

Unit 4 Notes  
Humean Skepticism  
(With Guest Appearances from Thomas Reid and Gottfried Wilhelm Leibniz)

§I. Introduction: Skepticism and the Problem of Induction

Consider the following seven ordinary beliefs.

- OB1 It is sunny outside right now.
- OB2 It snowed in February.
- OB3 Shakespeare wrote *The Tragedy of Macbeth*.
- OB4  $2 + 2 = 4$ .
- OB5 I exist.
- OB6 Objects near the surface of the Earth accelerate toward the center of the Earth at  $9.8 \text{ m/s}^2$ .
- OB7 The sun will rise tomorrow.

Accounts of our knowledge of these beliefs may differ.  
Our account of our beliefs like OB1 clearly appeals to occurrent sense experience.  
Beliefs like OB2 involve memory.  
Beliefs like OB3 involve testimony from others.  
OB4 and other pure mathematical sentences are controversial and a little puzzling.  
Descartes and Spinoza invoke innate ideas.  
Locke rests his account on reflection on sense experience, especially abstraction.  
OB5 seems unassailable when asserted, but *sui generis*; there are few if any other beliefs like it.  
Our accounts of our beliefs OB6 and OB7 and their like appeal to scientific theories, distillations of our best, most secure systematizations of claims about the world.  
OB4–OB7 all present difficulties for empiricists, who may even deny them.

Let's take a closer look at mathematical claims like OB4.  
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 that there are mathematical objects, like 'there are three prime numbers between four and twelve') are false.  
Fictionalists allow that conditional mathematical claims like CM are true, but only vacuously so.

- CM If two is rational, then there is a pair of whole numbers whose ratio is two and which have no common factor.

Any conditional with a false antecedent is true, according to classical logic.  
'Two is rational' is false if there are no mathematical objects.  
But CM can be true even if there are no mathematical objects.

Berkeley is a nominalist about both mathematical terms and scientific laws, claiming that they are illegitimate abstractions from particular ideas.  
Berkeley's view is precedental for contemporary mathematical fictionalists.  
He extends his nominalism to empirical science.  
Laws, for Berkeley, are provided by God for convenience, but with exceptions or miracles.  
Regularities among experiences, as physical laws expressed using abstract ideas, are not real, for Berkeley.

Hume agrees with Berkeley 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 (Hume, *Enquiry*, §XII.1, AW 595b).

Hume agrees with both 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.

Berkeley, of course, denies the existence of the material world.

For Locke and Hume, the material world, as well as any laws governing or applying in the world and any mathematical principles, is perceived only mediately or inferred.

Locke claims knowledge of the external world, science, and mathematics on the basis of a modified resemblance hypothesis and principles of reflection including abstraction.

Berkeley denies Locke's resemblance hypothesis and doctrine of abstract ideas and asserts 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. For Berkeley, the problems of abstract ideas infect science and mathematics.

Descartes similarly aligns mathematics and science, though lauding the conclusions of both.

Hume, in one of his most important innovations, separates mathematics and science.

Like Locke, Hume bases our knowledge of mathematics on the principle of contradiction and our bare psychological capacities.

But Hume agrees with Berkeley that our claims about the material world are unjustified.

Hume's conclusions about science are skeptical, though, rather than idealistic.

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* (Hume, *Enquiry*, §XII.1, AW 595a, emphasis added).

Locke responded to the problem here with humility.

We don't really know about the material world

Some questions are just beyond our ability to answer.

Hume extends Locke's humility into an entrenched, argued skepticism.

Hume's main focus is on the laws of nature and the ways in which we formulate predictive scientific theories on the basis of our experience.

The philosophers of the scientific revolution sought to provide a philosophical foundation for science.

The methods of science focused on induction, 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  $E_1, E_2, E_3, \dots$  some law like gravitation applies.

We conclude that in similar cases, this law applies.

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

Deductions, like GF, start with general claims.

GF     All goobles are froom.  
         Trazzie is a gooble.  
         So, Trazzie is froom.

Once we have general laws, we can deduce particular instances given initial conditions.  
But to arrive at general laws from observation, we use induction.

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

- NL1 Inertia: an object in motion will remain in motion, an object at rest will remain at rest, unless acted on by an unbalanced force.
- NL2 The force produced by an object is equal to the product of its mass and its acceleration.
- NL3 For every action there is an equal and opposite reaction.

Laws of motion are generalizations from experimental evidence and observation.  
The phenomena, the  $E_n$ , are sensory experiences.

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

This skeptical claim is called the problem of induction.

Unlike Berkeley, Hume does not turn toward God to insure our knowledge.

He turns 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 (Hume, *Enquiry*, §IV.2, AW 547b).

Even our knowledge of our selves, OB5, is impugned by Hume's philosophy.

Descartes took his existence to be among our most secure beliefs.

Hume argues, as we will see, that we do not have that knowledge despite its apparent obviousness.

Given Hume's inference of skepticism from basic empiricist principles, we might ask why we should believe in empiricism.

Berkeley assumes empiricism.

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

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

- HE HE1. All our beliefs about the world are either directly derived from sense impressions or are the results 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 examine the nature of our psychology and see what conclusions are warranted.

And we humbly avoid making unsupported claims.

The major differences between Hume and Locke are the severity with which Hume invokes his empiricist limitations and his consequent skepticism and atheism.

While Hume was something of a prodigy, publishing the *Treatise* in 1739 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 published posthumously.

Still, Hume's atheism was widely known and ridiculed and his proposed university appointments were blocked by the Scottish clergy twice.

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

Hume was unsatisfied with the reaction to his *Treatise*, published anonymously between 1738 and 1740.

He remarked that it fell stillborn from the press.

Like Berkeley, who wrote the *Three Dialogues* when his *Principles* was not widely lauded, Hume reformulated his view and made a more-streamlined presentation in the *Enquiry Concerning Human Understanding*, published in 1748.

We are mainly, though not exclusively, going to read from the *Enquiry*.

We will focus centrally on Hume's problem of induction, but also on two related topics: the bundle theory of the self and Hume's compatibilist account of free will.

## §II. Hume's Tools

### II.1. The Contents of the Mind: Ideas and Impressions

There's a saying that when a philosopher meets a dilemma, s/he makes a distinction.

Nowhere is this method more prominent than in Hume's work.

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 (Hume, *Enquiry*, §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.

In contemporary philosophy, we use the terms 'qualia', 'sensation', or 'phenomenal experience' to try to capture Hume's intent for the meaning of 'impression'.

Ideas are the recollections of impressions.

The mind has simple ideas and complex ones.

Simple ideas come 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 like that of Locke and Berkeley.

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

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 (Hume, *Enquiry*, §II, AW 540b).

The point of Hume's claim about the missing shade of blue has been much debated. I believe that Hume raises the question to show that he does not hold his empiricism as an absolute dogma. On what basis could an empiricist claim knowledge of that? Instead, his empiricism is the conclusion of reasonable observations about our psychological capacities. He infers from observation and experience a general principle that all knowledge must trace back to original impressions. He elevates that principle into a rule which he uses 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 (*Enquiry*, §II, AW 540b-541a).

While Hume wields his rule like an axe, he is willing to entertain exceptions to it, since he does not take the rule to be infallible, placed in our minds by a benevolent God. The missing shade of blue is just one such exception. It is not the kind of exception that will serve to ground the rationalists' 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, or nearly so, traces back to initial impressions. This tracing-back proceeds 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 (Hume, *Enquiry*, §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 impressions, and reasoning, in the guise of the psychological connections among ideas, work together to produce our beliefs.

Hume's three principles do some of the work that Locke's class of reflections, including the doctrine of abstract ideas, do for the earlier philosopher.

## II.2. Psychological Capacities and Abstract Ideas

Locke introduces the doctrine of abstract ideas as a way to replace the rationalists' posit of innate ideas with an appeal to psychological capacities.

Berkeley denies the doctrine of abstract ideas and argues that the belief in the existence of the material world is based on mistaken reliance on that doctrine.

Concomitantly, Berkeley suggests that we ban general terms from our most austere, respectable language.

Instead, he claims that we can use particular terms generally without pretending to form abstract ideas.

A word becomes general by being made the sign, not of an abstract general idea, but of several particular ideas, any one of which it indifferently suggests to the mind. For example, when it is said *the change of motion is proportional to the impressed force*, or that *whatever has extension is divisible*, these propositions are to be understood of motion and extension in general, and nevertheless it will not follow that they suggest to my thoughts an idea of motion without a body moved, or any determinate direction and velocity, or that I must conceive an abstract general idea of extension, which is neither line, surface, nor solid, neither great nor small, black, white, nor red, nor of any other determinate color. It is only implied that whatever particular motion I consider, whether it is swift or slow, perpendicular, horizontal, or oblique, or in whatever object, the axiom concerning it holds equally true (Berkeley, *Principles* Introduction §11, AW 442a).

Hume agrees that there can be no abstract objects or abstract ideas, and extends Berkeley's argument.

It is a principle generally received in philosophy that everything in nature is individual and that it is utterly absurd to suppose a triangle really existent which has no precise proportion of sides and angles. If this, therefore, be absurd in *fact and reality*, it must also be absurd in *idea*, since nothing of which we can form a clear and distinct idea is absurd and impossible ([Treatise I.1.7](#), p 5).

Given the representational theory of ideas, which Hume shares with Locke and Berkeley, we do have some psychological capacities to alter the ideas of sensation and to create new ones.

We can combine parts of our ideas, as when we think of a centaur.

We can consider some portions of an idea apart from others, as when we think about the door of a building and not the walls or roof or windows.

But Hume agrees with Berkeley that we can not form an abstract general idea, like the idea of a triangle, without thinking of a particular triangle, or like the idea of 250,737 without thinking of a particular symbol to stand for that number.

Given their rejection of Locke's doctrine of abstract ideas, Berkeley and Hume are faced with a new problem to account for our use of general ideas without admitting a psychological capacity for abstraction.

Locke designed the doctrine of abstract ideas in order to account for our ability to speak generally, to use one term to stand for many.

We obviously use terms like 'chicken' to represent chickens generally, even if we only ever experience individual chickens.

Speaking generally is fundamental to mathematics and science, where universal claims are ubiquitous. While taking particulars to stand for other particulars avoids a commitment to abstract ideas, it may not support knowledge of those universal claims.

Berkeley thus argues that we have no knowledge of general laws like those of empirical science and mathematics.

The theories, therefore, in arithmetic...can be supposed to have nothing at all for their object. Hence we may see how entirely the science of numbers is subordinate to practice and how jejune and trifling it becomes when considered as a matter of mere speculation (Berkeley, *Principles* §120).

Hume, in contrast to Berkeley, explains how our particular ideas can support universal claims by functioning as general ideas while remaining particular.

The image in the mind is only that of a particular object, though the application of it in our reasoning be the same as if it were universal (Hume, [Treatise I.1.7](#), p 5).

In order to make our particular idea function as a general one, Hume claims, we re-purpose the ideas. Repurposing is a psychological capacity different from abstraction.

A particular idea becomes general by being annexed to a general term, that is, to a term which, from a customary conjunction, has a relation to many other particular ideas and readily recalls them in the imagination (ibid, p 6).

Hume believes that unlike Locke's doctrine of abstract ideas, the capacity to annex a particular idea to a general term is psychologically defensible.

We can take objects to be of the same sort if they have any properties in common.

All (Euclidean) triangles have their angle sums in common, so they are the same sort of triangles.

But they do not have their side lengths in common, so they are not all scalene, etc.

Hume defends our ability to re-purpose individual ideas by providing examples.

We use symbols, like numerical inscriptions.

One particular idea or word can lead us to think of many different ones, as when the first notes of a song give us the whole tune.

We can recall different component aspects of a general term, depending on the appropriate context.

These psychological capacities may be unexplained or inexplicable but they are also undeniable.

Nothing is more admirable than the readiness with which the imagination suggests its ideas and presents them at the very instant in which they become necessary or useful (ibid, pp 6-7).

Hume surmises that general terms arise from habits of use.

If ideas be particular in their nature and at the same time finite in their number, it is only by custom they can become general in their representation and contain an infinite number of other ideas under them (ibid, p 7).

As we will see in the next section, Berkeley and Hume differ on the lesson to be learned from the failure of Locke's doctrine.

