The currently standard view takes causation to be an asymmetrical relation between events, where the relata are distinct events that follow one another in time, and where there number of events is 2: i.e. the cause, and the effect. (A limiting case is perhaps simultaneous causation, but this is controversial)

More than temporal succession

Mere temporal succession may be necessary for causation, it is not sufficient. Imagine: we know that there's a fire in a house, and we know that a man was smoking a cigarette inside. The mere fact that he smoked *before* the fire broke out is not enough to establish it as the cause. Clearly, the cause must be what 'produced' or 'brought about' the effect, but these seem just synonyms for 'caused'. What more is needed?

The natural answer is: 'necessitation'. If the cause happened, then (in some sense) the effect *must* happen. ('The cause is a *sufficient condition* for its effect') But what kind of necessity is this?

It does not seem to be logical necessity. Even if we assume the smoking caused the fire, there is no contradiction in asserting both that the smoking took place and that there is no fire.

Is it natural (nomological) necessity? ('necessary, given the laws of nature?') But what are laws of nature other than causal laws?

David Hume on our idea of causation

Hume thought that our ordinary *idea* of causation seems to involve the idea of necessary connection. It is important to distinguish between our idea of causation and causation itself.

> All events seem entirely loose and separate. One event follows another; but we never can observe any tie between them. They seem conjoined, but never connected. (*Enquiry*, Part II)

Hume's conclusion is that this idea is confused: it is the product of impressions of constant conjunctions of temporally successive events, together with our (legitimate) expectation that the future will resemble the past (see Hume on induction). The alleged 'natural necessity' is no more than an empty metaphysical dogma that has no basis in experience. In fact:

> '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.' (*Treatise*, I.iii.14)

So the Humean approach defines causation in terms of two ideas: (a) temporal succession and (b) constant conjunction. This is a *regularity theory* of causation: causation is understood as a kind of regularity relation.

Note, 'constant conjunction' only applies to *kinds* of events: we can't say that individual events are constantly conjoined (we can't say that the 2016 EU referendum is constantly conjoined with the triggering of Article 50!). We have to say that events of *kind* A are conjoined with events of *kind* B. Hume himself introduces the notion of resemblance—a way of grouping together similar events.

Causation as regular connection

The regularity view explains what it is for a particular event to cause another in terms of truths about other events. The causal relation is not a purely local relation relating this cause *c* and this effect *e*: rather the fact that this relation holds implies that relations hold between all sorts of other events of the same kinds.

However, the existence of a regularity between an event *e* of kind A and an event *f* of kind B is not sufficient for *e* to be a cause of *f*. Your trips to the countryside (kind A) may invariably be followed by rain (kind B). But this does not mean that a particular trip *e* is the cause of a particular rain shower *f*.

We might try and escape this by distinguishing between those regularities which are laws of nature and those which are not (so-called 'accidental' regularities). So the kinds in question must be kinds which figure in laws of nature: kinds like 'having a mass of *n* grams'. Regularity views are accordingly sometimes called 'nomological' views of causation. But this poses a problem. Consider:

1. I strike a match (**A**) and fire lights up (**B**)
2. I visit the countryside (**C**) and it starts raining (**D**)