

A General Pattern of Skeptical Argument

1. Hume's Basic Skeptical Argument

There is a basic pattern of skeptical argument that is set out by David Hume (1711-1776) in the following passage:

"The only existences, of which we are certain, are perceptions, which, being immediately present to us by consciousness, command our strongest assent, and are the first foundation of all our conclusions. The only conclusion we can draw from the existence of one thing to that of another, is by means of the relation of cause and effect, which shows that there is a connection betwixt them, and that the existence of one is dependent on that of the other. The idea of this relation is derived from past experience, by which we find, that two beings are constantly conjoined together, and are always present at once to the mind. But as no beings are ever present to the mind but perceptions, it follows that we may observe a conjunction or a relation of cause and effect between different perceptions, but can never observe it between perceptions and objects. It is impossible, therefore, that from the existence or any of the qualities of the former, we can ever form any conclusion concerning the existence of the latter, or ever satisfy our reason in this particular."

Treatise of Human Nature (Volume 1, Part 4, Section II, "Of Skepticism with regard to the Senses")

2. The Basic Skeptical Pattern of Argument

Hume's argument, in the above passage, is concerned with skepticism concerning the justification of beliefs about external objects. The basic argument, however, is equally applicable to the justification of beliefs concerning all of the following: (a) other minds, (b) physical objects, (c) past events, (d) future events, and (e) theoretical entities.

The general argument can be set out as follows:

- (1) The only things that one can be directly aware of are one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories.
- (2) One cannot have non-inferentially justified beliefs about something unless one can be directly aware of that thing.
- (3) Therefore, the only things that one can have non-inferentially justified beliefs about are one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories. (From (1) and (2).)
- (4) Physical objects, past events, future events, other minds, and theoretical entities in physics are not reducible to one's own present experiences, and aspects thereof, and other subjective states, including one's present memories.
- (5) Therefore, one cannot have non-inferentially justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics. (From (3) and (4).)

(6) If a belief is justified, it is either non-inferentially justified, or inferentially justified.

(7) Therefore, one can have justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics only if the beliefs in question are inferentially justified. (From (5) and (6).)

(8) If a belief is inferentially justified, it is ultimately inferentially justified on the basis of non-inferentially justified beliefs.

(9) Therefore, if a belief is inferentially justified, it is ultimately inferentially justified on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories. (From (3) and (8).)

(10) Therefore, one can have justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics only if the beliefs in question are inferentially justified on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories. (From (7) and (9).)

(11) All inferences are either deductive or inductive.

(12) Therefore, one can have justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics only if the beliefs in question are either deducible from non-inferentially justified beliefs about one's own present experiences, or else inductively justified on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories. (From (10) and (11).)

(13) No beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics follow deductively from beliefs that are beliefs simply about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories.

(14) Therefore, one can have justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics only if the beliefs in question are inductively justified on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories. (From (7) and (9).)

(15) The only acceptable form of inductive reasoning is **instantial generalization**, where one moves from premises to the effect that each of a number of things x_1, x_2, \dots, x_n has some property P , together with a premise that nothing is known to lack property P , to the generalization that everything has property P .

(16) Therefore, one can have justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics only if the beliefs in question are inductively justified via instantial generalization on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories. (From (14) and (15).)

(17) Any instantial generalizations that one forms on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories, will be generalizations about one's own experiences, past and present, and aspects thereof and possibly also about other subjective states, including one's memories, past and present.

(18) A generalization that is simply about one's own experiences, past and present, and aspects thereof, and possibly also about other subjective states, including one's memories, past and present, is not about physical objects, past events, future events, other minds, or theoretical entities in physics. (From (4).)

(19) Therefore, no instantial generalizations that one forms on the basis of non-inferentially justified beliefs about one's own present experiences, and aspects thereof, and possibly also other subjective states, including one's present memories, can be about physical objects, past events, future events, other minds, or theoretical entities in physics. (From (17) and (18).)

(20) Therefore, one cannot have any justified beliefs about physical objects, past events, future events, other minds, and theoretical entities in physics. (From (16) and (19).)

3. Some Notes on the Above Argument

1. I have spoken about being "directly aware" of things, where Hume speaks of things as being "immediately present to us by consciousness."
2. Where Hume speaks of "perceptions", I have spoken of "experiences, and possibly also other subjective states, including one's present memories".
3. How might one support the claim advanced at step (13)? One way to show that no deductive inference is possible is by appealing to possible worlds in which the beliefs that constitute one's evidence would be true, but the beliefs that one is attempting to justify would not be. Thus, in the case of beliefs about physical objects, one can appeal to brain-in-vat scenarios. In the case of other minds, one can appeal to the idea of possible worlds where other humans are automata, or else puppets controlled by alien beings. In the case of beliefs about the past, there is the possibility that the world came into existence only a moment ago, with apparent memories, etc., in place. Finally, in the case of beliefs about the future, one can appeal to the idea that the world is about to be annihilated, or to drop out of existence. So the truth of non-inferentially justified beliefs about one's own present experiences, apparent memories, and other subjective states does not suffice to guarantee the truth of the conclusion, and the inference, therefore, cannot be a deductively valid one.
4. The idea that the only legitimate form of inductive inference is instantial generalization, set out at step (15) above, is related to Hume's idea that all inference that carries one beyond what is immediately present to consciousness must make use of causation, and that causal judgments, in terms, must rest upon **constant conjunction**. What I have done is to drop the reference to causation, and to make use simply of the idea of constant conjunction.

The thought, then, is that inductive inference is always a matter of arriving at some generalization on the basis of instances of that generalization. So, for example, to establish **via induction** that all ravens are black, one needs **either** to establish it by appealing to instances falling under that generalization - that is, by appealing to the fact that one is justified in believing that there are particular objects - a, b, c, d, \dots - such that a is black and a is a raven, b is black and b is a raven, c is black and c is a raven, d is black and d is a raven, . . . , and that there is no object x such that one is justified in believing that x is a raven and x is not black - **or else** one needs to be able to deduce the generalization that all ravens are black from other generalizations that have been established in that way - that is, via instancial generalization.