Berkeley denies the existence of mathematical objects and the truth of physical laws.

Hume bases knowledge of mathematics on the principle of contradiction and bare psychological capacities.

But he has deep concerns about our knowledge of science.

### §III. Matters of Fact and Relations of Ideas

#### III.1. Hume's Distinction

The empiricist, as we have seen, is faced with difficulties justifying mathematical knowledge.

Mathematical beliefs do not seem to arise directly from sense experience.

Locke claims that our knowledge of mathematics (and moral claims) can be certain because claims in those areas concern only relations among our ideas.

Hume makes an even firmer distinction, grounding our mathematical knowledge in reasoning while impugning our empirical scientific conclusions.

He divides human reasoning into matters of fact, which are what we would now call empirical claims 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 (Hume, *Enquiry*, §IV.1, AW 542a).

Matters of fact are acquired *a posteriori* and are contingent.

Relations of ideas are acquired *a priori*, deductively, and are necessary.

The basic tool for discovering whether a given statement is a relation of ideas is the principle of contradiction.

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 (Hume, *Enquiry*, §II, AW 539b).

The principle of contradiction says contradictions and statements which entail them are certainly false.

We use the principle of contradiction in proofs by *reductio ad absurdum*, or indirect proof.

We know the mathematical claims that Hume cites because their negations are self-contradictory.

A statement can be known to be necessarily true only if its negation entails a contradiction.

Hume argues that many claims that have been accepted as certainly true, like statements of the laws of nature or of the existence and goodness of God, can not be so since their negations are not contradictory.

The only objects of the abstract sciences or of demonstration are quantity and number...All other inquiries of men regard only matter of fact and existence and these are evidently incapable of demonstration. Whatever *is* may *not be*. No negation of a fact can involve a contradiction (Hume, *Enquiry* XII.3, AW 599b).

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

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 (Hume, *Enquiry*, §XII.3, AW 599b).



In other words, the principle of contradiction is both sufficient and necessary for justifying our knowledge of all necessary truths, including those of mathematics.

We are possessed of a precise standard by which we can judge of the equality and proportion of numbers and, according as they correspond or not to that standard, we determine their relations without any possibility of error (Hume, [Treatise I.3.1](#), p 8).

Leibniz was perhaps the first philosopher to emphasize the importance of the principle of contradiction, which he called one of his great philosophical principles.

For Leibniz, every truth can be discovered using the principle of contradiction.

That's a striking claim.

For mathematical truths, Hume's relations of ideas, the claim is more-obviously plausible, though still contentious.

But Leibniz holds this claim, as we will see below in §VII.2, for empirical statements too.

The denial of any fact, like that we are in Clinton or that Obama is president, is not just false, but contradictory.

Unlike Leibniz, Hume does not believe that all negations of true propositions lead to contradictions. But he adopts Leibniz's view for mathematics, logic, and other relations of ideas.

### III.2. Reflections on Hume's Distinction

One worry about Hume's distinction between matters of fact and relations of ideas is that the principle of contradiction by itself can not do all the work Hume needs it to do.

We need auxiliary tools to frame hypotheses and to determine whether statements are contradictory.

In the nineteenth and twentieth centuries, logicians following Frege developed a syntactic test for contradiction by developing a formal language in which contradictions could be represented.

A contradiction is any statement of the form  $\alpha \bullet \sim\alpha$ .

While Hume and the other moderns did not have this criterion, they of course understood that to assert any sentence and its negation is a contradiction.

But, the account of how to know whether one sentence was a negation of another had yet to be developed.

Both Locke and Hume thus appeal to our psychological ability to recognize contradictions.

Following Leibniz, they also appeal to our ability to recognize identities, statements whose negations are contradictions.

Thus, there are actually two tools for determining whether a statement is a relation of ideas.

RI1     The principle of contradiction.

RI2     The imagination's ability to recognize similarity and difference.

Locke appeals to what he calls intuitive and demonstrative knowledge in his account of our knowledge of mathematics.

Intuitive knowledge is RI2.

If we will reflect on our own ways of thinking, we shall find that sometimes the mind perceives the agreement or disagreement of two *ideas* immediately by themselves, without the intervention of any other. And this, I think, we may call *intuitive knowledge* (Locke, *Essay* §IV.II. 1, AW 389a).

Hume makes similar claims.

Only four [philosophical relations], depending solely upon ideas, can be the objects of knowledge and certainty. These four are *resemblance*, *contrariety*, *degrees in quality*, and *proportions in quantity or number*. Three of these relations are discoverable at first sight and fall more properly under the province of intuition than demonstration (Hume, [Treatise I.III.1](#), p 7).

Demonstrative knowledge uses RI1, and, more broadly, proofs.

When the mind cannot so bring its *ideas* together, as by their immediate comparison and as it were juxtaposition or application one to another, to perceive their agreement or disagreement, it is inclined, by the intervention of other *ideas* (one or more, as it happens) to discover the agreement or disagreement which it searches; and this is that which we call *reasoning* (Locke, *Essay* IV.II.2, AW 389b).

In other words, Locke and Hume agree that we have both intuitive knowledge, or immediate apprehension of some basic principles, and derivative knowledge of more complex statements.

Believing it to be just the result of a natural psychological ability to recognize similarities, differences, and contradictions, they argue that this ability is acceptable to empiricists and includes no appeal to innate ideas.

Hume's division between relations of ideas and matters of fact thus allows him to maintain a commonsense view about the certainty and security of mathematics while raising devastating objections to the empiricists' account of science, the problem of induction.

#### §IV. The Problem of Induction

##### IV.1. Laws of Nature

Let's return to claims OB1–OB7.

- OB1 It is raining outside right now.
- OB2 It snowed in February.
- OB3 Shakespeare wrote *The Tragedy of Macbeth*.
- OB4  $2 + 2 = 4$ .
- OB5 I exist.
- OB6 Objects near the surface of the Earth accelerate toward the center of the Earth at  $9.8 \text{ m/s}^2$ .
- OB7 The sun will rise tomorrow.

OB1–OB3 state what Hume calls matters of fact.

He claims that such assertions can be traced back to original impressions.

For these three propositions, Hume's claim seems plausible.

The tracing turns out to be trickier than Hume thought, though.

The project was imagined in the 20<sup>th</sup> century by Ludwig Wittgenstein in his *Tractatus Logico-Philosophicus*, and pursued by logical empiricists like Rudolph Carnap, whose *Logical Structure of the World* attempted to use contemporary logical tools to carry out Hume's project.

Nevertheless, we will not pursue worries about these claims and we'll accept personal experience (OB1), testimony (OB3), and at least some instances of memory (OB2) as reliable evidence.

OB4 states a mathematical fact, and is thus a relation of ideas.

We will also put aside questions about the claim that mathematical theorems follow from self-evident axioms using unassailable logical tools including the principle of contradiction.

OB5, our knowledge of ourselves, leads to a complication to which we shall return below, in §VIII.

For now, let's look at OB6 and OB7.

They are instances of what we can call natural laws, like Newton's three laws of motion, NL1–NL3, which we saw in §I, above.

While the sun does not actually rise, as OB7 says, we use the sentence as shorthand for lawlike claims about the rotation of the Earth on its axis.

Laws of nature are supposed to have a predictive quality, telling us what will happen.

We can use them to design machines, for example, like cell phones or cars, which behave in predictable ways. The energies of scientists and engineers are used with the assumption that the laws they discover and invoke are known to project into the future.

OB6 and OB7, and other law statements, are not relations of ideas since their denials do not lead to a contradiction.

If the Earth had a different diameter, the acceleration due to gravity at its surface would be different.

Also, if the physical laws were slightly changed, gravitational force could be different.

So the denial of OB6 is not contradictory in any obvious way.

Similarly, 'The sun will not rise tomorrow' is possibly true.

So OB7 is not a relation of ideas either.

We can not discover that denials of laws of nature are false by mere process of thought as we can with relations of ideas.

The course of nature may change, and...an object seemingly like those which we have experienced, may be attended with different or contrary effects. May I not clearly and distinctly conceive that a body, falling from the clouds, and which in all other respects resembles snow, has yet the taste of salt or feeling of fire? Is there any more intelligible proposition than to affirm that all the trees will flourish in December and January and decay in May and June? Now, whatever is intelligible and can be distinctly conceived implies no contradiction and can never be proved false by any demonstrative argument or abstract reasoning *a priori* (Hume, *Enquiry*, §IV.2, AW 546a-b).

Thus it seems difficult to defend knowledge of claims about laws of nature.

If they are matters of fact, they have to be traceable back to original sense impressions.

But we do not have any experience of the future, so they can not be confirmed by experience.

They pronounce on future events and so go beyond our experiences of the past, inductively.

Claims about the future are thus unfounded, being neither relations of ideas or matters of fact.

We thus seem to have no justification of our beliefs like OB6 and OB7.

## IV.2. Cause and Effect

Scientific laws are generally taken to describe the causal structure of the universe.

We have no sense impressions of many terms used in laws, including 'gravity', 'force', and 'mass'.

We have experience only of events, not their causes or the underlying laws.

The effect is totally different from the cause, and consequently can never be discovered in it. Motion in the second billiard ball is a quite distinct event from motion in the first, nor is there anything in the one to suggest the smallest hint of the other. A stone or piece of metal raised into the air and left without any support immediately falls. But to consider the matter *a priori*, is there anything we discover in this situation which can beget the idea of a downward rather than an upward or any other motion in the stone or metal?...When I see, for instance, a billiard ball moving in a straight line towards another, even suppose motion in the second ball should by accident be suggested to me as

the result of their contact or impulse, may I not conceive that a hundred different events might as well follow from that cause? May not the first ball return in a straight line or leap off from the second in any line or direction? All these suppositions are consistent and conceivable (Hume, *Enquiry*, §IV.1, AW 543b-544a).

Hume asks us to consider our inability to know novel properties like the cohesion of marble. The secret powers, the connections between events, are hidden from us.

Let an object be presented to a man of ever so strong natural reason and abilities; if that object is entirely new to him, he will not be able, by the most accurate examination of its sensible qualities, to discover any of its causes or effects. Adam, though his rational faculties are supposed entirely perfect at the very first, could not have inferred from the fluidity and transparency of water that it would suffocate him, or from the light and warmth of fire that it would consume him (Hume, *Enquiry*, §IV.1, AW 543a).

When we perform inductions and pronounce on laws connecting events, we go beyond the evidence of our experience.

We pretend that we see connections among events.

But all we ever see are conjunctions of (somehow) related phenomena.

We only learn by experience the frequent conjunction of objects, without being ever able to comprehend anything like connection between them (Hume, *Enquiry*, §VII.1, AW 560b).

All our beliefs about the world are based on experience.

Experience only tells us what was or is, not what has to be.

We have no access to the causes.

Laws of nature reduce disparate phenomena to simple statements.

But such reductions require insight into the causal structure of the world which we can not get from sense experience.

Thus we can not establish the truth of laws of nature despite our best efforts.

The utmost effort of human reason is to reduce the principles productive of natural phenomena to a greater simplicity and to resolve the many particular effects into a few general causes by means of reasonings from analogy, experience, and observation. But as to the causes of these general causes, we should in vain attempt their discovery, nor shall we ever be able to satisfy ourselves by any particular explication of them. These ultimate springs and principles are totally shut up from human curiosity and inquiry...Thus the observation of human blindness and weakness is the result of all philosophy and meets us at every turn in spite of our endeavors to elude or avoid it (Hume, *Enquiry*, §IV.1, AW 544a-b).

We have no knowledge of both particular and general claims about laws of nature.

We do not know Newton's laws.

We do not know that the sun will rise tomorrow.

The problem is not that there might be a big explosion.

Such an event would be consistent with physical laws.

The problem is that the laws could suddenly shift from what we think they are.

### IV.3. Induction and Skepticism

Hume's concerns about our ability to know physical laws is generally known as the problem of induction. Induction is how you know about unobserved phenomena, including predictions about the future. One challenge for the philosopher or the scientist attempting to systematize our best beliefs into secure generalizations lies in how to determine when causes of different events are similar. How do we get knowledge of the unobserved?

One traditional answer appeals to our knowledge of the laws of nature as eternal, necessary truths. We can have knowledge of the future if our inductive inferences give us insight into the causal structure of the world.

