

Class 20: April 8

David Hume, *An Enquiry Concerning Human Understanding*, §I - §IV (AW 533-548)

I. Introduction

Consider the following eight propositions.

- P1. It is raining outside right now.
- P2. It snowed in February.
- P3. It is cold at the North Pole.
- P4. Shakespeare wrote *The Tragedy of Macbeth*.
- P5. $2 + 2 = 4$.
- P6. I exist.
- P7. Objects near the surface of the Earth accelerate toward the center of the Earth at 9.8 m/s^2 .
- P8. The sun will rise tomorrow.

Accounts of our knowledge of these propositions may differ.

Our account of the first proposition may appeal to occurrent sense experience.

Our account of the last two propositions may involve appealing to universal scientific principles.

The last four present difficulties for empiricists, who may even deny them.

Consider mathematical claims, like P5.

Many empiricists are nominalists or fictionalists about mathematical terms.

In contemporary philosophy, fictionalism is the claim that mathematical objects are merely convenient fictions.

For the fictionalist, existential mathematical claims (propositions which claim or entail that there are mathematical objects, like 'there is a prime number between four and six') are false.

Fictionalists allow that conditional mathematical claims (like 'if two is rational, then there is a pair of whole numbers whose ratio is two and which have no common factor') are true, but only vacuously so.

Any conditional with a false antecedent is true, according to classical logic.

Berkeley was a nominalist about both mathematical terms and scientific laws, claiming that are illegitimate abstractions from particular ideas.

Laws, for Berkeley, are provided by God for convenience, but with exceptions, or miracles.

But these regularities, as abstract ideas, are not real ideas.

Hume agrees with Berkeley, in many ways.

For example, they agree about the illegitimacy of abstraction from sense perception.

The idea of extension...is wholly dependent on the sensible ideas or the ideas of secondary qualities. Nothing can save us from this conclusion but the asserting that the ideas of those primary qualities are attained by *abstraction*; an opinion which, if we examine it accurately, we shall find to be unintelligible, and even absurd (§XII.1, AW 595b).¹

¹ All quotes in these notes are from the *Enquiry*, except where noted.

Hume agrees with Locke and Berkeley on their empiricist methodology.

All three philosophers, generally labeled the British Empiricists, agree that we are immediately aware of only our ideas, not an external world of objects.

That external world, as well as any laws governing or applying in the world, and any mathematical principles, is perceived only mediately, or inferred.

Locke claimed knowledge of the external world, science, and mathematics on the basis of a modified resemblance hypothesis, and a principle of abstraction.

Berkeley denied Locke's resemblance hypothesis and doctrine of abstract ideas, and asserted idealism: there is no material world, we have only a practical knowledge of general scientific regularities which are at all times subject to God's will, and mathematical principles are fundamentally flawed by their reliance on abstraction.

Despite his affinities with Berkeley's premises, Hume's conclusions are skeptical, rather than idealistic. He agrees with Berkeley that our conclusions about the material world are unjustified.

The mind never has anything present to it but the perceptions and cannot possibly reach any experience of their connection with objects. The supposition of such a connection is, therefore, *without any foundation in reasoning* (§XII.1, AW 595a, emphasis added).

Hume's main focus is on the laws of nature, and our ability to formulate predictive scientific theories on the basis of our experience.

The achievements of the new science centered on the discovery of universal scientific laws, especially Newton's three laws of motion.

L1: Inertia: an object in motion will remain in motion, an object at rest will remain at rest, unless acted on by an unbalanced force.

L2: The force produced by an object is equal to the product of its mass and its acceleration.

L3: For every action there is an equal and opposite reaction.

The philosophers of the scientific revolution sought to provide a philosophical foundation for science. The methods of science focused on induction.

Induction is the derivation of a general law from particular cases.

We see lots of objects moving, and stopping, and we generate hypotheses about why this happens.

We see that in events E_1, E_2, E_3, \dots a law applies.

We conclude that in all similar cases, this law must apply.

Induction is contrasted with deduction, in which we infer a particular case from a general rule or law.

Laws of motion are generalizations from experimental evidence.

The phenomena, the E_n , are sensory experiences.

Hume argues that induction relies on analogy.

We have to consider when cases are similar, in order to know when a law applies.

All our reasonings concerning matters of fact are founded on a species of analogy which leads us to expect from any cause the same events which we have observed to result from similar causes. Where the causes are entirely similar, the analogy is perfect, and the inference drawn from it is regarded as certain and conclusive. Nor does any man ever entertain a doubt where he sees a piece of iron that it will have weight and cohesion of parts as in all other instances which have ever fallen under his observation. But where the objects have not so exact a similarity, the

analogy is less perfect and the inference is less conclusive, though still it has some force in proportion to the degree of similarity and resemblance. The anatomical observations formed upon one animal are, by this species of reasoning, extended to all animals; and it is certain that, when the circulation of the blood, for instance, is clearly proved to have place in one creature, as a frog, or fish, it forms a strong presumption that the same principle has place in all (§IX, AW 575a).

