

## Foundations of Knowledge

### Relations of ideas

Known by comparing ideas with one another in imagination and noting relations [of resemblance in quality, difference in degrees, contrariety, etc.] that depend just on what those ideas are like

This knowledge is necessarily true, because it depends just on the ideas, which are unchangeable.

### Matters of fact

Knowledge of what things exist

Not necessarily true (no contradiction in supposing the opposite)

## Basis of knowledge of matters of fact

Sense experience

Memory of past sense experience

Causal inference

## Basis of knowledge of causal relations

Negative thesis: Causal relations are not relations of ideas

(they can't be known simply by comparing the ideas of a thing taken to be a cause and a thing taken to be an effect)

Positive thesis: Causal relations are matters of fact, only known by experience

## Arguments for the negative thesis

- When any entirely new object is presented to us, we are at a loss to say what its cause was or what its effect will be just by looking at it
- If we imagine what it was like to first encounter a familiar object, we can feel we were originally at a loss to say what its cause was or what its effect would be

this is the case even for such things as falling of heavy bodies

the communication of motion by impact

the burning of fire

In these cases alternative consequences are at least conceivable

which means there can be no contradiction in them occurring instead

Which means the actual sequence of events cannot be intuited or demonstrated to have to occur

## A background negative argument

Causal relations can be denied without any apparent contradiction.

A contradiction is a claim of the form:

A but not-A

Denying a causal relation is a claim of the form:

A occurred but B did not follow.

In no case of a causal relation do we see anything in the cause that tells us why some other, distinct event has to follow from it.

The best we are able to do is see specific causal relations as instances of more general ones

e.g., see hammers driving in nails or baseball bats hitting baseballs as instances of communication of motion by impact

without being able to say why the more general causal relation has to occur

## How does experience lead to knowledge of causal relations?

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But that is just constant conjunction, and constant conjunction is not the same thing as cause.

What leads us to infer, from the experience of a constant conjunction, that there is a causal relation between the constantly conjoined events?

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But what process of reasoning could lead us to draw a conclusion from repeating the same premises over and over again, when the conclusion didn't follow from the premises to begin with?

## Induction

If you suppose that the future will be like the past, or that the course of events in nature will continue to be the same,

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**But what leads us to suppose that the future will be like the past?**

The claim that the future will be like the past does not express a relation of ideas

Because there is no contradiction in the claim that the course of nature might change

So it must be a matter of fact

But if it is a matter of fact it has to be known by the senses, by memory, or by causal inference.

But the senses only tell us about the present, not the future, and memory only tells us about the past, not the future, and causal inference is what we are trying to explain.

we can't appeal to causal inference to say what justifies induction so that we can appeal to induction to say what enables us to draw causal inferences

Neither can we justify this matter of fact by appeal to induction itself

e.g., say that the reason the future will be like the past is that in the past the future has always been like the past.

This begs the question:

Just because the future has been like the past in the past, why should it continue to be so?

## Sceptical doubts concerning the operations of the understanding

There appears to be no rational foundation for causal inference

and so for our knowledge of the existence of any objects extending beyond the reach of present sensation or memory

Nonetheless it is necessary for the purposes of life that we *believe* in the existence of unperceived objects

and we do it all the time

We have, however, no good reason for doing it