

## 1 Hume on Causation

Take a case where we want to say that some X causes some Y.

- Ordinary cases: boiling teapot, ball hitting ball ...
- What sorts of things are X and Y?

Hume: 18<sup>th</sup> Century thinker, skeptic of sorts, theory of ideas

Causation is not to be found in X and Y alone but in the relation between them.

- Hume: Upon examining ordinary candidates for X and Y, we find no common property that they all have (like “being a cause” or “being an effect”).
- So what is the nature of this causation relation between X and Y? Can it be explained any further?

Hume: We find only three essential components of the causation relation.

- One is **Contiguity**: nearness in space and in time
- Another is **Succession**: temporal priority of cause over effect
- But we seem to think there is some third notion, because the first two aren't sufficient for causation to occur.
  - Examples?
  - How about if we say that X *produces* Y?
- Hume rejects that we can find a Necessary Connection between X and Y.
  - The repetition of contiguity and succession alone can never get us there.
  - More specifically, Hume thinks that all there is to our idea of necessary connection between cause and effect is **constant conjunction**.

“Tho’ the several resembling instances, which give rise to the idea of power, have no influence on each other, and can never produce any new quality *in the object*, which can be the model of that idea, yet the *observation* of this resemblance produces a new impression *in the mind*, which is its real model. For after we have observ’d the resemblance in a sufficient number of instances, we immediately feel a determination of the mind to pass from one object to its usual attendant, and to conceive it in a stronger light upon account of that relation. This determination is the only effect of the resemblance; and therefore must be the same with power or efficacy, whose idea is deriv’d from the resemblance ... These instances are in themselves totally distinct from each other, and have no union but in the mind, which observes them, and collects their idea. Necessity, then is the effect of this observation, and is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another.” (Hume, 288)

“The necessary connexion betwixt causes and effects is the foundation of our inference from one to the other. The foundation of our inference is the transition arising from the accusom’d union. These are, therefore, the same.” (Hume, 288)

Definition 1: A cause is “[a]n 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.” (Hume, 289)

Definition 2: “A cause is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.”

## 2 Reid

“But in certain motions of my body, and directions of my thought, I know, not only that there must be a cause that has power to produce these effects, but that I am the cause; and I am conscious of what I do in order to the production of them.” (Reid, 290)

Reid’s reply to Hume: I know that I am the cause of some thoughts in my mind and motions in my body. Beings like me who have some degree of understanding and will also have causal power, but inanimate things (like rocks) are merely passive.

- [I]t would follow from [Hume's definition of causation], that whatever was singular in its nature, or the first thing of its kind, could have no cause. (*Essays on the Active Powers* [EAP] 4.9, *Works* 627)
- “It follows from [Hume's] definition of a cause, that night is the cause of day, and day the cause of night. For no two things have more constantly followed each other since the beginning of the world. (EAP 4.9, *Works* 627)”

## 3 Russell

Russell wants to replace the old notion of causation that Hume was responding to with mere generalizations in some scientific scheme.

- Cause and effect must be temporally contiguous processes (with no time between their occurrences).
  - But which part of the processes matter? Not the earlier part of the causal process, if we hold fixed the latter. (Arsenic example.)
  - Not the later part of the effect either.
  - Both processes will have to be indefinitely shortened.
- We only have empirical generalizations (like “Taking arsenic is followed by death”).
  - But these are not “exact or universal.”
  - This is the closest we get to true causal laws.
- A cause just is a “nearly invariable antecedent.”
  - It is not always unique.