One can imagine someone, perhaps Descartes, using KF to defend our inductions.

- KF1. We have experiences of the sun rising.
- KF2. These experiences, combined with our reasoning, provide insight into the causal structure of the world.
- KF3. The causal structure of the world is necessary.
- KF4. What is necessary is eternal and so projects into the future.
- KFC. So the sun will rise tomorrow.

KF1 is obviously true.

Hume provides no reason to doubt KF3 and KF4.

His complaint is with KF2.

Hume argues that the induction to claims about the causal structure of the world relies on analogy. We have to consider when cases are similar in order to know when we can assimilate particular experiences and 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 (Hume, *Enquiry*, §IX, AW 575a).

The question we have to ask, in all cases, is when to expect uniformities to extend beyond our observation, as Bertrand Russell later points out.

Domestic animals expect food when they see the person who usually feeds them. We know that all these rather crude expectations of uniformity are liable to be misleading. The man who has fed the chicken every day throughout its life at last wrings its neck instead, showing that more refined views as to the uniformity of nature would have been useful to the chicken (Russell, *Problems of Philosophy*, p 63).

Here is a version of Hume's skeptical argument about induction.

- PI     PI1. Our beliefs about future events and unobserved objects are matters of fact.
- PI2. Beliefs about matters of fact are based on experience.
- PI3. Experience tells us how things were, not how they will be; it tells us only about actually observed phenomena.
- PIC. So, our beliefs about the future and the unobserved are unknown.

PI1 is a definition.

PI2 is the basic principle of empiricism.

Scientific generalizations which do not limit themselves to past observations go beyond sense evidence.

Descartes, for example, argued that innate principles can allow us to make the inductive leap.

An appeal to innate principles will not work for Hume, obviously.

We can not go beyond the evidence of our senses.

PI3 is the result of Hume's observations about causation.

When we infer any particular cause from an effect, we must proportion the one to the other and can never be allowed to ascribe to the cause any qualities but what are exactly sufficient to produce the effect...If the cause assigned for any effect is not sufficient to produce it, we must either reject that cause or add to it such qualities as will give it a just proportion to the effect. But if we ascribe to it further qualities or affirm it capable of producing other effects, we can only indulge the license of conjecture and arbitrarily suppose the existence of qualities and energies without reason or authority (Hume, *Enquiry*, §XI, AW 588a).

Here is a specific version of the problem of induction.

- B       B1. I have seen one billiard ball strike another many times.
- B2. Each time the ball which was struck has moved, motion was transferred.
- BC. So, the struck ball will move this time.

Notice that BC does not follow deductively from B1 and B2.

B is an invalid argument.

An argument is valid if it is impossible for the premises to be true and the conclusion to be false.

You can see that B is invalid if you consider what would happen if the laws of physics shift.

The conclusion could be false while the premises remain true.

#### IV.4. A Solution? The Uniformity of Nature

An additional premise could make B a valid inference

Consider the principle of the uniformity of nature (PUN).

- PUN    The future will resemble the past.

If we add PUN as a third premise, then the conclusion will follow.

- B\*     B1. I have seen one billiard ball strike another many times.
- B2. Each time the ball which was struck has moved, motion was transferred.
- B3. The future will resemble the past.
- BC. So, the struck ball will move this time.

The main problem with B\* is that we have no basis for believing PUN.  
All inductive inference presupposes it, but, Hume argues, it can not justify itself.

All inferences from experience suppose as their foundation that the future will resemble the past and that similar powers will be conjoined with similar sensible qualities. If there is any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless and can give rise to no inference or conclusion. It is impossible, there-fore, 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 (Hume, *Enquiry*, §IV.2, AW 547b).

The future has resembled the past in the past.  
We don't know that it will continue to resemble the past.  
If we had knowledge of cause and effect relations, of the connections among events, we could tie them together to yield PUN.  
We would know the hidden springs by experience.  
But, we only have knowledge of constant conjunction.  
So scientific generalizations which do not limit themselves to observed evidence are unjustified.  
Physical laws like Newtonian gravitation or the gas laws go beyond experimental evidence.  
Even the existence of a material world is a scientific hypothesis generated by experience.

It is a question of fact whether the perceptions of the senses are produced by external objects resembling them; how shall this question be determined? By experience, surely as all other questions of a like nature. But here experience is and must be entirely silent. 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 (Hume, *Enquiry*, §XII.1, AW 595a).

Philosophers, as we have seen, speculate broadly about the world and its laws.  
Hume insists that such speculation is unfounded.  
He proposes that we resist and eliminate it.

When we run over libraries, persuaded of these principles, what havoc must we make? If we take in hand any volume—of divinity or school metaphysics, for instance—let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames, for it can contain nothing but sophistry and illusion (Hume, *Enquiry*, §XII.3, AW 600b).

#### IV.5. More Problems of Induction

Hume's skepticism is centered on the problem of induction which persists, in extended fashion, in contemporary philosophy.

We can identify three problems that could be called problems of induction.

The first might be called the weak problem of induction, WI.

WI     We have limited intelligence and experience.

There is not enough evidence to draw the conclusions that we draw.  
Scientific theories are generally under-determined by the evidence.

Often there are two or more competing yet equally well-supported theories about the world. Such theories agree on all the empirical evidence we have gathered. Even if we presume that physical laws will be uniform and stable, we don't know which theory to use. Scientists can solve some of the problems of WI by hard work. For example, physicists have spent some time wondering whether the [fine-structure constant](#) is really a constant throughout space-time. There was not enough evidence about it, so they worked to gather more evidence. Most physicists now agree that it is constant through space-time. If we were smarter or had more time, we might solve all of the problems of WI by gathering sufficient evidence.

WI is not Hume's problem of induction. It is just a problem of limitations on evidence. It is not really a philosophical problem.

The second problem might be called the strong problem of induction.

SI      Even given all possible evidence from the past, we can not know that the laws of nature will not shift radically and unexpectedly.

SI is Hume's problem. But despite Hume's complaints about inductive processes, we do make successful predictions. We presume that the laws of nature will remain uniform and stable even if that assumption is unjustified. Hume's problem of induction is thus an epistemic puzzle. We do these things that it seems that we shouldn't be able to do; how? What error have we made?

A third problem of induction, often called the new riddle of induction, extends the puzzle. The new riddle gets its name from Nelson Goodman's *Fact, Fiction, and Forecast*. You know what it means for an object to be green. Consider the property called 'grue'. An object is grue if it has been examined prior to 1/1/2020, and found to be green or not so examined and it is blue. Consider the competing claims G1 and G2.

G1      All emeralds are green.  
G2      All emeralds are grue.

All evidence for an emerald being green is also evidence for its being grue. G1 and G2 each describe a lawlike generalization. They are equally well confirmed by the evidence. Goodman's new riddle, NRI, is to determine why we think that G1 is a law and G2 is not.

NRI      Even given that the laws of nature remain stable, we do not know which predicates are confirmed.

One could construct other artificial properties, like the property of being a paphone. A paphone is something which has been examined before 1/1/2020 and is a piece of paper or has not been examined and is an phone. All evidence that something is a piece of paper is also evidence that it is a paphone.



NRI shows that Hume's problem is not just about physical laws, but about common terms we use to describe the world, too.

SI and NRI are among the most serious problems in philosophy, especially in the philosophy of science. Berkeley shows that Lockean empiricist principles lead to difficulties with our beliefs in an external, material world.

Hume shows that these problems infect all of science, not merely belief in matter.

Goodman shows that the problem infects even our most common uses of language.

Berkeley believes that we can continue to speak with the vulgar and think with the learned.

Hume and Goodman shows that even the most learned beliefs appear to be unjustified.

Hume's skepticism is not just Locke's humility.

It is a thorough rejection of the justification of our ordinary beliefs.

It is founded on the observation, perhaps drawn from Berkeley, that we are isolated from causal connections.

All we can experience are conjunctions of events, certain regularities in the past.

From those regularities we formulate generalities which we ambitiously call laws of nature,

But we can not know that such regularities will persist.

## §V. Mitigating Hume's Skepticism

### V.1. Laws of Nature and Miracles

Philosophers, like politicians, often make strange alliances.

There are deep similarities between the views of the Anglican bishop, Berkeley, and the Scottish skeptic and agnostic, Hume.

Both Hume and Berkeley deny that we know laws of nature but for different reasons.

Berkeley thinks that there are some general regularities in nature.

These regularities ensure that human beings can be productive and safe, demonstrating the goodness of God.

Berkeley also thinks that there are exceptions to these regularities, blemishes in nature.

Such blemishes are miracles, exceptions to the laws of nature for which Berkeley is determined to leave room.

It cannot be denied that God, or the intelligence that sustains and rules the ordinary course of things, might if He were minded to produce a miracle, cause all the motions on the dial-plate of a watch, though nobody had ever made the movements and put them in it (Berkeley, *Principles* §62; see also §84).

Consider the biblical miracle, described in the book of Joshua, in which God makes the sun stand still so that Joshua can complete his killing before dark.

And it came to pass, as they fled from before Israel, and were in the going down to Bethhoron, that the Lord cast down great stones from heaven upon them unto Azekah, and they died: they were more which died with hailstones than they whom the children of Israel slew with the sword. Then spake Joshua to the Lord in the day when the Lord delivered up the Amorites before the children of Israel, and he said in the sight of Israel, Sun, stand thou still upon Gibeon; and thou, Moon, in the valley of Ajalon. And the sun stood still, and the moon stayed, until the people had avenged themselves upon their enemies. Is not this written in the book of Jasher? So the sun stood still in the midst of heaven, and hasted not to go down about a whole day. And there was no day like that before it or after it, that the Lord hearkened unto the voice of a man: for the Lord fought for Israel (Joshua, 10:11-14).

In contrast to Berkeley, Hume not only denies that miracles happen, he denies that they are possible. There can be no irregularities in nature because the very notion of a regularity presupposes uniformity. If there were exceptions to the laws, we wouldn't call them laws.

Nothing is esteemed a miracle if it ever happen in the common course of nature. It is no miracle that a man, seemingly in good health, should die on a sudden, because such a kind of death, though more unusual than any other, has yet been frequently observed to happen. But it is a miracle that a dead man should come to life because that has never been observed in any age or country. There must, therefore, be a uniform experience against every miraculous event, otherwise the event would not merit that appellation. And as a uniform experience amounts to a proof, there is here a direct and full proof, from the nature of the fact, against the existence of any miracle, nor can such a proof be destroyed or the miracle rendered credible but by an opposite proof which is superior (Hume, *Enquiry*, §X, AW 579b).

A problem for Hume's argument for the impossibility of miracles arises when we have nearly uniform experiences and one small irregularity. If we experience an anomaly, though, an event inconsistent with what we think are the laws of nature, we adjust our account of the laws.

When any cause fails of producing its usual effect, philosophers ascribe not this to any irregularity in nature, but suppose that some secret causes in the particular structure of parts have prevented the operation (Hume, *Enquiry*, §VI, AW 556a).

Note the tension here between Hume's claim that we have no knowledge of causal laws, on the one hand, and his insistence that there are universal regularities in nature. In the arguments for skepticism, he seems to deny that we have any knowledge of laws or regularities. Here, not only does he countenance regularities, he denies that there can be exceptions to those regularities. He even argues that there is no chance in nature. All probability arises from our ignorance of causal connections; it is epistemic, rather than objective. As Einstein (later) said, [God does not throw dice](#).

One way to understand how Hume's skepticism is compatible with his denial of irregularities is to remember that Hume does have a psychological account of causation. The regularities that we find are real, even if among our ideas. Hume is not, like Berkeley, leaving room for divine intervention. He is taking seriously the problem of being cut off from the external world, behind the veil of ideas.

## V.2. The Psychological Definition of Causation and the Naturalist Hume

We talk about causation all the time.  
We believe that there are connections between events.  
We exit through the door, not the window.  
We do not really doubt that the sun will rise.  
If our beliefs are as unjustified as Hume claims, it would seem odd and perhaps inexplicable that we perform so many successful inductions.

