

**24.01 Classics of Western Philosophy**  
Prof. Rae Langton

**IV. Hume**

**Lecture 16. Hume's Enquiry Concerning Human Understanding (contd.)**

1. *Reminder: Relations of Ideas and Matters of Fact.* Hume argues, in effect (though not quite with these labels) that all propositions divide neatly between these two. If a proposition expresses a relation of ideas, it is knowable *a priori*, it is *necessarily* true, and it is true in virtue of the *meanings* of the ideas. If it expresses a matter of fact, it is knowable *a posteriori*, *contingent*, and *not* true simply in virtue of the *meanings* of the ideas. 'All bachelors are unmarried' expresses a relation of ideas; 'there is at least one bachelor' expresses a matter of fact.

2. *How do we know matters of fact?* Much of our knowledge of matters of fact goes well beyond the evidence of what we immediately perceive, or remember perceiving.

When it is asked, 'What is the nature of all our reasonings concerning matter of fact?' The proper answer seems to be, that they are founded on the relation of cause and effect. When again it is asked, 'What is the foundation of all our reasonings and conclusions concerning that relation?' it may be replied in one word, Experience. But if we still carry on our sifting humor, and ask, 'What is the foundation of all conclusions from experience?' this implies a new question... As to past experience, it can be allowed to give *direct* and *certain* information of those precise objects only, and that precise period of time which fell under its cognizance; But why this experience should be extended to future times and to other objects...this is the main question (IV Part II, 739).

Experience, or observation, may teach us directly, and with certainty, about certain matters of fact; for example, that the sun has risen in the past. But how does experience, or observation, teach us that the sun will rise tomorrow? In general, how do we make this kind of transition:

Premise: All observed F's are G  
Conclusion: All F's are G

Hume is interested in the question of how we move from the observed to the unobserved, whether from the observed past to the unobserved future, or from the observed (past) sample, to the wider (past, present or future) sample population. This kind of inference is known as *induction*.

3. *The problem of induction.* Apart from the initial problem of distinguishing accidental from non-accidental regularities, there is the fundamental problem that Hume raises. This argument form is not valid. It is perfectly possible for the premise to be true and the conclusion false. The conclusion that all F's are G does not express a relation of ideas; neither does it does not express a matter of fact known directly and with certainty on the basis of experience and memory. Most knowledge of matters of fact proceeds by induction. This is true of everyday life, and of the sciences. Scientists use induction when they move from data to theory: when they construct a

theory that all F's are G, on the basis of observing that some F's are G. If Hume is right, scientists believe what they do on the basis of insufficient evidence; *no* evidence could be sufficient to prove that all F's are G.

4. *First response: the uniformity of nature.* We can make the argument valid by supplying a missing, and perhaps plausible, premise: the future resembles the past—for short, nature is uniform.

Premise 1: All observed F's are G

Premise 2: Uniformity of Nature: If a regularity R (for example, all F's are G) holds in my experience, then it holds in nature generally.

Conclusion: All F's are G

Does Premise 2 express a relation of ideas, or a matter of fact? Can it be denied without contradiction? Yes: so it is a purported matter of fact. But then on what basis should we believe it? Perhaps on the basis of induction: nature has been uniform in the past; in the past, it has been true that the future resembled the past. But this, as Hume says, would be circular.

It is impossible...that any arguments from experience can prove this resemblance of the past to the future; since all these arguments are founded on the supposition of that resemblance.

5. *Second response: induction works!* We can think of our past experiences not only of the sun rising, or of bread nourishing us: we can think of our past experiences of *inferring by the method of induction*. And we reflect that when we have used induction, whether in everyday life, or in science, we have always had great success. Imagine how unsuccessful a creature would be, if it lived by the reverse principle of counter-induction! We can try to use this insight to defend induction directly.

Premise 1: All observed cases of induction have been successful.

Conclusion: All cases of induction are successful.

This argument is itself not a deductive, but an inductive argument. It only works if induction works! It is circular: it assumes that induction works in order to establish that induction works.

6. *Hume's skeptical solution:* what makes us infer inductively is nothing more –or less – than habit, or *custom*:

All inferences from experience, therefore, are effects of custom, not of reasoning. Custom, then, is the great guide of human life. It is that principle alone, which renders our experience useful to us, and makes us expect, for the future, a similar train of events with those which have appeared in the past (743).