Hume argues that while we base our knowledge of laws in principles of induction over sense experiences, our beliefs in such principles are unjustified.

This skeptical claim is called the problem of induction.

Thus, unlike Berkeley, Hume turns not toward God to insure our knowledge, but away from certainty.

Hume claims that universal scientific claims are unknown, and unknowable.

In vain do you pretend to have learned the nature of bodies from your past experience. Their secret nature and, consequently, all their effects and influence may change without any change in their sensible qualities (§IV.2, AW 547b).

Even our knowledge of our own selves is impugned by Hume's philosophy.

So why should we believe in empiricism?

Berkeley assumes empiricism.

Locke argues against innate ideas, defending empiricism on Ockhamist grounds.

Hume has a more direct argument, from reflection on our psychology.

HE1. All our beliefs about the world are either directly derived from sense impressions, or are the result of reasoning about cause and effect relations.

HE2. All our beliefs about cause and effect relations are based on experience, not reason.

HEC. So, all beliefs about the world are based on experience.

Hume's goal, then, is a lot like Locke's.

We start with a modest appraisal of our experience and our psychological capacities.

We will examine the nature of our psychology, and see what conclusions are warranted.

And, we will humbly avoid making unsupported claims.

The major difference between Hume and Locke is the severity with which Hume invokes his empiricist limitations, and his consequent skepticism, and atheism.

Indeed, while Hume was something of a prodigy, producing the *Treatise* when he was 27, he was never able to work in a university.

He published the *Treatise*, with its skeptical conclusions about religion, anonymously.

He suppressed his most thorough attacks on causal arguments for the existence of God, the *Dialogues Concerning Natural Religion*, through his lifetime; they were only published posthumously.

Still, his proposed university appointments were blocked by the Scottish clergy twice.

Hume's atheism was widely known and ridiculed.

The portly Hume is rumored (Virginia Woolf cites the story in *To The Lighthouse*) to have gotten stuck in a bog; he was rescued only after capitulating his views, and reciting the Lord's prayer.

Hume was unsatisfied with the reaction to his *Treatise*, claiming that it fell stillborn from the press.

We are mainly going to focus on his later, more streamlined presentation of his views, in the *Enquiry*.

We will focus centrally on Hume's problem of induction, but also related topics:

1. Causation and Induction
2. Free Will and Compatibilism
3. Belief in God and Miracles
4. The Vanishing Self

There's a saying that when a philosopher meets a dilemma, he makes a distinction. Nowhere is this method more prominent than in Hume's work.

II. The Contents of the Mind: Ideas and Impressions

Hume divides the contents of the mind into ideas and impressions.

We may divide all the perceptions of the mind into two classes or species, which are distinguished by their different degrees of force and vivacity. The less forcible and lively are commonly denominated thoughts or ideas. The other species want a name in our language, and in most others; I suppose, because it was not requisite for any but philosophical purposes to rank them under a general term or appellation. Let us, therefore, use a little freedom and call them impressions, employing that word in a sense somewhat different from the usual. By the term *impression*, then, I mean all our more lively perceptions, when we hear, or see, or feel, or love, or hate, or desire, or will. And impressions are distinguished from ideas, which are the less lively perceptions, of which we are conscious, when we reflect on any of those sensations or movements above mentioned (§II, AW 539a).

An impression is a sensation, a vibrant idea, like a hand on a burning stove, or the sound of a voice, or what you are looking at right now.

An idea is the thought of that burning sensation ten minutes later.

The mind has simple ideas and complex ones.

Simple ideas are derived directly from impressions.

We can also have original ideas, ones that we construct ourselves, like those of unicorns.

These are complex ideas, made up of combinations of simple ideas.

So far, Hume's epistemology is consonant with Locke's.

Hume does admit of a limited exception to the general rule that all the contents of the mind are simple or complex ideas, or impressions.

We might be able to fill in a missing shade of blue.

Suppose...a person to have enjoyed his sight for thirty years, and to have become perfectly acquainted with colors of all kinds except one particular shade of blue, for instance, which it never has been his fortune to meet with. Let all the different shades of that color, except that single one, be placed before him, descending gradually from the deepest to the lightest; it is plain that he will perceive a blank, where that shade is wanting, and will be sensible that there is a greater distance in that place between the contiguous color than in any other. Now I ask whether it be possible for him, from his own imagination, to supply this deficiency, and raise up to himself the idea of that particular shade, though it had never been conveyed to him by his senses? I believe there are few but will be of opinion that he can; and this may serve as a proof that the

simple ideas are not always, in every instance, derived from the correspondent impressions; though this instance is so singular, that it is scarcely worth our observing, and does not merit that for it alone we should alter our general maxim (§II, AW 540b).

