David Hume, 1711-1776



1. Introduction. Theory of Ideas and Conceptual Empiricism

Peter Millican Hertford College, Oxford

Hume's Most Relevant Works

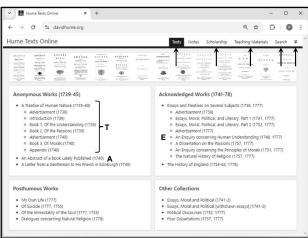
- T: A Treatise of Human Nature (1739-40)
 - Book 1 is on epistemology and metaphysics; Book 2 on the passions (1739); Book 3 on morals was published with a famous Appendix (1740).
- A: Abstract of the Treatise (1740)
 - Summarises the *Treatise*'s "Chief Argument".
- E: Enquiry concerning Human Understanding
 - Many editions from 1748 to 1777. More polished than the Treatise, but less comprehensive.
 - Find all Hume's texts at www.davidhume.org ...

www.davidhume.org

Click on "Texts" to see the menu of texts as

shown on the previous slide. Click on "Search" to search the texts:

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- Click on * to jump to a specific text reference (e.g. T 1.3.2.11, A 27, or E 4.13).
- Click on "Teaching Materials" to find links to:
 - Previous lectures on Hume (2010, 2011, 2018) together with handouts (including for 2021).
 - "Outline of Humean Texts": annotated summaries of some of the most important sections of the Treatise, to aid comprehension and reference.
 - "Analysis of Hume's Sceptical Texts" as above, but focusing on sceptical topics.
 - "Notes on Particular Topics" more opinionated discussions of other key topics.
- Click on "Scholarship" to find over 50 of my papers on Hume, and handouts from many talks.

Aims of the Lecture Series

- The aim is to help you to understand Hume's main texts and arguments, and to complement the other resources provided, by:
 - Conveying the big picture, to appreciate the overall shape and force of Hume's theoretical philosophy;
 - Helping you to take advantage of the "outlines" and "analyses" to read and understand the texts efficiently, and to focus on their key points;
 - Highlighting and explaining the main interpretative debates, and why they matter;
 - Drawing your attention to relevant secondary literature;
 - Preparing you for the Early Modern examination.

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For More Background ...

- To maximise efficiency towards these aims, we will not here be looking deeply at the historical or biographical background of Hume's ideas. But it is good to understand something about these.
 - For historical context, see the General Philosophy lecture pages at https://www.millican.org/genphil.htm (e.g. 2018 lectures 1 and 2, and lecture 3 as far as slide 26).
 - For more systematic coverage and detail, see "Introduction" under "2007" at https://davidhume.org/scholarship/millican.
 - For biographical context, see Lecture 1 in the 2018 series at https://davidhume.org/teaching/lectures.
 - For biographical philosophy, see "Hume's Chief Argument" under "2016" at https://davidhume.org/scholarship/millican.

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1(a) The Lockean Inheritance



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Descartes's "Way of Ideas"

■ René Descartes (1596-1650) took all our understanding and knowledge to start from "ideas" in the mind - an



- internalist perspective that took hold for centuries.
- Some ideas he took to be "innate" and divinely implanted (e.g. the ideas of God, and of extension i.e. matter (see M 3 AT 7:37-8; CCB AT 8B:357-61).
- Other ideas come through the senses some of these correspond to real properties of material things (e.g. shape and size); others do not (e.g. colours, sounds, odours, tastes). Locke later called these primary and secondary qualities respectively.

Locke's Reaction to Descartes

- Locke follows Descartes by conceiving mental content in terms of "ideas" (and advocates the primary/secondary distinction), but a principal aim of his Essay concerning Human Understanding (1690) is to deny that any of our ideas are innate.
- Book 1 entitled "Of Innate Notions" focuses on denying that we have innate principles.
- Book 2 "Of Ideas in general, and their Original" - was probably more influential, purporting to explain how all our ideas are derived from experience, i.e. to establish concept-empiricism.