If a philosopher denies a common belief, it is intellectually responsible to account for that belief. If I were to tell you that there is no Santa Claus, I should be able to explain to you how the properties you think belong to Santa Claus really belong to other people: your parents bring you presents, a neighbor puts on

the Santa suit for the party, the department store hires people to pretend to be Santa at the mall. When Berkeley argues that there is no external world, he accounts for our ordinary beliefs in material objects by showing that our ideas of objects could, strictly speaking, be interpreted as about our own sensations; we mis-perceive the world as material.

Hume's positive account of our practice of induction might be called a naturalistic account. Naturalism is a term contemporary philosophers often use to describe a variety of views. One prominent version of naturalism, and one which may apply to Hume, is the common view that natural science is the locus of our best, most serious beliefs. Hume's account of successful induction relies on some facts about our psychology.

When one particular species of event has always, in all instances, been conjoined with another, we make no longer any scruple of foretelling one upon the appearance of the other, and of employing that reasoning which can alone assure us of any matter of fact or existence. We then call the one object *cause*, the other *effect*. We suppose that there is some connection between them, some power in the one by which it infallibly produces the other and operates with the greatest certainty and strongest necessity (Hume, *Enquiry*, §VII.2, AW 563a).

Hume thus reinterprets ordinary talk of causal connections as talk about our mental states and behaviors. Our confidence in the regularity of nature is a habit, not justifiable but explicable in terms of our psychological development.

After a repetition of similar instances the mind is carried by habit upon the appearance of one event to expect its usual attendant and to believe that it will exist. This connection, therefore, which we *feel* in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression from which we form the idea of power or necessary connection...The first time a man saw the communication of motion by impulse, as by the shock of two billiard balls, he could not pronounce that the one event was *connected*, but only that it was *conjoined* with the other. After he has observed several instances of this nature, he then pronounces them to be *connected*. What alteration has happened to give rise to this new idea of *connection*? Nothing but that he now *feels* these events to be *connected* in his imagination, and can readily foretell the existence of one from the appearance of the other. When we say, therefore, that one object is connected with another, we mean only that they have acquired a connection in our thought (Hume, *Enquiry*, §VII.2, AW 563a).

When we devise physical laws by induction, we make a mental leap unsupported by evidence. Consider if a person were suddenly brought into the world. She would have no habits, and so no beliefs about regularities or causal powers. All her inductions would be mere guesses. By experience, she would develop certain habits and expectations while never having any experiences of causal connections.

Suppose...that he has acquired more experience and has lived so long in the world as to have observed familiar 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. And though he should be convinced that his understanding has no part in the operation, he would nevertheless continue in the same course of thinking. There is some other principle which determines him to form such a conclusion. This principle is *custom* or *habit* (Hume, *Enquiry*, §V.1, AW 549a-b).

What we develop by experience are mental capacities, not insights.

Remember, Hume agrees with Berkeley that we experience our sensations and not their causes.

We have no experience of the things in themselves.

Habit gives us conjunction, not connection.

We habitually suppose the existence of an external, material world without any direct experience of it.

Thus, the term 'cause', if it is to be meaningful, refers not to some fact about the external world, but to a private mental phenomenon.

The appearance of a cause always conveys the mind, by a customary transition, to the idea of the effect. Of this also we have experience. We may, therefore, suitably to this experience, form [a] definition of cause, and call it *an object followed by another, and whose appearance always conveys the thought to that other* (Hume, *Enquiry*, §VII.2, AW 563b).

Properly distinguished, Hume claims, causes are internal rather than external.

They are not in nature but in our minds.

Causes are psychological rather than objective.

This naturalistic account of our successful inductions won't give you the strong argument KF, from §IV.3, above.

But it does give us some justification of our beliefs.

An enthusiastic naturalist might even claim that it gives us something as strong as NKF.

- NKF NKF1. We have experiences of the sun rising.
- NKF2. These experiences provide insight into our psychology (i.e. our uses of the term 'cause').
- NKF3. Since we could never be justified in ascribing causes to the world, our legitimate uses of 'cause' must refer to our habits.
- NKF4. Our habits are justified as a matter of course.
- NKFC. We can be justified in believing or asserting that the sun will rise tomorrow.

I do not know whether to ascribe NKF to Hume.

There are hints of it in his work, but it seems too strong, especially at NKF4.

We might ascribe a weaker premise like NKF4\* to Hume.

- NKF4\* We can have no justification more secure than that which we have for our habits.

NKFC will not follow from NKF4\*, but the weaker NKFC\* will.

- NKFC\* We have an explicable habit of believing that the sun will rise tomorrow.

NKFC\* seems compatible with Hume's writing.

Hume certainly claims that we have no knowledge of the future and unobserved.

But we do have knowledge of our mental states and we can explain our habits.

Some contemporary naturalists try to adopt Humean restrictions on our psychological capacities while arguing for something pretty close to NKF.

But that's a topic for another course.

### V.3. Psychologism and Objectivity

Berkeley, when faced with the limits of what we can know, interpreted the terms we use that seem to refer to objects as referring to our mental states.

Hume, rejecting Berkeley's idealism, assumes that there is a material world.

Still, we can not know about the laws which govern the interactions of objects in the world.

Instead of internalizing the world, Hume internalizes cause and effect.

To see how radical Hume's psychologistic claim is, it might be useful to compare his views with those of Frege, writing in 1884.

In the following quote, Frege is responding to Mill's psychologistic view of numbers, which is essentially the same as that of Locke and Hume.

Number is no whit more an object of psychology or a product of mental processes than, let us say, the North Sea is. The objectivity of the North Sea is not affected by the fact that it is a matter of our arbitrary choice which part of all the water on the earth's surface we mark off and elect to call the North Sea. This is no reason for deciding to investigate the North Sea by psychological methods. In the same way number, too, is something objective. If we say 'The North Sea is 10,000 square miles in extent' then neither by 'North Sea' nor by '10,000' do we refer to any state of or process in our minds: on the contrary, we assert something quite objective, which is independent of our ideas and everything of the sort (Frege, *Grundlagen*, §26).

Locke psychologizes mathematics, taking it to be about our mental states.

Hume psychologizes causation.

Frege points out that we lose objectivity with such psychologizing.

Hume recognizes that we speak as if the world and the causal laws are objective, existing independently of us.

But he argues that we are unjustified in believing that.

Thus we are left as skeptics with unjustified but perhaps explicable habits.

We have seen two aspects of Hume's work on induction and science.

The skeptical Hume argues that we have no knowledge of the future or unobserved.

The naturalist Hume presumes our beliefs in universal scientific laws and explains them in terms of our natural psychological capacities or habits.

But to explain is not to justify and the problem of induction persists.

### §VI. Reid on Hume

The psychologism Frege criticizes did not arise with Hume, or even Locke.

The psychologism of the Moderns is rooted in Descartes's claim that we know our mental states best.

This view about our direct access to our mental states is not an inevitable concomitant to the Moderns' embrace of the new science.

One of Hume's Scottish contemporaries, Thomas Reid, saw the problems of psychologism well before Frege. Reid argues that good common sense should lead us away from abstruse views.

When a man suffers himself to be reasoned out of the principles of common sense by metaphysical arguments, we may call this metaphysical lunacy, which differs from the other distemper in this: that it is not continued, but intermittent—it is apt to seize the patient in solitary and speculative moments, but when he enters into society, Common Sense recovers her authority (Reid, *Inquiry* AW 649a)

Reid traces the problem back to both Aristotle and Descartes. Aristotle, he claims, makes the mind corporeal, with the doctrine of enformation.

Our sensations are the impressions which sensible objects make upon the mind and may be compared to the impression of a seal upon wax; the impression is the image or form of the seal, without the matter of it; in like manner, every sensation is the image or form of some sensible quality of the object. This is the reasoning of Aristotle, and it has an evident tendency to materialize the mind and its sensations (Reid, *Inquiry* AW 645 b).

Descartes, conversely, makes bodies mental. The consequence is Berkeleyan idealism.

By just reasoning upon the Cartesian principles, matter was stripped of all its qualities; the new system, by a kind of metaphysical sublimation, converted all the qualities of matter into sensations and spiritualized body as the old had materialized spirit (Reid, *Inquiry* 646a).

The problem, Reid argues, arises partly from a supposed distinction between sensation and reasoning. For Descartes, these were facets of distinct substances, the body and the mind. The empiricists maintain the distinction, though Hume denies that there is a 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 (Hume, *Enquiry*, §V.1, fn 9; AW 550a).

Reid pursues this rejection of the distinction more forcefully. We do not, he says, merely passively receive a world, later remembering, embellishing, or augmenting our initial sense impressions. Reflection and sensation come together.

Can we form clear and just notions of our sensations any other way than by reflection? Surely we cannot. Sensation is an operation of the mind of which we are conscious; and we get the notion of sensation by reflecting upon that which we are conscious of. In like manner, doubting and believing are operations of the mind whereof we are conscious; and we get the notion of them by reflecting upon what we are conscious of. The ideas of sensation, therefore, are ideas of reflection as much as the ideas of doubting or believing or any other ideas whatsoever... When it is asserted that all our notions are either ideas or sensation or ideas of reflection, the plain English of this is that mankind neither do nor can think of anything but of the operations of their own minds. Nothing can be more contrary to truth or more contrary to the experience of mankind (Reid, *Inquiry* AW 648a–b).

Once we realize that the distinction between sensation and reflection is spurious, the path is clear to a more commonsensical understanding of perception, one which is direct. We don't perceive our impressions and then make judgments about their causes in the material world. Such a judgment would be liable to error, and opens the door to idealism or skepticism. Instead, we perceive the world directly, forming judgments at the same time as we have sensations.

Such original and natural judgments are therefore a part of that furniture which nature has given to the human understanding... They are a part of our constitution, and all the discoveries of our reason are grounded upon them. They make up what is called *the common sense of mankind*... (Reid, *Inquiry* AW 649a).

Reid's direct-perception view is tempting, as it seems to solve a whole host of problems swiftly. If we perceive the world directly, we don't have to worry about Berkeleyan idealism or Cartesian skepticism or Humean skepticism.

But Reid's solution, while tempting, may be too quick.

One problem with Reid's view is that it fails to leave room for an explanation of our sense errors or discrepancies.

Descartes's examples of the wax and the sun were explained by a gulf between the way the world is and the way we perceive it.

The primary/secondary distinction, from Galileo through Locke, is rooted in an understanding of the same gulf.

We do not always, all of us, perceive the world in the same way.

The representational theory of ideas facilitates an explanation of this difference: the world is however it is in itself, but my subjective perception may differ.

If we perceive objects directly, it's hard to see how we can account for the differences in our perceptions.

Still, when faced with Humean skepticism, Reid's commonsense approach seems attractive.

Where Hume denies that we have knowledge of the external world and its causal connections, Reid tells us that we have such knowledge naturally.

Reid's views are precedential for contemporary work.

But they were less influential during the late eighteenth and nineteenth centuries, which were dominated by Kant's related response to Hume, which we'll examine in our final unit.

First, though, we will look at two further topics on which Hume's work is influential: free will and the self. We'll look more at Reid's work once we get to the latter topic.

## §VII. Compatibilism

### VII.1. Free Will and Determinism

We turn now to the problem of free will.

Broadly speaking, there are three kinds of positions on free will.

- FW1    Libertarianism: Our will is free.<sup>1</sup>
- FW2    Determinism: Our will is not free, but determined.
- FW3    Compatibilism: We are both free and determined.

Descartes defended libertarianism, attributing our ability to err to our freedom.

He argued in the Fourth Meditation that our wills are as free as God's will.

We choose our actions unconstrainedly.

We are limited, intellectually, by our finite understanding.

But we can choose anything.

Spinoza presents a deterministic view.

For Spinoza, all events, whether human choices or physical interactions, are governed by categorical laws.

The appearance of human freedom is an illusion.

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<sup>1</sup> 'Libertarianism' in this context is not the political position of the same name.

Libertarianism and determinism are what we call incompatibilist positions.  
If we have libertarian freedom, then the world is not determined.  
If the world is determined, then we are not libertarian-free.

The problem of free will arises because we have reasons to believe both that we are free and that we are determined.  
Our conscious experience feels free.  
We don't feel the causal pressure of the past on our actions in the way that we feel restricted by the laws of nature when we try, say, to dunk a basketball.

