

Lecture 1 - Introduction & Hume

1. What is a theory of causation?

In general, theories of causation are theories that seek to *analyse, describe, or explain* what it is for one event to be a cause of another. Our broad question will be as follows: *In virtue of what is one event a cause of another?*

2. Narrowing the Question

An answer to the “in virtue of what” question demands answers to many, many others. The *specific* question that we will be investigating is the following:

Is there anything more to causation than constant conjunction?

For the purposes of our discussion, we will be assuming the following:

- Causation occurs from *past to future*
- The causal relata are *events* (i.e. causes join events, rather than e.g. objects or facts, together)

3. Causes and Correlations

Consider the following pairs of events:

- (1) I strike a match, and a split-second later, the match lights.
- (2) I strike a match, and a split-second later, my team scores a goal.

There seems to be an important difference between (1) and (2). The striking of the match and the match’s subsequent lighting seem connected in a way that the striking of the match and the scoring of a goal in a game of football aren’t. In particular, **we think that the match’s being struck *caused* it to light, but *didn’t* cause the goal.** We think that striking the match *made* it light, in some relevant sense of ‘made’. We have an intuition, Hume maintains, that the first event’s happening *compels* or *necessitates* the second. But this is no less mysterious than saying that the first event caused the second. So, Hume sets off to investigate the “***necessary connexion***” between a cause and its effect.

4. Looking for Necessary Connexions, I - Hume’s Method

According to Hume, all knowledge can be divided into two categories: ***relations of ideas*** and ***matters of fact***.

Relations of Ideas	Matters of Fact
<ul style="list-style-type: none">- Known <i>a priori</i> (prior to experience)- Negation entails contradiction- Includes geometrical, mathematical, logical truths- E.g. The interior angles of a triangle total 180°	<ul style="list-style-type: none">- Known <i>a posteriori</i> (after experience)- Negation <i>does not</i> entail contradiction- E.g. Cambridge is in the United Kingdom

So, **our idea of necessary connection—if it is knowledge—must be either a relation of ideas or a matter of fact.**

Looking at a specific example, **Hume eliminates the first possibility.** Consider our idea that, when one billiard ball hits another, the impact is necessarily connected with the movement of the second ball. First, Hume argues that this cannot be known prior to experience—**it cannot be known *a priori***. I couldn't, for instance, infer from the very idea of a ball that it will cause other balls to move on impact *unless* I have observed these events before.

Second, he argues that **claims about necessary connection do not entail any contradiction when negated.** Consider the billiard balls again. There is no contradiction in supposing that the second ball would *not* move when struck. After all, it may, unbeknownst to us, have been glued to the table, for instance. Only experience can tell us that the second ball would move when struck by the first.

Therefore, our idea of necessary connection fails to meet both of the criteria for being a relation of ideas. So, **it must be a matter of fact**, if it is knowledge. We must learn about it through experience—i.e. via our senses.

5. Looking for Necessary Connexions, II - Experience of Causes

Hume considers several different potential sources of our experience of necessary connection. They fall into two broad categories:

Internal impressions - sensory experiences of events internal to us
E.g. the motions of our bodies and of our thoughts

External impressions - sensory experiences of events external to us
E.g. the motions of billiard balls

However, he concludes that **we cannot be getting our experience of necessary connection from either of these sorts of sources.** The reason is this: the idea of necessary connection leads us to be *certain* of the connection between the cause and the effect. But, not one of the sensory experiences he considers, internal or external, leads us to be certain that the second event will follow the first.

So, since our idea of necessary connection makes us certain that the effect will follow its cause, and since we do not get this idea of certainty from sense perception, **our idea of necessary connection (and so of causation) cannot be a matter of fact.** But earlier, we concluded that it couldn't be a relation of ideas either! And these two categories exhaust the varieties of knowledge. Therefore, according to Hume, **our idea of necessary connection cannot be knowledge.**

6. Hume's Theory - Correlation + Habit

If our idea of necessary connection is not knowledge, then from where *does* this idea come? Hume argues that it must come from some distinct operation of our mind on our ideas. Namely the operation of **habit**. He maintains that we only come to form causal beliefs about some events *A* and *B* after observing several instances of *B* following *A*. From this he concludes that it is just out of *habit* that we come to associate the one with the other. Eventually, **we come to expect the second event whenever we see the first**. And this habit, Hume argues, is all there is to our idea of necessary connection. Our idea of causation, then, is a combination of this idea of necessary connection, and the impression of constant conjunction.

Consider the billiard balls one last time: according to Hume, it is only after repeatedly observing one ball move after being struck by another that we arrive, out of habit, at the belief that the first *causes* the second to move.

We began our investigation with two questions:

(Q) In virtue of what is one event a cause of another?

Hume answers:

Some event A is a cause of some distinct event B in virtue of,

*(1) Events of type A being correlated (constantly conjoined)
with events of type B*

*(2) Our forming a habit in the mind of expecting B-type events
whenever we see A-type events*

(Q) Is there anything more to causation than constant conjunction?

Hume answers: (A qualified) *No*

There is nothing more to causation than constant conjunction, *except* the operation of our mind that makes us *think* that effects are certain to follow from their causes.

NEXT WEEK: Objections to Hume; Anscombe; Mackie