Two Kinds of "Empiricism"

■ Distinguish *concept-empiricism*:

All our ideas derive from experience

(i.e. contra Descartes, there are no innate ideas)

from knowledge-empiricism:

All knowledge of the world derives from experience

(i.e. no "synthetic a priori knowledge", contra Kant)

Locke is a committed concept-empiricist, but he is *not* a pure knowledge-empiricist. (Hume is strongly empiricist in both senses.)

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What is an "Idea"?

■ Locke defines an idea as

"whatsoever is the Object of the Understanding when a Man thinks"

(Essay I i 8)

■ This is supposed to include all types of "thinking", including perception and feeling as well as contemplation. So our ideas include thoughts and sensations, and also "internal" ideas that we get from reflection.

"White Paper" and "Two Fountains": Sensation and Reflection

■ "Let us then suppose the Mind to be, as we say, white Paper, void of all Characters, without any *Ideas*; How comes it to be furnished? ... To this I answer, in one word, From *Experience* ... Our Observation employ'd either about *external*, *sensible Objects*; or about *the internal Operations of our Minds* ... These two are the Fountains of Knowledge, from whence all the *Ideas* we have ... do spring." (II i 2)

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Humean Ideas and Impressions

- Hume considers Locke's usage of "idea" too broad, so adopts different terminology:
 - An impression is a sensation (e.g. from seeing a blue sky, smelling a flower, or physical pain) or a feeling (e.g. anger, desire, disapproval, envy, fear, love, or pride);
 - An idea is a thought (e.g. about the sky, or about a pain, or about the existence of God);
 - A perception is either an impression or an idea. (So Hume uses the word perception to cover everything that Locke calls an idea.)

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"Sensation" and "Reflection"

- Hume follows Locke in calling the two sources of ideas "sensation" and "reflection" (T 1.1.2.1, cf. Essay II i 3-4), but there are differences ...
- First, whereas Locke takes for granted that we have "sensitive knowledge" of the existence of external objects (*Essay* IV xi), Hume describes the impressions of sense (e.g. perceptions of colour, taste, smell, bodily pain) as arising "in the soul originally, from unknown causes" (*T* 1.1.2.1). This suggests from the start a more sceptical attitude towards the senses.

Ideas on a Mental Stage?

- The theory of ideas tends to portray the mind as *passive*, with mental acts being understood in terms of the activity and qualities of "ideas":
 - seeing a tree involves having a visually vivid idea of a tree "in front of the mind";
 - thinking about a tree involves having a less vivid idea of a tree:
 - feeling a pain involves having an idea of a pain;
 - desiring chocolate involves having a "positively charged" idea of chocolate.

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An Obvious Distinction?

- Hume seems to think that the impression/idea distinction is a fairly obvious one, between (roughly) feeling – including both feelings of sensation and of reflection – and thinking:
 - "I believe it will not be very necessary to employ many words in explaining this distinction. Every one of himself will readily perceive the difference betwixt feeling and thinking." (*T* 1.1.1.1)
- This indeed seems to be how he mainly thinks of the distinction, but as we'll soon see, he muddies the waters by seeming to define it in a different way (in terms of "force and vivacity").

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Humean Reflection

- Impressions of reflection are "deriv'd in a great measure from our ideas", particularly the ideas of pleasure or pain that arise when we feel e.g. "heat or cold, thirst or hunger" (T 1.1.2.1).
- Thinking or reflecting about pleasures and pains gives rise to "desire and aversion, hope and fear, which may properly be call'd impressions of reflection because deriv'd from it". Hume also calls these secondary impressions (T 2.1.1.1-2). At T 1.1.6.1 Hume says that impressions of reflection are either passions (e.g. the desire for something) or emotions (e.g. happiness).

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"Reflection": A Contrast with Locke

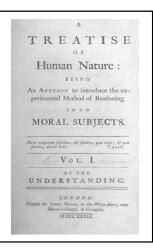
When Locke discussed ideas of reflection, his focus was very different from Hume's:

"By REFLECTION ... I ... Mean, that notice which the Mind takes of its own Operations, ... by reason whereof, there come to be *Ideas* of these Operations in the Understanding."