There are two routes to determinism.  
The theistic route, like Descartes's, refers to an omniscient and benevolent God.  
Sine such a God knows the future completely, it seems as if we cannot choose our actions.  
We are constrained to act in the way that God could predict.

The causal route to determinism, sometime called the [Laplacean argument](#), refers to deterministic laws of physics.  
The laws of nature prescribe exactly the results of all causal interactions.  
Unless we are very different from other physical objects, exceptions to the laws, our actions are also determined.

To avoid determinism, the libertarian must show that the future is not fixed.  
As Spinoza noted, a free, undetermined future seems inconsistent with an omniscient God or strictly deterministic laws of physics.

Some contemporary philosophers try to make room for freedom by appealing to the indeterminacy of quantum physics.  
But quantum indeterminacy does not seem to rise to the observable level.  
Moreover, the deterministic-seeming laws of physics do not suffer from the random indeterminacies we find at the quantum level.  
Our freedom does not seem to consist of random moments inconsistent with the laws.  
Our freedom is rooted in our ability to choose among various options.

Given (or despite) our feeling of freedom, the determinist tries to show that our belief in our libertarian free will is illusory.  
Appearances of free will may be due to a lack of understanding of the laws and the initial conditions.  
Or they can be attributed to the inability of a finite mind to comprehend the infinitude of God.

Determinism, though, seems troubling and not just because of the unpleasant and counterintuitive thought that I don't have the freedom I appear to have.  
Determinism seems to undermine our ordinary notions of moral responsibility.  
Many people believe that we are morally responsible only for behavior that we could have avoided; we are not responsible when we have no ability to do otherwise.  
On this natural view, I am not personally responsible for stopping climate change because I can not personally do so.  
I am not responsible for, say, tidying up the surface of Jupiter or preventing the great Chicago fire of 1871, since the laws of physics prevent me from doing anything about them.  
(On the other hand, since I can contribute, in some way, to the reduction of carbon in our atmosphere, say by walking to work or lowering my thermostat in winter or encouraging my College to divest from fossil fuels, I may be responsible for contributing to the effort to mitigate problems of climate change.)



We hold children and psychotics to different standards because we take them to be unable to control their behavior like ordinary adults.

But if determinism is true and it entails that I too can not do otherwise than what I do, it seems that I can never be morally responsible for any of my actions.

Intuitively, we do think people are morally responsible for some of their actions.

Determinism clashes with these intuitions.

Hume and Leibniz present compatibilist views which try to avoid the problems of determinism while accepting that the laws of nature are strictly deterministic.

Compatibilism is the view that determinism is not, contrary to appearance, opposed to free will.

Like Spinoza, they reject Descartes's libertarianism.

But they argue that strict determinism does not undermine the claim that we are free.

## VII.2. Leibnizian Compatibilism

Leibniz's work is naturally contrasted with that of Spinoza.

Spinoza thought that everything that was possible was actual, that the infinitude of God entails that everything that can happen does.

Leibniz, in contrast, thinks that there are non-actual possible worlds.

Our world is just one possible world.

God's goodness entails that this world, since it is not merely possible but actual, must be [the best of those possible worlds](#).

Ordinarily, and for Leibniz, we think of alternate worlds as descriptions of paths not taken, of choices we have not chosen.

Thus, the questions surrounding possible worlds are linked to questions surrounding human freedom.

If there are non-actual possible worlds, they are naturally seen as the result of our freedom to choose this one, rather than another.

The existence of this world, as against other possible worlds, is contingent on our free choice.

Indeed, Leibniz's work is motivated in large part by a rejection of Spinozan determinism.

Leibniz believes that, for some actions, I could have done otherwise.

Leibniz's account of freedom is not libertarian, like Descartes's.

Indeed, unlike Descartes, and for reasons we need not get into here, Leibniz believes that every fact about the world is already programmed into every individual and separate substance, which he calls monads.

If we knew all of the laws, and all of the facts about the world now, we could predict the rest of human history.

God apprehends monads intellectually, by thinking about their properties.

God thus has foreknowledge of all of our actions, and so can know exactly what we will choose.

Any fact can be discovered by analyzing the complete concept of a monad, like you and me, into its component parts.

Since the individual notion of each person includes once and for all everything that will ever happen to him, one sees in it the *a priori* proof of the truth of each event, or, why one happened rather than another (Leibniz, *Discourse on Metaphysics* §13, AW 230b)

By analysis, God can either find a given predicate inside the concept of a monad, or find a contradiction arising from that predication.

Either a property is true of a substance or it is not, both in the future and in the past.

The status of any claim can be evaluated by analyzing the concept of any substance at any time.

So we can freely choose our actions, but God knows which choices we will make.  
They are already determined, even though free.

The idea that free will and determinism are compatible can be puzzling.  
We can see three hints at room for a resolution of this conundrum in Leibniz's discussions of contingency and necessity.

First, while Leibniz states that the actual world is the best of all possible worlds, he does accept that such other worlds are possible.

We can look at those possibilities, and on what they depend, more carefully for an account of contingency.  
Second, Leibniz claims that contingent claims can be discovered only by infinite analysis, while necessary truths are discoverable by finite analysis.

Third, Leibniz distinguishes between certain truths and necessary ones.

Everyone grants that future contingents are certain, since God foresees them, but we do not concede that they are necessary on that account (Leibniz, *Discourse on Metaphysics* §13, AW 230b).

By exploring these three hints, we can arrive at a characterization of contingency and freedom to see how Leibniz accommodates this view with the necessitarian elements of his work.

Leibniz's claim that there are other possible worlds arises directly from his observation of the phenomenology of free will.

The problem with the phenomenology of free will is that we do not know whether it is an illusion.  
The existence of an omniscient God seems to debar any future that was not already, in a sense, settled.  
Further, the laws of physics seem, at least on the observable level, to be deterministic.

So, Leibniz's weakest claim about other possibilities, and our freedom to create them, is that they are merely chimerical.

The fact that Leibniz embraces talk about possible worlds does not entail that such talk does not conflict with other of his claims.

Our second hint is that Leibniz makes a distinction between those truths which require infinite analysis and those which require only finite analysis.

The topics of analysis and conceptual containment are, like the nature of possible worlds, important in contemporary philosophy, and will be central in our study of Kant's work.

In a finite analysis, we can unpack a complex concept until we reach what Leibniz calls an identity statement.  
For example, we can show that three squared is equal to the positive square root of eighty-one, a claim which may be non-obvious at first, by analyzing the concepts on each side of the equation.

$$\begin{array}{rcl} 3^2 & = & +\sqrt{81} \\ 3 \times 3 & = & 9 \\ 3 \times 3 & = & 3 \times 3 \end{array}$$

We start with a desire to show that two terms which are not identical refer to equal quantities.

We transform the first row into the second by noticing that  $\sqrt{81} = 9$  (itself an identity worth proving).

We transform the second row into the third by noticing that  $9 = 3 \times 3$  (another identity).

Since the terms on each side in the last row are identical, we have shown the original statement necessary.

Later philosophers call such claims analytic truths.

Similarly, given a false statement, like ' $2 < \sqrt{9}$ ', we can arrive at a contradiction by analysis.

Eventually we reach a like, like ' $4 < 3$ ', which is obviously or intuitively false.

Leibniz thinks that we can use the same process of analysis to determine the truth and falsity of other statements, including scientific claims.

According to the doctrine of conceptual containment, the truth of R entails that my concept contains, in some way, my having two children.

R        Russell has two children.

Nevertheless, there are possible worlds in which I don't have two children.

Correspondingly, when we analyze the concept 'Russell', we will not be able to unpack the claim that I have two children.

God could do so, but we can not.

The one whose contrary implies a contradiction is absolutely necessary; this deduction occurs in the eternal truths, for example, the truths of geometry. The other is necessary only *ex hypothesi* and, so to speak, accidentally, but it is contingent in itself, since its contrary does not imply a contradiction. And this connection is based not purely on ideas and God's simple understanding, but on his free decrees and on the sequence of the universe (Leibniz, *Discourse on Metaphysics* §13, AW 231a).

So, Leibniz claims, it is certain that I have two children; God can see that fact.

It is not necessary that I have two children, since this fact depends on the free choices of my wife and me.

Leibniz illustrates his distinction between certainty and necessity, our third hint, referring to Julius Caesar.

If someone were able to carry out the whole demonstration by virtues of which he could prove this connection between the subject, Caesar, and the predicate, his successful undertaking, he would in fact be showing that Caesar's future dictatorship is grounded in his notion or nature, that there is a reason why he crossed the Rubicon rather than stopped at it and why he won rather than lost at Pharsalus and that it was reasonable, and consequently certain, that this should happen. But this would not show that it was necessary in itself nor that the contrary implies a contradiction... For it will be found that the demonstration of this predicate of Caesar is not as absolute as those of numbers or of geometry, but that it supposes the sequence of things that God has freely chosen, a sequence based on God's first free decree always to do what is most perfect and on God's decree with respect to human nature, following out of the first decree, that man will always do (although freely) that which appears to be best. But every truth based on these kinds of decrees is contingent, even though it is certain; for these decrees do not change the possibility of things...it is not its impossibility but its imperfection which causes it to be rejected. And nothing is necessary whose contrary is possible (Leibniz, *Discourse on Metaphysics* §13, AW 231b).

Necessary events will have possible contraries.

But, alternative possibilities need not be compossible with other alternatives.

They may be possible only in themselves, not in respect to the broader world.

I am not going to defend Leibniz's distinction between necessity and certainty, which he also calls the distinction between truths of reason and truths of fact.

If my future actions are certain, my free will is denigrated, even if Leibniz calls those actions contingent.

Leibniz may have provided us only a semantic difference, not a real difference.

Putting that complaint aside, let's see how Leibniz's distinction manifests his resultant theory of freedom.

For freedom, Leibniz is most concerned to establish a theory of will on which God's will is free.

The freedom of God's will is challenged by the claim that God's will is constrained to choose the best.

God's will appears to be determined.

Leibniz's solution is to say that while God's is constrained to choose the best, that choice is still free. There is nothing in the nature of any possible world that constrains God to create it. All worlds are contingent, and remain to be brought into existence by God. Only God could perform the infinite analysis which would yield knowledge of which world is best.

Elsewhere Leibniz argues for what is called the doctrine of striving possibles. Each possible entity strives for existence against other possible entities.

Since something rather than nothing exists, there is a certain urge for existence or (so to speak) a straining toward existence in possible things or in possibility or essence itself; in a word, essence in and of itself strives for existence. Furthermore, it follows from this that all possibles, that is, everything that expresses essence or possible reality, strive with equal right for existence in proportion to the amount of essence or reality or the degree of perfection they contain, for perfection is nothing but the amount of essence. From this it is obvious that of the infinite combinations of possibilities and possible series, the one that exists is the one through which the most essence or possibility is brought into existence. In practical affairs one always follows the decision rule in accordance with which one ought to seek the maximum or the minimum: namely, one prefers the maximum effect at the minimum cost, so to speak (Leibniz, "On the Ultimate Origination of Things").

The actual world is the result of the resolution of the struggle among possibles. In that struggle contains a hint of freedom, one that will allow us to assimilate the accounts of God's freedom and human freedom.

For human freedom, note that one of the motivating factors in positing the existence of monads was to capture mental phenomena; bodies can not think. Leibniz takes active, thinking things as elemental. The life of the monad consists of the unfolding of its perceptions. The activity of a monad corresponds to the distinctness of its perceptions. Some perceptions are unconscious, some perceptions are conscious apperceptions, some perceptions are clear and distinct. All activity is self-determined, according to laws of final causes; Leibniz denies any transeunt causation. Leibniz calls the guiding principles of the unfolding of a monad's perceptions appetite.

The action of the internal principle which brings about the change or passage from one perception to another can be called *appetition*; it is true that the appetite cannot always completely reach the whole perception toward which it tends, but it always obtains something of it, and reaches new perceptions (Leibniz, *Discourse on Metaphysics* §15, AW 276b).

As the monads of persons have both conscious experience (distinct perception) and memory, we apperceive our appetite.

Let's say that I desire a milkshake. My desire for that milkshake is reasonably attributable to some prior beliefs and desires along with some account of my current experiences and surroundings. An account on which all of those factors are beyond my control is not implausible. But the more ignorant we are of those factors, the more we take them to be unconscious or hidden, the more likely we are to see our desire for the milkshake as free. Once we analyze our beliefs, desires and surroundings, we are more likely to see ourselves as constrained. Consider the strength of subliminal advertising.

