day, it's very likely you end up watching Netflix all night. Agency theories privilege the perspective of a deliberating agent when thinking about causation. If this is right, then we conceive of effects as things that do not occur before whatever we bring about.

5. Causation as a secondary quality. Huw Price agrees that “the asymmetry of causation simply reflects (or better, perhaps, *projects*) that of the means-end-relation” (1992, 515). Because it is tied to our perspective as agents, being a cause is a perspective-dependent concept. The fact that some event satisfies this concept cannot be understood in mind-independent terms. This is why Price talks about ‘projection’ and suggests causation is (like) a ‘secondary quality’. On this view, being a cause is not a fully objective property, but more like a relational or response-dependent one, just as many people think colour is. Note, it would still be a property of events in the world, not of our minds. It would mean, however, that when we say ‘A causes B’ we say something that exceeds how the world works mind-independently. We must include how the world appears to a free agent.

6. Isn’t this circular? You might think that the manipulability theory is viciously circular. Gasking and others aim to explain causation in non-causal terms. But the notion of ‘producing’ is already a causal notion! Well, not obviously. We have independent reason to resist a causal theory of action. Acting in the world is not as such a causal event (we don’t *cause* our bodily movements, we *move* our bodies). The connection between action and result is logical. For example, the result ‘a bar being in the fire’ is not an effect of something we bring about (e.g. an intention to put the bar in the fire). Instead, the result is the result of the action ‘sticking an iron bar in the fire’. The result of an act is an essential ‘part’ of the act itself. Is this a coherent view of agency? And should we accept it?

7. What about unmanipulables? The second main problem for manipulability theory of causation is that some apparent causes are ‘unmanipulables’. The rise in mean sea-level at a certain geological epoch *e* was due to the melting of the Polar ice-cap. It is natural to think of the melting of the Polar ice-cap as a cause of the rise in mean sea-level in *e*. Yet we do not conceive of *melting the Polar ice-cap* as a procedure to bring about anything, let alone a rise in mean sea-level. A possible reply is to suggest that such unmanipulable events (e.g., melting of ice-caps) can be reduced to similar, more humane examples which are manipulable events (e.g., melting of ice in a basin). This would however suggest that our application of the notion of a cause to the melting of the Polar ice-cap is derivative or parasitic. (Couldn’t we instead use a counterfactual?)

8. Isn’t this epistemology instead of metaphysics? Manipulation helps us *establish* causal claims (e.g. experiment in science). But this shows merely an epistemic role for manipulation. Yet, a theory of causation should be a metaphysical one! This objection is misguided, at least if we are happy with the secondary quality analogy. Causation might be a feature of events that essentially requires reference to agents in explicating its nature. So perhaps the nature of causation is simply not independent of our ability to establish causal claims. Compare, if looking red is part of the nature of redness then that nature is not independent of how we establish that something is red.

9. Surely this is an anthropomorphism? A similar objection is that agency theories of causation imply that there would be no causation in an agent-free world (or no causation in a world in which agents are sufficiently different from us). Wouldn’t that imply a weirdly anthropomorphic conception of causation? Also here we can rely on the analogy with colour. The point about colour is, yes it is an anthropocentric concept. That there are far-fetched scenarios of colourless worlds doesn’t undermine our grasp of the colour concepts in the actual world. Just as colour is a stable phenomenon, causation is.