- "... such are, *Perception, Thinking, Doubting, Believing, Reasoning, Knowing, Willing,* and all the different actings of our own Minds;" (II i 4)
- Locke seems to overlook passions and emotions; Hume is more interested in these, but seems to overlook mental operations!

1(b)

Hume's Copy Principle and the Simple/Complex Distinction



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Hume's Conceptual Empiricism: A First Approximation

- To a first approximation, Hume's conceptual empiricism is the claim that all of our ideas (i.e. thoughts) are derived from impressions (i.e. sensations or feelings).
- But Hume takes conceptual empiricism more strictly than Locke, insisting (again to a first approximation) that all of our ideas are <u>copies</u> of impressions, which almost exactly resemble the corresponding impressions.

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Conceptual Empiricism: Refining the Approximation

- Obviously, some of our ideas (e.g. of a unicorn) are not copies of any single impression.
- Hume acknowledges this, but wants to insist that all of the content of our ideas is copied from impressions – we might say that ideas are entirely composed of impression-copied content.
- His way of dealing with this is to draw a distinction between simple ideas (which are directly copied from simple impressions) and complex ideas (which may be constructed from simple ideas)

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Simple and Complex Ideas

At Treatise 1.1.1.2, Hume divides all ideas and impressions into <u>simple</u> and <u>complex</u>:

"Simple perceptions or impressions and ideas are such as admit of no distinction nor separation. The complex are the contrary to these, and may be distinguished into parts."

- Hume writes as though this distinction is really straightforward, but it isn't! Take, for example, the idea of a red circle: that seems to be a complex idea, but what exactly are the parts, and how many (maybe two: the red colour, and the circular shape, or maybe the size also)?

Spatial Ideas and Atomism

- At Essay II v 1 and II viii 9, Locke describes the ideas of space, extension, and figure – i.e. shape – as simple (though II xiii on "the simple modes of space" complicates the story a bit.)
- Hume has a much stricter "atomist" view of spatial ideas, taking them to be formed of minima, in much the way that a computer image is formed of individual coloured pixels. T 1.2.1.4 describes how an ink spot can yield a minimal impression.
 - Extension and figure arise only when we have multiple minima, hence complexity (e.g. T 1.2.3.15).

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Professor Peter Millican, Hertford College, Oxford

Hume's Copy Principle

Hume's concept-empiricism is expressed in his "first principle" (T 1.1.1.12) which is now commonly known as his Copy Principle:

"that all our simple ideas [i.e. thoughts] in their first appearance are deriv'd from simple impressions [i.e. sensations or feelings], which are correspondent to them, and which they exactly represent." (T 1.1.1.7)

■ Hume sees this as a more precise formulation of Locke's denial of innate ideas (as he makes explicit at Abstract 6 and E 2.9 n. 1).

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Hume's First Argument for the Copy Principle

■ There seem to be no counterexamples:

"After the most accurate examination, of which I am capable, I venture to affirm, that the rule here holds without any exception, and that every simple idea has a simple impression, which resembles it; and every simple impression a correspondent idea." (*T* 1.1.1.5)

■ And since the impressions come before the ideas (*T* 1.1.1.8), they must cause the ideas rather than vice-versa.

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Problems with Hume's Arguments

- Hume's first argument doesn't seem to fit very well with his use of the Copy Principle against opponents:
 - Suppose someone claims to have an idea which doesn't derive from a corresponding impression; he will simply deny Hume's generalisation and hence his argument for the Principle. Bennett (2002, pp. 100-1) presses this sort of objection.
 - Garrett (1997, pp. 46-8) mounts a defence on Hume's behalf:

Weaponising the Copy Principle?

■ The 1748 *Enquiry* boldly flourishes the Copy Principle as a weapon against bogus ideas:

"When we entertain ... 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." (E 2.9)

But in practice, Hume almost always uses it not to dismiss ideas but to clarify them, by tracing them to their impression-source.