The point of Hume's claim about the missing shade of blue has been much debated.

I tend to take him at his word.

Hume wants to defend his empiricism, not as an absolute dogma, but as the conclusion of reasonable observations about our psychological capacities.

He develops a rule that all knowledge must trace back to original impressions.

He uses that rule to limit speculative claims.

When we entertain, therefore, any suspicion that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but enquire, *From what impression is that supposed idea derived?* And if it be impossible to assign any, this will serve to confirm our suspicion. By bringing ideas into so clear a light we may reasonably hope to remove all dispute, which may arise, concerning their nature and reality (§II, AW 540b-541a).

Hume is willing to entertain exceptions to his rule.

The missing shade of blue is just one such exception.

But, it is not the kind of exception that will found the rationalist's projects.

It is just a small thing, not the introduction of innate ideas.

I therefore take Hume at his word; we need not alter his general maxim.

All knowledge must trace back to initial impressions.

Further, this tracing back must proceed along the lines of ordinary psychological connections among ideas.

There appear to be only three principles of connection among ideas, namely, *resemblance*, *contiguity* in time or place, and *cause* or *effect*. That these principles serve to connect ideas will not, I believe, be much doubted. A picture naturally leads our thoughts to the original. The mention of one apartment in a building naturally introduces an enquiry or discourse concerning the others; and if we think of a wound, we can scarcely forbear reflecting on the pain which follows it. But that this enumeration is complete, and that there are no other principles of association except these, may be difficult to prove to the satisfaction of the reader, or even to a man's own satisfaction. All we can do, in such cases, is to run over several instances, and examine carefully the principle which binds the different thoughts to each other, never stopping till we render the principle as general as possible. The more instances we examine, and the more care we employ, the more assurance shall we acquire, that the enumeration, which we form from the whole, is complete and entire (§III, AW 541b).

These three principles of connection among ideas, resemblance, contiguity, and cause and effect, appear throughout the *Enquiry*, as the foundation for all reasoning.

Experience, in the guise of sense impression, and reasoning, in the guise of the psychological connections among ideas, work together to produce our beliefs, and there is no clear line between the two.

Notwithstanding that this distinction [between experience and reason] is thus universally received, both in the active and speculative scenes of life, I shall not scruple to pronounce that it is, at bottom, erroneous, at least, superficial (§V.1, fn 9; AW 550a).

III. Matters of Fact and Relations of Ideas

Remember that the empiricist is faced with difficulties justifying mathematical knowledge, since mathematical beliefs do not seem to arise directly from sense experience.

Locke claimed that our knowledge of mathematics (and moral claims) could be certain, even if there were no mathematical objects, since it concerns only relations among our ideas.

Hume maintains Locke's approach.

He divides human reasoning into matters of fact, which are what we would now call empirical, and which include the claims of science; and relations of ideas, which are of mathematics and logic.

All the objects of human reason or enquiry may naturally be divided into two kinds, namely, *relations of ideas*, and *matters of fact*. Of the first kind are the sciences of geometry, algebra, and arithmetic; and in short, every affirmation which is either intuitively or demonstratively certain. *That the square of the hypotenuse is equal to the square of the two sides* is a proposition which expresses a relation between these figures. *That three times five is equal to the half of thirty* expresses a relation between these numbers. Propositions of this kind are discoverable by the mere operation of thought, without dependence on what is anywhere existent in the universe. Though there never were a circle or triangle in nature, the truths demonstrated by Euclid would for ever retain their certainty and evidence (§IV.1, AW 542a).

Matters of fact are a posteriori, contingent.

Relations of ideas are a priori, necessary, and deductive.

They derive from the law of contradiction: any proposition whose denial entails a contradiction is necessarily true.

What never was seen, or heard of, may yet be conceived, nor is any thing beyond the power of thought except what implies an absolute contradiction (§II, AW 539b).

Mathematical theorems express relations of ideas, since their denials are contradictions.

Some non-mathematical claims (e.g. 'all bachelors are unmarried') can be relations of ideas, as well.

But, such claims will depend on definitions.

To convince us of this proposition, *that where there is no property, there can be no injustice*, it is only necessary to define the terms and explain injustice to be a violation of property. This proposition is, indeed, nothing but a more imperfect definition. It is the same case with all those pretended syllogistical reasonings which may be found in every other branch of learning, except the sciences of quantity and number; and these may safely, I think, be pronounced the only proper objects of knowledge and demonstration (§XII.3, AW 599b).

Hume's method, which we have seen in other work, is key for Hume's skeptical argument, as we shall see.