We might think that we are freely choosing to have a beverage, though that thought is actually the result of predictable subconscious trains of thought.

So, Leibniz's account of freedom on which our actions are determined (knowable in advance) and yet free, is not incompatible with common sense, in such cases.

Libertarians about free will are more concerned to defend the freedom of our decision to acquire and drink, or not, the milkshake.

Leibniz's account of free will is harder for a libertarian to accept.

For Leibniz, human freedom, like God's freedom, is restricted.

God understands what is best, and freely chooses it; what is possible is independent of God's will, but not his understanding.

Our freedom, like God's, is the name we give to our faculty for striving, for unfolding the internal principles of our essence.

We strive for future states, even if they are states of pain and unhappiness, as these are preferable to the alternative, which is non-existence.

Contemporary discussions of free will are often less concerned with the metaphysical problem than with questions of responsibility.

Most philosophers agree that the arguments for metaphysical determinism are strong.

The focus of contemporary research is mainly on how to rectify determinism with moral responsibility.

In other words, many philosophers today hold compatibilist views, attempting to show how we can have free will and moral responsibility in a determined universe.

Such views are often more obviously indebted to Hume's compatibilism than Leibniz's, though Leibniz's work is importantly precedential.

### VII.3. Humean Compatibilism

As we saw in the discussion of miracles, Hume accepts that there are strictly deterministic laws, that there is no chance in nature.

It is universally allowed that matter, in all its operations, is actuated by a necessary force and that every natural effect is so precisely determined by the energy of its cause that no other effect, in such particular circumstances, could possibly have resulted from it (Hume, *Enquiry*, §VIII.1, AW 565b).

Hume pursues this deterministic line of reasoning through to human actions.

People do not generally surprise us with their actions.

When they do surprise us, it is due to our ignorance rather than any real unpredictability in their behavior.

The philosopher, if he is consistent, must apply the same reasoning to the actions and volitions of intelligent agents. The most irregular and unexpected resolutions of men may frequently be accounted for by those who know every particular circumstance of their character and situation (Hume, *Enquiry*, §VIII.1, AW 568a).

Hume claims that the dispute between libertarians and determinists is mainly verbal, since the freedom that we really care about is not in fact opposed to determinism.

The term 'freedom' is ambiguous.

Descartes's libertarian freedom, opposed to 'determinism', or 'necessity', is unavailable and undesirable.

If our actions were free in this sense, we would have no reasons for acting at all.

Our acts would be random and chaotic, and would seem to be blameless since they do not proceed

determined from our will.

We only hold people responsible for their actions when they are done intentionally.

We do not hold the lion morally culpable for killing the wildebeest.

Similarly, we should not blame the person whose actions, even if bad, are undetermined.

The actions themselves may be blamable; they may be contrary to all the rules of morality and religion. But the person is not answerable for them and, as they proceeded from nothing in him that is durable and constant and leave nothing of that nature behind them, it is impossible he can, upon their account, become the object of punishment or vengeance. According to the principle, therefore, which denies necessity, and consequently causes, a man is as pure and untainted after having committed the most horrid crime as at the first moment of his birth, nor is his character any way concerned in his actions, since they are not derived from it, and the wickedness of the one can never be used as a proof of the depravity of the other (Hume, *Enquiry*, §VIII.2, AW 572b).

Hume thus argues that libertarian freedom prevents ascriptions of moral responsibility in the same way that determinism does.

The incompatibilist undermines moral responsibility, so we should look for a different sense of ‘freedom’.

In its proper sense, Hume claims, ‘freedom’ should be contrasted with ‘constraint’.

That is, an action is done freely when it is done without external constraint: if I am not dragged, pushed, or held at gunpoint to perform it.

For what is meant by liberty when applied to voluntary actions? We cannot surely mean that actions have so little connection with motives, inclinations, and circumstances that one does not follow with a certain degree of uniformity from the other and that one affords no inference by which we can conclude the existence of the other. For these are plain and acknowledged matters of fact. By liberty, then, we can only mean *a power of acting or not acting according to the determinations of the will*—that is, if we choose to remain at rest, we may; if we choose to move, we also may. Now this hypothetical liberty is universally allowed to belong to everyone who is not a prisoner and in chains (Hume, *Enquiry*, §VIII.1, AW 571a).

For Hume, then, if I do something only because I could not have done otherwise, I do not do it freely.

I do not return to the ground after jumping freely; I can not do otherwise.

More importantly, if I pay my taxes because I am afraid of being fined or imprisoned, or if I refrain from cheating only out of fear of punishment, or if I am forced by threat to do any action I do not wish to perform, I do not act freely.

On the other hand, if I want to pay taxes, since I approve of their uses in building and maintaining roads, schools, and armed forces; or if I refrain from cheating because I believe it to be wrong, then I am acting in accordance with my will, freely.

Consequently, we can hold people morally responsible for those acts they perform freely, in Hume’s sense, and not for those they perform under constraint.

By focusing on a sense of ‘freedom’ that is not opposed to determinism, Hume makes free will compatible with determinism.

He also makes both free will and determinism compatible with ascriptions of moral responsibility.

He allows us an account of moral responsibility which aligns with our belief that we are responsible only for that which we choose.

Hume’s definition is consistent with the doctrine that ought implies can, that our moral responsibilities do not exceed our powers.

Everyone should be happy.

#### VII.4. Worries About Compatibilism

The reflective determinist may be unsatisfied with Hume's definition of 'freedom'.

Hume seems not to take into account any constraints on our will.

The determinist can pursue the question of whether we are free or determined by asking whether we are free to choose what we choose.

If our thoughts are themselves the products of physical processes, mainly brain processes along with their perceptual inputs, then the problem of determinism recurs with regard to our will.

Our will itself seems to be determined.

Our actions may be in accord with our will, but we are prevented from willing freely.

If our wills are constrained, then there is a sense in which we are not free even if we are not under external constraint.

We excuse children from legal responsibility because we think that they are not free to choose otherwise, even when they are not constrained by an external force.

Similarly, we excuse people with various mental illnesses when we believe that their illnesses prevent a free choice, again even in the absence of external constraints.

We do not make such excuses for ordinary adults, who we suppose to be free.

The differences between adults, on the one hand, and children and people with dementia, on the other, may not be as significant as is ordinarily assumed.

As psychology progresses, we find an increasing number of phenomena considered to be mental illnesses.

Mental disorders are standardly listed by the American Psychiatric Association in the *Diagnostic and Standards Manual*, or DSM, the fifth edition of which was recently released.

Since the original DSM was produced in 1952, the number of disorders listed has tripled, and the size of the manual has increased seven-fold.

Some characteristics, like homosexuality, have been removed from the DSM.

But the overwhelming trend is toward greater diagnoses of disorders.

There is [an interesting controversy](#) over the methods used to develop the DSM-V.

As a result of increased diagnoses of mental disorders, more of our actions are seen as the result of mental predispositions than as the result of free choice.

Neuroscientific progress and advances in genetics have also increased the number of phenomena for which scientific theories can account in the absence of any role for free will.

Presumably, such scientific progress will include, eventually, substantial predictive power.

Advances in fMRI technology have allowed machines to begin to [read our thoughts](#) by scanning our brains.

It would be difficult to maintain, as the compatibilist does, that we are free, if a computer can predict our behavior.

Scientific advances seem to provide a challenge to the compatibilist.

We reduce our ascriptions of moral responsibility when a subject's actions can be predicted.

The absence of free will implied by the predictability of our actions seems to excuse.

That is the essence of the incompatibilism which Leibniz and Hume dismiss.

#### VIII.5: Contemporary Humeanism

The following contemporary considerations may help illuminate Hume's view of free will.

Harry Frankfurt argues for an updated [version of Hume's compatibilism](#).

Frankfurt notes that we are inclined to endorse the principle of alternate possibilities, PAP, which opposes compatibilism

PAP A person's act is free if and only if that person could have done otherwise.

On PAP, if determinism is true and incompatible with free will, no one ever could have done otherwise. No one ever acts freely.

And, thus, no one can be morally responsible in a deterministic universe.

That is, perhaps, one reason that Descartes favors his incompatibilistic libertarianism.

Frankfurt rejects PAP and argues that one can be morally responsible even if one could not have done otherwise.

He presents the example of Jones<sub>4</sub>, which seems to provide a counterexample to PAP.

Suppose someone — Black, let us say — wants Jones<sub>4</sub> to perform a certain action. Black is prepared to go to considerable lengths to get his way, but he prefers to avoid showing his hand unnecessarily. So he waits until Jones<sub>4</sub> is about to make up his mind what to do, and does nothing unless it is clear to him (Black is an excellent judge of such things) that Jones<sub>4</sub> is going to decide to do something other than what he wants him to do. If it does become clear that Jones<sub>4</sub> is going to decide to do something else, Black takes effective steps to ensure that Jones<sub>4</sub> decides to do, and that he does do, what he wants him to do... Now suppose that Black never has to show his hand because Jones<sub>4</sub>, for reasons of his own, decides to perform and does perform the very action Black wants him to perform. In that case, it seems clear, Jones<sub>4</sub> will bear precisely the same moral responsibility for what he does as he would have borne if Black had not been ready to take steps to ensure that he do it. It would be quite unreasonable to excuse Jones<sub>4</sub> for his action...on the basis of the fact that he could not have done otherwise. This fact played no role at all in leading him to act as he did... Indeed, everything happened just as it would have happened without Black's presence in the situation and without his readiness to intrude into it (Harry Frankfurt, "Alternate Possibilities and Moral Responsibility," 835-6).

It seems as if Jones<sub>4</sub> could not have done otherwise because Black was prepared to force him to act.

But Jones<sub>4</sub> still bears moral responsibility.

Thus we have a case in which someone bears responsibility despite not being able to do otherwise, which PAP denies.

Note that Black, in Frankfurt's example, is a stand-in for the laws of physics.

He is what ensures that Jones<sub>4</sub> could not do otherwise.

While Black does not impel Jones<sub>4</sub> to act, he ensures that Jones<sub>4</sub> can not do otherwise.

Frankfurt has shown PAP false without impugning the more plausible claim that moral responsibility is excluded by coercion.

If we are truly coerced, we are not morally culpable for our actions.

But there are cases, like that of Jones<sub>4</sub>, in which we can not do otherwise and yet we are morally responsible.

The question, if one accepts Frankfurt's claims, is to determine what other, real-world cases are relevantly similar to that of Jones<sub>4</sub>.

Hume and Frankfurt both argue that moral responsibility is compatible with determinism.

That's useful for both the determinist and the compatibilist, both of whom accept that we can not do other than what we do.

It does not settle the question of whether we have free will in the libertarian sense.

And notice that nothing in Frankfurt's example depends on whether we are really free, in the Cartesian sense, or constrained.

That is, the compatibilist recovers moral responsibility while avoiding the metaphysical question about freedom.



## §VIII. The Self

### VIII.1. The Consciousness Theory: Locke and Reid

For the final topic of our fourth unit, we revisit the question of our selves.

As we saw, Locke defends a view of the self which ties our personal identity to our conscious experiences and memories.

He argues that we can identify our selves with neither our bodies nor our souls, in a traditional sense of 'soul'. The biological theory of personhood applies the same identity conditions to people as we do to other individual animals.

Locke provides thought experiments, including those of the prince and the cobbler and of the day/night person, which ask us to consider the possibility of transferring and sharing consciousness among biological entities.

Some intuitions support the claim that the self transfers with consciousness and memory.

The person consisting of the cobbler's body and the prince's thoughts is the prince and not the cobbler.

Similar arguments, from Locke, apply to the soul theory.

Given some common views about the soul, that it exists prior to birth and after death, our personhood can be seen to be different from our soul by considering some simple thought experiments.

We can imagine two different souls inhabiting (or whatever the relation is) the same person.

Two different persons can house (or whatever) the same soul.

Instead, Locke argues that we identify with our conscious experiences, linked by memory.

Locke's theory relies on psychological continuity to identify a person over time.

We know that we are the same person who had a certain earlier experience when we can recall, using memory, that experience.