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Hume's Second Argument for the Copy Principle

People who lack any particular sense modality always lack also the corresponding ideas:

"wherever by any accident the faculties, which give rise to any impressions, are obstructed in their operations, as when one is born blind or deaf; not only the impressions are lost, but also their correspondent ideas; ... likewise where they have never been put in action to produce a particular impression [such as] the taste of a pine-apple ..." (*T* 1.1.1.9)

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Garrett's First Defence of Hume

- "when [Hume] argues against the existence of a certain (putative) idea, he never argues merely that we do not find such a corresponding impression in experience; he also always argues that no impression could possibly satisfy the requirements we implicitly demand for such a perception." (1997, p. 49)
- So such an idea would not merely contradict the Copy Principle, "It would ... require the admission of an entirely distinct representational faculty", in addition to our imagistic imagination.

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Responding to Garrett

- But the point that "no impression could possibly satisfy the requirements" for serving as the source of a particular idea is double-edged.
- Hume's opponent can point out that the ideas in question those that are not obviously imagistic and which Hume has to work so hard to explain in imagistic terms (necessary connexion, body, the self etc.) are precisely the ones for which the Copy Principle is least plausible to start with.
- Is it really legitimate to extend an argument which seems plausible in the case of sensory ideas to these more contentious cases?

Garrett's Second Defence of Hume

■ Garrett (1997, pp. 46-8) defends Hume more straightforwardly, arguing that although one might not be able to *demonstrate* to others that one was having a simple idea without a simple impression, the fact that blind and deaf people (etc.) don't claim to have such ideas can be taken as significant:

"It is a fact, for example, that the blind and the deaf do not report mental images – that is, Humean 'ideas' – that are unrelated to any simpler elements previously experienced in sensation or feeling. ... The fact that the blind and deaf can and do report aspects of their mental lives but do not report such images is surely some evidence that they do not have them." (p.46)

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The Missing Shade of Blue

- After arguing for the Copy Principle, Hume himself strangely presents a counter-example: the famous "missing shade of blue" (T 1.1.1.10).
- He seems, however, to think this isn't a serious problem for his position, maybe because:
 - The "new" simple idea is being constructed (by something like blending) from materials that are provided by impressions, so his concept-empiricism isn't being fundamentally threatened.
 - The new idea could be derived from sensory experience, even if in this case it hasn't been it's still imagistic (so clearly thinkable on Hume's view).

- Hume's second argument also has problems. It may seem very plausible that a blind man can have no idea of red, for example. But how can Hume know that this is the case? Might it not be that the man has private mental experiences that involve the colour red?
- At risk of anachronism, some authors (e.g. Bennett, Dicker) argue that Hume's point is best understood as being not about private mental experience, but about public meaningfulness. The blind man cannot use the word "red" correctly, and they take this (positivist) moral to be the real point of Hume's position.

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- Further evidence, Garrett suggests, comes from people whose senses are repaired, who as adults become able to see for the first time. They report new sensations, apparently: sensations that they could not imagine prior to the repair.
- Note, however, that this second argument explicitly focuses on ideas that are acknowledged from the start to be sensory, so it doesn't help in the more contentious cases that are not obviously sensory.
- For those ideas (necessity, body, self etc.), Hume's case for empiricism like Locke's perhaps has to depend on the strength of his specific account of those ideas. Can he actually explain their nature in terms of impression-copy content?

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"Suppose ... a person to have enjoyed his sight for thirty years, and to have become ... well acquainted with colours of all kinds, excepting one particular shade of blue, ... which [he has never met] with. Let all the different shades of that colour, except that single one, be placed before him, descending gradually from the deepest to the lightest; 'tis 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 betwixt the contiguous colours, than in any other. [Could he], from his own imagination, ... raise up to himself the idea of that particular shade, tho' it had never been conveyed to him by his senses? I believe ... he can; and this may serve as a proof, that the simple ideas are not always derived from the correspondent impressions; tho' the instance is so particular and singular, that [it] ... does not merit that for it alone we should alter our general maxim."

