

Philosophy 311: Knowledge and Justification

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Handout 19: Skepticism about Induction

Examples of inductive inference:

All observed A's have been B's, so the next A will be a B.
All observed A's have been B's, so all A's are B's.

N% of observed A's have been B's, so it's N% likely that the next A will be a B.
N% of all A's have been B's, so N% of A's are B's.

Inductive inference presupposes that unobserved patterns resemble observed patterns.
Feldman's formulation of this presupposition:

(PF) The future will be like the past.

It's not really the *future* and *past* we're concerned with; it's the *unobserved* and the *observed*.
But the simplification reflected in PF makes things easier, so we'll go along with it.

Hume's argument against inductive reasoning

David Hume (18th century Scottish philosopher) argued roughly as follows:

1. If PF can be justified, then it's justified either by "demonstrative" (i.e., deductive) or "moral" (i.e., inductive) reasoning.
2. Only necessary truths can be justified by deductive reasoning.
3. PF is not a necessary truth.
4. So, PF is not justified by deductive reasoning. (2, 3)
5. All inductive reasoning presupposes the truth of PF.
6. So, if PF is justified by inductive reasoning, PF is justified by an argument that presupposes PF. (5)
7. No claim can be justified by an argument that presupposes it.
8. So, PF can't be justified by inductive reasoning. (6, 7)
9. So, PF can't be justified. (1, 4, 8)

It's then a hop skip and a jump to the conclusion that inductive inference isn't justified:

10. Inductive inference presupposes PF.
11. If a presupposition of an inference presupposes a claim that can't be justified, then the inference isn't justified.
12. So, inductive inference isn't justified. (9, 10, 11)

But 12 is bad, since we use inductive inference all the time. Is there a response to Hume?

Response 1: Inductive defense of induction

Hey, here's an argument:

1. PF has been true in the past.
2. So, PF will be true in the future.

This argument doesn't include PF as a premise. So it's okay, right?

No, not really. The argument from 1 to 2 doesn't include PF, but it does presuppose it.

Response 2: Pragmatic defense of induction

You're dying; the only thing that can possibly save you is operation X. The doctor reasons:

1. The only thing that can save her is to perform operation X.
2. So, I should perform operation X.

Couldn't a similar argument justify the use of induction?

3. The only thing that lets me draw inductive inferences is to presuppose PF.
4. So, I should presuppose PF.

Maybe. But just as 1 doesn't give us reason to think that operation X *will* succeed, 3 doesn't give us reason to think that PF *is true*. We're looking for a justification for PF that *does*.

Response 3: A priori defense of induction

A claim is a priori justified if we have reason to accept it independently of experience. We may not have reason to accept PF independently of experience. But consider:

- PF-R Knowing that things have been a certain way in the past is a good reason to believe that they'll be that way in the future.

PF is not necessarily true, but PF-R might be. Moreover, PF-R might be something you can be justified in accepting independently of experience, or by deductive inference. So Hume has not shown that we can't be justified in accepting PF-R. And maybe PF-R is all we need to be justified in accepting for inductive inference to be justified.

But *is* PF-R something that you can accept independently of experience? Hmm.

Some of Hume's reactions to his own skeptical arguments

"Suppose a person has lived so long in the world as to have observed similar objects or events to be constantly conjoined together—what is the consequence of this experience? He immediately infers the existence of one object from the appearance of the other. Yet he has not, by all his experience, acquired any idea or knowledge of the secret power by which the one object produces the other, nor is it by any process of reasoning he is engaged to draw this inference. But still he finds himself determined to draw it. ... There is some other principle which determines him to form such a conclusion. This principle is *custom* or *habit*." (*Enquiry Concerning Human Understanding*, Sec. V)

"When [the skeptic] awakes from his dream, he will be the first to join in the laugh against himself and to confess that all his objections are mere amusement and can have no other tendency than to show the whimsical condition of mankind, who must act and reason and believe, though they are not able, by their most diligent inquiry, to satisfy themselves concerning the foundation of these operations or to remove the objections which may be raised against them." (*Enquiry Concerning Human Understanding*, Sec. XII)