Memory is essential to connecting our consciousness.

Reid worries about Locke's blurring the difference between memory and consciousness.

Locke discusses memory as if it is consciousness of a past experience.

Reid notes that there is a difference between remembering an experience and having consciousness of that experience.

When, therefore, Mr. Locke's notion of personal identity is properly expressed, it is, that personal identity consists in distinct remembrance; for, even in the popular sense, to say that I am conscious of a past action means nothing else than that I distinctly remember that I did it (Reid 347b).

Even Reid notes that this objection may not be a serious one.

It is mainly just an unfortunate use of language which seems to have no effect on the theory of self.

The more serious concern, as Locke himself points out, is that there are gaps in both our conscious experience and in our memory.

Every time we sleep, we lose consciousness.

Some experiences are forgotten.

Two things can only be identical if they have all the same properties.

If my self ends with the cessation of conscious experience, when I go to sleep, and then begins again in the morning, it seems as if I should have many different selves.

While any being continues to exist, it is the same being; but two beings which have a different beginning or a different ending of their existence cannot possibly be the same (Reid 346a).

If consciousness and psychological continuity are required for personal identity, then every time we sleep or lose a memory, we lose our identity.

If the intelligent being may lose the consciousness of the actions done by him, which surely is possible, then he is not the person that did those actions; so that *one intelligent being may be two or twenty different persons*, if he shall so often lose the consciousness of his former actions (Reid 347a).

Reid's worry is perhaps better expressed in the problem of the old general.

The old general remembers being a middle-aged officer.

The middle-aged officer remembers an experience from his childhood, being flogged for robbing an orchard.

But, the old general does not remember being flogged.

According to the transitive property of identity, the old general is surely the same person as the child.

But according to Locke's theory, it seems, the old general is not the same person as the child.

The old general cannot remember being flogged as a child.

The general's consciousness does not reach so far back as his flogging; therefore, according to Mr. Locke's doctrine, he is not the person who was flogged. Therefore the general is, and at the same time is not, the same person with him who was flogged at school (Reid 347a).

Reid has thus derived a contradiction from Locke's theory.

The problem expands, since our consciousness is not a constant, but a stream of changing experiences.

Our consciousness, our memory, and every operation of the mind, are still flowing like the water of a river, or like time itself (Reid 348a).

Since our conscious experiences change constantly, it looks like Locke's theory entails that we are constantly changing, too.

Reid's worry about these oddities may not be decisive against Locke.

They point out some counterintuitive consequences of the consciousness theory, and in the case of the contradiction force Locke to restate some of his claims.

But perhaps our conscious experience, ever flowing, does not support any kind of sameness of an individual over time.

Reid suggests that Locke assert that we are the same kind of individual, rather than the same individual, over time.

Even Reid's strongest words about these related problems do not show that he took them as refuting Locke.

Is it not strange that the sameness or identity of a person should consist in a thing which is continually changing, and is not any two minutes the same (348a)?

Most philosophical views have some strange consequences.

The question is whether their virtues outweigh their oddities.

Lastly, Reid claims that Locke confuses personal identity with evidence for personal identity.

My memories of an experience are evidence that I had that experience.

My consciousness of an experience is evidence that I am having an experience.

But, my identity is not my memory or my consciousness.

It is to attribute to memory or consciousness a strange magical power of producing its object, though that object must have existed before the memory or consciousness which produced it (Reid, 347b)

Reid illustrates the formal problem, which is a general one, using the example of a stolen horse.

The owner of a stolen horse, when presented with a horse which might be the stolen one, will use its similarity to the original to determine if the two horses are the same.

The similarity of the original horse and the present one is evidence that the two horses are the same.

But would it not be ridiculous from this to infer that the identity of a horse consists in similitude only (Reid 348a)?

Reid is accusing Locke of arguing from epistemological premises to metaphysical conclusions.

We discover, says Reid, that we are the same over time by using memory and consciousness.

But we should not confuse the way we learn about something with the thing itself.

We use memory and consciousness to identify our selves, but our selves are not merely continued consciousness or memory.

### VIII.2: Reid's Irreducibility Theory

Reid's positive account of the self, if we can call it that, might be called an irreducibility theory.

To understand it, we should think a little bit about the nature of philosophical reduction.

We can distinguish among more-complex and more-simple objects in the world

Among the simpler objects are atoms and molecules.

They are similar to each other, and the components of many more-complex objects.

Many people suppose that there are some fundamental particles (or otherwise constituent objects) that are roughly uniform, out of which the complex objects are made.

The complex objects can, in some sense, be reduced to their component parts.

Physical objects are just collections of atoms.

Among the most complex objects are things that are not best considered to be objects at all.

Consider the mess in your room: dirty laundry, half-eaten food, and piles of books and papers.

In one sense, there is really a mess in your room.

Grammatically, at least, the mess is an object.

But, we do not believe that there is an object (the mess) beyond those things which compose the mess.

There is no mess beyond the laundry, food, and papers.

It is just a convenience of language to pretend to put these things together and call it a mess.

The mess is reducible to the laundry, food, and papers.

Among real objects, complex objects are often reducible to simpler ones.

Among the most important tasks of science and philosophy is to determine reductions of complex things.

Consider water, which is a complex.

It was a significant scientific achievement to discover that it is H<sub>2</sub>O.

We discovered that heat is molecular motion, and that lightning is electrical discharge, too.

All of these discoveries are scientific reductions.

Our mental states are among the most important complex objects awaiting scientific reduction.

It would be nice to know what my joy, or depression, or anxiety, or elation really are.

Are they neural states?

Are they functional organizations of some matter?

Are they states of a body-independent soul?

Or, are they irreducible to any further simples?

Do they have parts, or layers?

Perhaps mental states are simples in themselves.

For some phenomena or objects, there is an open question whether they admit of reduction.

Consider numbers.

Some people think that numbers are certain kinds of sets.

Two standard definitions of numbers in terms of sets derive from work of Ernesto Zermelo and John von Neumann in the early twentieth century.

Take  $\emptyset$  to stand for the empty set.

Zermelo defines the numbers as follows:

$$\begin{aligned}0 &= \emptyset \\1 &= \{\emptyset\} \\2 &= \{\{\emptyset\}\} \\3 &= \{\{\{\emptyset\}\}\} \quad \dots\end{aligned}$$

Von Neumann defines them differently:

$$\begin{aligned}0 &= \emptyset \\1 &= \{\emptyset\} \\2 &= \{\emptyset, \{\emptyset\}\} \\3 &= \{\emptyset, \{\emptyset\}, \{\emptyset, \{\emptyset\}\}\} \quad \dots\end{aligned}$$

Von Neumann's definitions are perhaps less elegant than Zermelo's.

They are also more flexible and efficient, and have become standard.

Still, it is not clear that 2 is just  $\{\emptyset, \{\emptyset\}\}$ .

Many mathematicians and philosophers deny the identity of 2 and  $\{\emptyset, \{\emptyset\}\}$ , even if they use the von Neumann sets as ordinal numbers in standard set-theoretic presentations of arithmetic.

Either set of definitions will suffice.

There seems to be nothing to determine which reduction is the right one.

Some philosophers respond by arguing that numbers are other kinds of sets, ones incompatible with those of the first group.

But others believe that numbers are objects *sui generis*, of their own kind.

On this view, numbers are just numbers.

They are simple and not reducible to other objects.

Reid's irreducibility theory gives a parallel answer to the question of how to reduce the concept of the self.

There is no reduction of personal identity to some other property, he says.

Our selves are just our selves, *sui generis*.

Reid starts with a strong claim for the existence of personal identity.

The conviction which every man has of his identity, as far back as his memory reaches, needs no aid of philosophy to strengthen it; and no philosophy can weaken it, without first producing some degree of insanity (Reid 343a).

Further, we all know of our own identity.

We may infer with certainty, that every man of common sense has a clear and distinct notion of identity (Reid 344a).

So, it may come as some surprise that Reid offers no definition, no reductive account, of the self.

If you ask a definition of identity, I confess I can give none; it is too simple a notion to admit of logical definition; I can say it is a relation, but I cannot find words to express the specific difference between this and other relations, though I am in no danger of confounding it with any other (Reid 344a).

Reid is claiming that all of the other accounts of self are unsatisfactory and that the lesson we should learn is not that there is a further, reductive theory of self on which we have not yet stumbled.

We can not, says Reid, reduce the self at all.

It is simple, and un-analyzable.

All we can do is characterize it, differentiate the relation we have with our selves from other relations, and explain how we encounter the self.

Past that, attempts to define or reduce the self are quixotic.

### VIII.3. Reid and Philosophy

Definitions are often difficult to devise.

A standard definition provides necessary and sufficient conditions.

If we want to define, say, 'chair', we look for what properties an object requires in order for it to be a chair, and what properties are sufficient for an object to be a chair.

If an object is a chair, it will have those properties; if an object has those properties, then it is a chair.

We might propose the following:

Chair: An object is a chair if and only if it is a piece of furniture, used for sitting, with a back.

The philosopher will proceed to examine this definition for exceptions.

Are stools kinds of chairs?

How about a giant sculpture of a chair, one on which no person could really sit?

Or a doll-house chair on which no human can sit; isn't that a chair?

The game of finding counter-examples to any purported definition is a popular one in philosophy.

Philosophers are trained to do this sort of thing.

It should come as no surprise that it is difficult to define anything to the satisfaction of all philosophers.

There are some theoretical terms which admit of clear definitions, ones which refer to scientific concepts, say, with no ordinary uses.

Monosaccharide: A carbohydrate that cannot be decomposed into simpler carbohydrates by hydrolysis.

'Bachelor' admits of a pretty good definition, too.

Other terms, like 'mind' and 'self' are more difficult to define.

There are two kinds of reactions that one could have to difficulties formulating necessary and sufficient conditions for ordinary terms, like 'self'.

We might start to believe that there is no such thing as a mind or the self.

If we can't define something, perhaps it doesn't really exist.

Consider the term 'caloric', which was supposed to refer to a substance which made objects hot.

It used to be thought that an object gained caloric when it heated and lost caloric when it cooled.

As scientists discovered that heat is just molecular motion, we gave up the term 'caloric'. It turned out that it had no meaningful definition.

Another response to difficulties defining an object is to continue to believe in the thing but to give up the idea that it is reducible to other objects or properties.

That's the *sui generis* solution to the problem of defining numbers, and Reid's view about the self.

Reid argues that the self is irreducible to body, or to soul, or to consciousness.

I am not thought, I am not action, I am not feeling; I am something that thinks, and acts, and suffers (Reid 344b).

The self is simple and irreducible, though Reid invokes Leibnizian monads to characterize the self.

Reid alleges that the self is, like a monad, a perfect, complete whole.

The identity of the self is the only pure, or perfect, kind of identity that there is.

Other identities are merely approximate.

The identities...which we ascribe to bodies, whether natural or artificial, is not perfect identity; it is rather something which, for the conveniency of speech, we call identity. It admits of a great change of the subject, providing the change be gradual; sometimes, even of a total change... But identity, when applied to persons, has no ambiguity, and admits not of degrees, or of more and less. It is the foundation of all rights and obligations, and of all accountableness; and the notion of it is fixed and precise (Reid 346).

Reid's strategy allows him to invoke all the characteristics of the self used by earlier attempts to define the self without depending on those properties to be necessary and sufficient conditions.

We can characterize rather than define what we take to be the self.

For example, Reid argues that self is continuous.

Identity supposes an uninterrupted continuance of existence. That which has ceased to exist cannot be the same with that which afterwards begins to exist; for this would be to suppose a being to exist after it ceased to exist, and to have had existence before it was produced, which are manifest contradictions. Continued, uninterrupted existence is therefore necessarily implied in identity (Reid 344a).

Reid invokes the continuity of the self to block attempts to reduce the self to any particular mental state, since all mental states are fleeting.

Similarly, Reid invokes the unary nature of the self; it is indivisible.

A part of a person is a manifest absurdity. When a man loses his estate, his health, his strength, he is still the same person, and has lost nothing of his personality. If he has a leg or an arm cut off, he is the same person he was before... A person is something indivisible (Reid 344a-b).

Memory is useful for picking out our selves since one can not remember something that one did not do.

We should not be misled into thinking that memory is essential to ourselves.