(*T* 1.1.1.10)

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David Hume, 1711-1776



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2. Force and Vivacity, Belief, Separability and Association of Ideas

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Last Time ...

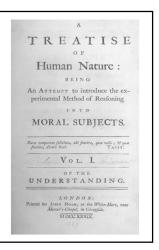
- We saw how Hume's conceptual empiricism follows Locke in taking all of our ideas to come through sensation or reflection. However:
 - Hume's terminology of *impressions* and *ideas* helps to clarify the issue, though we shall soon see problems in his notion of *force and vivacity*.
 - Hume takes feelings (not mental operations) to be the paradigmatic objects of ideas of reflection.
- Hume's arguments for his Copy Principle (and his complacent assumption of the simple/ complex distinction) are not entirely convincing.

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2(a)

Force and Vivacity



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Distinguishing Impressions and Ideas

- When first introducing his distinction between impressions and ideas, Hume seems to base it mainly on force, vivacity, or liveliness:
 - "All the perceptions of the human mind resolve themselves into two distinct kinds, which I shall call IMPRESSIONS and IDEAS. The difference betwixt these consists in the force and liveliness, with which they strike upon the soul, and make their way into our thought or consciousness. Those ... which enter with most force and violence, we may name *impressions* ..." (*T* 1.1.1.1).

Starting from Internalism?

- Hume seems to want to define the impression/ idea distinction in terms of their internally perceptible qualities rather than their causes (e.g. whether they're caused by external objects).
- Perhaps as with his "unknown causes" comment about impressions of sensation (*T* 1.1.2.1) he wants to remain sceptically noncommittal (e.g. about the existence of an external world), and to avoid dogmatic commitments.
- But he also has a deeper theoretical motivation, deriving from his theory of belief ...

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Why Emphasise "Force and Vivacity?"

- Hume is looking for a way that ideas can differ from impressions while still having the same content (thus respecting his Copy Principle that ideas are literally copies of impressions).
 - T 1.3.7.6: "the same idea can only be vary'd by a variation of its degrees of force and vivacity"
- Hume emphasises this when developing his theory of belief:
 - If I believe proposition P, and you don't, the same ideas must be involved, or it wouldn't be the same proposition (see discussion at T 1.3.7.3-4).

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Looking Ahead to Induction

- Hume will later (in T 1.3.6-8) argue that whenever we draw an inference from observed to unobserved matters of fact (what we now call "induction"), we do this by custom or habit.
- For example, after seeing A's repeatedly followed by B's, our ideas of A and B become associated, and hence when we next see an A, we habitually expect a B to follow.
- The vivacity of the sense-impression of A is conveyed by association to enliven our idea of B, and we accordingly expect B to follow.

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A Hydraulic Theory of Probability

Suppose I toss a six-sided die ...

"When ... the thought is determin'd by the causes to consider the dye as falling and turning up one of its sides, the chances present all these sides as equal, and make us consider every one of them, one after another, as alike probable ... The determination of the thought is common to all; but no more of its force falls to the share of any one, than what is suitable to its proportion with the rest. 'Tis after this manner the original impulse, and consequently the vivacity of thought, arising from the causes, is divided and split in pieces by the intermingled chances." (*T* 1.3.11.12) Distinguishing Belief from Mere Conception

■ Hume's theory of belief defines it (at T 1.3.7.5) in terms of force and vivacity or "liveliness", typically derived from an associated impression:

"An opinion, therefore, or belief may be most accurately defin'ed, A LIVELY IDEA RELATED TO OR ASSOCIATED WITH A PRESENT IMPRESSION."

■ This liveliness is shared also by memories (T 1.1.3.1, 1.3.5.3 ff.) – "Thus it appears, that the belief or assent, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present." (T 1.3.5.7)

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A "Hydraulic" Theory of Belief

"I wou'd willingly establish it as a general maxim in the science of human nature, that when any impression becomes present to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity." (T 1.3.8.2)

■ *T* 1.3.8 gives various "experiments" to illustrate how force and vivacity can be conveyed from impressions to their "associated ideas", confirming this as a general phenomenon of human nature.

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Doubts about Force and Vivacity

■ Hume seems to recognise that relying on "force and vivacity" to distinguish impressions from ideas is problematic:

"in sleep, in a fever, in madness, or in any very violent emotions of soul, our ideas may approach to our impressions: [And] it sometimes happens, that our impressions are so faint and low, that we cannot distinguish them from our ideas." (T 1.1.1.1)

Compare, for example, dreaming of an attack of spiders, with watching paint dry! (But note that a feeling of *fear* would be a *reflective impression*, quite separate from the imagined visual ideas.)

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- There are also other difficulties:
 - A fictional story can far be more "vivacious", at least superficially, than a dull historical account (perhaps Hume realised this at *T* 1.3.10.10, added in 1740?).
 - Is a change in "force and vivacity" really consistent with preserving the same idea? Suppose our idea of a dull red door acquires more vivacity: couldn't that become the idea of a bright red door, rather than belief in a dull red door? How can we distinguish between these two outcomes?
 - Coming to believe something looks more like a change of our attitude to an idea than like a change in the "force and vivacity" of the idea itself (recall the concern expressed in Lecture 1, slide 14).

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Symptoms of Unease?

In the 1740 Appendix, Hume seems to evince some discomfort with his account:

"An idea assented to *feels* different from a fictitious idea ... And this different feeling I endeavour to explain by calling it a superior *force*, or *vivacity*, or *solidity*, or *firmness*, or *steadiness*. ... 'tis impossible to explain perfectly this feeling or manner of conception. We may make use of words, that express something near it. But its true and proper name is *belief*, which is a term than every one sufficiently understands ..."

(*T* 1.3.7.7; see also *T* 1.3.10.10, as noted in slide 49 above)

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Phenomenological or Functional?

- Trends in philosophy are often mirrored by trends in interpretation, especially to defend a revered figure! Accordingly, Hume's "Force and Vivacity" has been interpreted (e.g. by Everson 1988) as externalist and functional rather than internalist and phenomenological.
 - Marušić (2010) argues strongly on the other side, citing Hume's emphasis (e.g. in paragraphs 7-9 of the Appendix to the Treatise) on feeling as causally key to the functional difference between belief and mere conception. It looks as though the difference in "feeling" is more fundamental.

Is "Force and Vivacity" Univocal?

- Hume's hydraulic theory seems to assume that a single dimension of "force and vivacity" can capture the differences between:
 - An impression of X (most forceful/vivacious)
 - A memory of X (between impression and idea)
 - A belief or expectation of X (a vivacious idea)
 - Mere contemplation of X (least forceful/vivacious)
- Dauer (1999) suggests that this implausibility later pushed Hume away from the hydraulic model, which does not feature in the *Enquiry*.

Retreating from the Theory

In the Enquiry, Hume seems to retreat from the hydraulic theory:

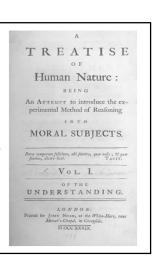
"Were we to attempt a *definition* of this sentiment, we should, perhaps, find it ... impossible ... Belief is the true and proper name of this feeling; ... It may not, however, be improper to attempt a *description* of this sentiment; ... I say then, that belief is nothing but a more vivid, lively, forcible, firm, steady conception of an object, than what the imagination alone is ever able to attain." (*E* 5.12)

Probable belief, as in the case of a die, arises from "an inexplicable contrivance of nature" (E 6.3).

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2(b)

The Separability Principle



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The "Liberty of the Imagination"

■ We have already seen that some ideas are complex, and can be divided imaginatively into components:

An apple has a particular shape, a colour, a taste, a smell ... Its shape is also complex ...

- We can also put ideas together in new ways: gold + mountain = golden mountain.
- At T 1.1.3.4 Hume refers to this "liberty of the imagination to transpose and change its ideas" as his "second principle".