It is not my remembering any action of mine that makes me to be the same person who did it. This remembrance makes me to know assuredly that I did it; but I might have done it, though I did not remember it (Reid 345a).

We can forget what we did without losing our selves, as in Reid's case of the old general/brave soldier.

### VIII.3. Hume's No-Self Theory

Hume, like Reid, worries that the common notion of self outruns our memories. There are experiences which it is natural to call mine that I do not remember.

Memory does not so much *produce* as *discover* personal identity by showing us the relation of cause and effect among our different perceptions. It will be incumbent on those who affirm that memory produces entirely our personal identity to give a reason why we can thus extend our identity beyond our memory (Hume, *Treatise* I.4.6, AW 530b).

Berkeley worries that given Locke's constraints on our capacities to acquire beliefs, we have no sense of self. We sense our bodies, or appearances of our selves. But these appearances are always changing, while the self persists through time. We never sense our selves. Thus, says Berkeley, we have no idea of the self, or of God.

There can be no idea formed of a soul or spirit; for all ideas whatever, being passive and inert... they cannot represent unto us, by way of image or likeness, that which acts... The words *will, soul, spirit* do not stand for different ideas or, in truth, for any idea at all, but for something which is very different from ideas, and which, being an agent, cannot be like or represented by any idea whatsoever—though it must be admitted at the same time that we have some notion of soul, spirit, and the operations of the mind, such as willing, loving, hating, inasmuch as we know or understand the meaning of those words (Berkeley, *Principles* §27, AW 452b).

Berkeley abandoned, for these special cases, his strict policy of never admitting an object that was not first in the senses. He claims that we have notions of the self and God even if we do not have ideas of them. (We also posit God as the source of all the ideas.) *Esse is percipi or percipere*; to exist is either to be perceived or to perceive. We posit the self in order to unify our experiences.

Theism aside, Hume agrees with Berkeley that we have no impression, and thus no idea, of the self. But where Berkeley relaxed his epistemic standards and allowed for notions in addition to ideas, Hume stands his ground. Since we have no idea of the self, we have no reason to believe in any such thing.

If any impression gives rise to the idea of self, that impression must continue invariably the same through the whole course of our lives, since self is supposed to exist after that manner. But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions and sensations succeed each other and never all exist at the same time. It cannot, therefore, be from any of these impressions or from any other that the idea of self is derived, and, consequently, there is no such idea (Hume, *Treatise* I.4.6, AW 526a).

If what we mean by the self is some constant substance or property which persists through time, there is no such thing. There is no underlying, unifying object which we can call the self. There are just perceptions.

When I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception and never can observe anything but the perception (Hume, *Treatise* I.4.6, AW 526a).

Since Hume denies that there is a self, we can call Hume's theory of self the no-self theory of self.

As I said in §V.2, above, whenever a philosopher denies something that people commonly believe, s/he should provide some account of our ordinary beliefs.

Hume provides a psychological account of our unjustified inferential habits to go along with his denial that we have knowledge of inductions.

He also provides an account of our ordinary beliefs in the self to go along with his denial that we have knowledge of a self.

We can evaluate his no-self theory of the self both on the plausibility of his argument for the theory and on the plausibility of his account of our ordinary experiences.

#### VIII.4. The Bundle Theory

Hume's claim that there is no self relies on his premise that a self should be precisely identical over time. That claim seems too strong.

As we age and acquire more experiences, we have different properties.

We say that certain experiences are cathartic, that they change us.

That could just be a metaphoric or otherwise non-literal way of speaking.

But perhaps it is serious.

If so, perhaps even small changes to our bodies and minds actually change who we are.

Even having lunch or shifting our bodies slightly to the left changes our relations to the world.

A biological theory of the self accommodates these changes without giving up on an enduring self by relying on the functional organization of the body as a criterion for identity over time.

Another way of looking at the biological theory would be to see the self as a collection of loosely-related individual instances of bodies, each just a moment of time wide.

The self over time would be a bundle of related biological entities.

Hume's account of our ordinary conception of self is similar to this functional view.

Hume argues that we never perceive a self.

But we do have experiences.

So whatever we call ourselves must be related to our series of experiences.

Our experiences are joined by a variety of psychological connections among our ideas: resemblance, contiguity, and cause and effect.

These psychological connections govern all of our thoughts.

They do not connect our ideas in some underlying substance.

They merely conjoin our experiences over time.

Even memory, for Locke the essential characteristic of the self, merely demonstrates such conjunctions.

The ordinary notion of self which we are pursuing outruns our memories: there are experiences which I call mine but which I do not remember.

Locke argues that an enduring self requires connections among our memories and other conscious experiences.

Hume claims that we lack secure connections.

We have only a series of loosely-related conjunctions of experiences.



Instead of being a paradigm of unity, Hume thus argues that the self is an exemplar of diversity. Just as Berkeley argues that the apple is merely a bundle of independent sense experiences, its taste independent from its roundness and its crunch, we are just a collection of various, separate experiences. As far as we know, even the world itself is just a loose collection of events unconnected by causal laws. Everything is particular and all the particulars are independent.

Every distinct perception which enters into the composition of the mind is a distinct existence and is different and distinguishable and separable from every other perception, either contemporary or successive (Hume, *Treatise* I.4.6, AW 529b).

The self is dissolved.

When we attribute identity, in an improper sense, to variable or interrupted objects, our mistake is not confined to the expression, but is commonly attended with a fiction, either of something invariable and uninterrupted, or of something mysterious and inexplicable, or at least with a propensity to such fictions. What will suffice to prove this hypothesis to the satisfaction of every fair enquirer, is to show from daily experience and observation, that the objects, which are variable or interrupted, and yet are supposed to continue the same, are such only as consist of a succession of parts, connected together by resemblance, contiguity, or causation... (Hume, *Treatise* I.4.6, AW 527b).

For Hume, then, the self as we ordinarily understand it is just a loose bundle of experiences.

So there are two ways to view Hume's theory of the self.

On the one hand, it is a no-self theory.

He denies any experience of a self, and any reason to think that there is a persistent substantial or conceptual self.

On the other hand, we can call it the bundle theory of self for his claim about our loose connections.

That latter name is a bit misleading, since it might be interpreted as claiming that there is a self which ties the bundle together.

We can have a practical interest in maintaining a notion of the self over time.

But the claim that there is a self underlying the experiences, some haecceity, is, strictly speaking, false.

There is no I, beyond the experiences.

Hume's claim that there is no self is similar to a Buddhist view.

On the Hume-Buddha view, Descartes's claim that the cogito yields the existence of a thinker is too strong.

We can not claim that a self exists.

We are just thought.

Hume was not fully satisfied with his destructive account of personal identity, as you can see in his Appendix, AW 531–32.

He did not return to the topic in the *Enquiry*.

It might have been too skeptical a conclusion even for Hume.

## §IX. Summary: Skepticism and Practice

The empiricists of the modern era believed that they could limit the extravagant speculations of the continental rationalists by paying close attention to our epistemic capacities.

As early as Hobbes, we saw attention paid to psychological matters, especially the principles governing the connections of our ideas.

Hobbes's analogy of the water on the table is meant to illuminate how our thoughts are connected. Locke claims that ideas of reflection are produced by memory, comparison, augmentation, and abstraction. Hume claims that the connections among ideas are exhausted by the three categories of resemblance, contiguity, and cause and effect relations. These are all rather nascent theories of mind.

Philosophy of mind throughout the modern era is characterized by a representational theory in which we apprehend only our ideas, which may or may not stand for objects external to us. The representational theory may be contrasted with Aristotle's theory of direct perception in which we are immediately acquainted with the external world. For all of the moderns, our experience of the world is mediated by our ideas. The representational theory leads to the Lockean veil of ideas; we are cut off from the external world. The empiricists, who all agreed with Locke that the contents of the mind arise from sense experience, thought of ideas as pictures in the mind, like a movie in which the external world is duplicated. Even Descartes held the representational theory. Only Reid resisted this view.

One claim of lasting importance in Descartes's work is his separation of thought from sensation; our ideas need not be sense impressions. That is the point of the chiliagon example in the Fifth Meditation: we know about the chiliagon without having anything like a clear and distinct sense idea of it. Indeed, it is helpful to think of Descartes's criterion as clear and distinct conception rather than perception. Still, Descartes thought of ideas, whether sensory or pure, as representations of an external world.

Both Berkeley and Hume may be read, in retrospect, as *reductio* arguments on the representational theory of mind, though of course they did not think of their work in that way. Berkeley shows that this theory of mind, coupled with our sensory apparatus, gives us no reason to believe in a material world. Hume, as we have seen, shows that the combination gives us no reason to believe that we have knowledge of the laws of nature. Reid gives up the view in favor of non-reductive theories of the self and direct accounts of perception. But such accounts either give up on philosophy or return us to a naive view of perception, perhaps even an Aristotelian view, which we gave up with Galileo and Newton.

Hume recommends a practical response to the skeptical problem. We have no evidence for our beliefs in laws governing an external world but we proceed as if the world exists as we perceive it. Berkeley decried skepticism as an immoral philosophy. Hume denies that skepticism leads to immorality. Indeed, his account of free will is constructed precisely to rehabilitate the concept of moral responsibility in response to problems with incompatibilist formulations.

The philosopher who seeks universal truths will be frustrated by Hume's approach. But we can just ignore the skeptical questions.

The abstruse philosophy, being founded on a turn of mind which cannot enter into business and action, vanishes when the philosopher leaves the shade and comes into open day, nor can its principles easily retain any influence over our conduct and behavior. The feelings of our heart, the agitation of our passions, the vehemence of our affections, dissipate all its conclusions and reduce the profound philosopher to a mere plebeian (Hume, *Enquiry*, §I, AW 534a-b).

Skepticism is practically defeasible if not philosophically eliminable.

The great subverter of *Pyrrhonism*, or the excessive principles of skepticism, is action, and employment, and the occupations of common life. These principles may flourish and triumph in the schools, where it is indeed difficult, if not impossible, to refute them. But as soon as they leave the shade and by the presence of the real objects which actuate our passions and sentiments are put in opposition to the more powerful principles of our nature, they vanish like smoke and leave the most determined skeptic in the same condition as other mortals (Hume, *Enquiry*, §XII.2, AW 597b).

Extreme skepticism is self-refuting.

The Cartesian doubt...were it ever possible to be attained by any human creature (as plainly it is not) would be entirely incurable and no reasoning could ever bring us to a state of assurance and conviction upon any subject (Hume, *Enquiry*, §XII.1, AW 593a).

A Pyrrhonian cannot expect that his philosophy will have any constant influence on the mind or, if it had, that its influence would be beneficial to society. On the contrary, he must acknowledge, if he will acknowledge anything, that all human life must perish were his principles universally and steadily to prevail. All discourse, all action would immediately cease, and men remain in a total lethargy until the necessities of nature, unsatisfied, put an end to their miserable existence (Hume, *Enquiry*, §XII.2, AW 598a).

Hume's skepticism is a philosophical position, not a practical one.

We leave through the door rather than through the window despite having no justification for our actions.

Despite such attempts to mitigate the most severe consequences of skepticism, Hume's work has long been deemed excessively despairing.

Some contemporary research on Hume minimizes the importance of skepticism to his greater goals.

Many philosophers see him as the intellectual ancestor of today's naturalists.

Instead of arguing for skepticism, we can see Hume as trying to develop a science of human nature, of psychology, using the success of physical science as a paradigm.

This view of Hume's work, while not obviously the best interpretation of his words, has been fruitful.

Moreover, his work in science is especially influential in contemporary philosophy, in the guise of a view called [MRL, or Humean Supervenience](#), about laws.

Briefly, the view is that laws are not real properties of the world.

They are merely convenient ways of our summarizing collections of loosely related, intrinsically independent, phenomena.

In contemporary philosophy of mind, substantial attention has been paid to the nature of ideas, and to the language of thought.

If you are interested in such questions, you should pursue courses in the philosophy of mind and in the philosophy of language.

The modern era has one last gasp.

Kant thinks that he can find his way through the skeptical haze by adopting a transcendental method of arguing.

In our final unit, we will look at Kant's attempt to reconcile some of the competing views and avoid skepticism by paying even closer attention to our psychology.