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Arguing for the Separability Principle

■ Hume's argument for the Separability Principle is extremely cursory:

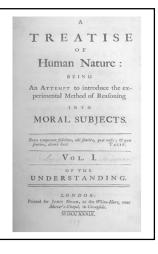
> "For how is it possible we can separate what is not distinguishable, or distinguish what is not different?" (T 1.1.7.3)

■ This makes the Separability Principle look trivially true, but Hume will later use it to maintain, for example, that a perception (i.e. an impression or idea) could exist quite independently of any perceiver.

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2(c)

Association of Ideas



The Separability Principle (SP)

Later, that relatively modest "second principle" seems to morph into what is commonly called Hume's Separability Principle, which has strikingly paradoxical results later in the *Treatise*:

"We have observ'd [apparently at T 1.1.3.4], that whatever objects are different are distinguishable, and that whatever objects are distinguishable are separable by the thought and imagination. And ... these propositions are equally true in the inverse, and that whatever objects are separable are also distinguishable, and that whatever objects are distinguishable are also different." (T 1.1.7.3)

Taking Separability Too Far?

■ This happens at T 1.4.5.5, where Hume considers the standard (e.g. Descartes, Chambers) definition of a substance as something which may exist by itself":

"this definition agrees to every thing, that can possibly be conceiv'd; ... Whatever is clearly conceiv'd may exist; ... every thing, which is different, is distinguishable, and every thing which is distinguishable, is separable by the imagination. My conclusion ... is, that since all our perceptions are different from each other, and from every thing else in the universe, they are also distinct and separable, and may be consider'd as separately existent. and may exist separately, and have no need of any thing else to support their existence. They are, therefore, substances, as far as this definition explains a substance."

Locke on the Association of Ideas

Hume sometimes expresses great enthusiasm about the association of ideas (e.g. A 35), but this is in striking contrast to Locke's attitude:

"[3] this sort of Madness ... [4] this ... Weakness to which all Men are so liable, ... a Taint which so universally infects Mankind ... [5] ... there is [a] Connexion of Ideas wholly owing to Chance or Custom; Ideas that in themselves are not at all of kin, come to be so united in some Mens Minds that 'tis very hard to separate them ...'

(Locke, Essay II xxxiii 3-5)

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Chambers' Cyclopaedia (1728)

"ASSOCIATION of Ideas, is where two or more Ideas, constantly and immediately follow or succeed one another in the Mind, so that one shall almost infallibly produce the other ... Where there is a real Affinity or Connection in Ideas, it is the excellency of the Mind, to be able to collect, compare, and range them in Order, in its Enquiries: But where there is none, nor any Cause to be assign'd for their accompanying each other, but what is owing to mere Accident or Habit; ...this unnatural Association becomes a great Imperfection, and is generally speaking, a main Cause of Error, or wrong Deductions in reasoning."

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Hume on the Association of Ideas

Despite "the liberty of the imagination", there is a pattern to our thoughts:

"all simple ideas may be separated by the imagination, and may be united again in what form it pleases ... [yet there is] some bond of union among them, some associating quality, by which one idea naturally introduces another" (*T* 1.1.4.1)

Hume calls this "a gentle force" which explains why languages "so nearly correspond to each other" in the complex ideas that are represented within their vocabulary.

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Natural and Philosophical Relations

- *T* 1.1.5 starts with a distinction between two senses of the word "relation". In one sense, we think of things as *related* when the idea of one *naturally* leads the thought to the other.
- So the "natural relations" are those that correspond to our associative tendencies – resemblance, contiguity, cause and effect.
- But when philosophers talk about "relations", they include any arbitrary "subject of comparison", even when it doesn't give rise to association.
- We'll return to Hume's theory of relations later. For now, we resume our focus on association.

"Thus the Idea of Goblins and Sprights, has really no more Affinity with Darkness than with Light; and yet let a foolish Maid inculcate these often on the Mind of a Child, and raise them there together, 'tis possible he shall never be able to separate them again so long as he lives, but Darkness shall ever bring with it those frightful Ideas."

"Such wrong combinations of Ideas, Mr. Lock shews, are a great Cause of the irreconcileable Opposition between the different sects of Philosophy and Religion: ... some loose and independent Ideas are by Education, Custom, and the constant Din of their Party, so coupled in their Minds, that they always appear there together: These they can no more separate in their Thoughts, than if they were but one Idea, ... This ... is the Foundation of the greatest, and almost of all the Errors in the World." (p. 161)

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Three Principles of Association

Ideas may be associated in three ways:

"The qualities, from which this association arises ... are three, *viz.* RESEMBLANCE, CONTIGUITY in time or place, and CAUSE and EFFECT." (*T* 1.1.4.1)

- Association is "a kind of ATTRACTION, which in the mental world" has remarkable effects like gravity in the physical world (T 1.1.4.6).
 - The complex ideas arising from such association "may be divided into *Relations*, *Modes*, and *Substances*" (*T* 1.1.4.7). Hume then discusses these three categories in turn, in *T* 1.1.5 and 1.1.6.

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Custom and Induction

- As already noted (slide 45) Hume will argue in T 1.3.6-8 that all inference to the unobserved depends on custom, by which we expect for the future what we have observed in the past.
- So Hume in contrast to Locke and Chambers takes a very positive attitude to custom:

"Tis not, therefore, reason, which is the guide of life, but custom." (A 16)

"Custom, then, is the great guide of human life. It is that principle alone, which renders our experience useful to us ..." (*E* 5.6)

6

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Custom and Association of Ideas

- At T 1.3.7.6, Hume appears to refer to "custom" as "a principle of association".
- Yet there is a big difference between the sort of association that is merely "a gentle force" (T 1.1.4.1) tending to leads our thoughts from one idea to another, and what will later turn out to be custom's irresistibility (e.g. at T 1.3.9.7, 1.4.1.7 and 1.4.4.1).
- There is also another fundamental difference, in that custom involves *inference to something unobserved*, whereas mere association typically involves *flow of a train of thought to something previously observed*. Hume is much clearer about this in his *Enquiry*.

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"No one can doubt but causation has the same influence as the other two relations of resemblance and contiguity. Superstitious people are fond of the reliques of saints and holy men, for the same reason, that they seek after types or images, in order to enliven their devotion, and give them a more intimate and strong conception of those exemplary lives, which they desire to imitate." (*E* 5.18)

"Suppose, that the son of a friend, who had been long dead or absent, were presented to us; it is evident, that this object would instantly revive its correlative idea, and recal to our thoughts all past intimacies and familiarities, in more lively colours than they would otherwise have appeared to us. This is another phænomenon, which seems to prove the principle above-mentioned [i.e. that the relation of *causation* gives rise to association of ideas and consequent increase in vivacity]. (*E* 5.19)

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69 70

Religion and Association

- Although in the *Treatise* Hume conflates *custom* and *association*, he generally sees the former as epistemologically essential, and the latter as often leading to confusion and fallacy. He particularly highlights examples occurring in religion:
 - T 1.3.8.4 The "mummeries" of Roman Catholicism enhance belief in saints (etc.) by perception of statues and associational *resemblance*.
 - T 1.3.8.6 Relics have a similar effect, associated to saints through *causation*.
 - T 1.3.9.9 Contiguity enhances the belief of pilgrims to Mecca or the Holy Land.

Custom and Association in the first *Enquiry*

- In the Enquiry, Hume treats custom as clearly distinct from association of ideas by causation.
 - Custom operates when, having previously seen A followed by B repeatedly and then seeing A, I infer that B will follow.
 - Association of ideas by causation operates when, having come to the belief that A and B are causally related, my thought of A leads me to thought of B. This will not usually involve any specific inference.

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"We may observe, that, in these phænomena, the belief of the correlative object is always presupposed; without which the relation could have no effect. The influence of the picture supposes, that we believe our friend to have once existed. Contiguity to home can never excite our ideas of home, unless we believe that it really exists. Now I assert, that this belief, where it reaches beyond the memory or senses, is of a similar nature, and arises from similar causes, with the transition of thought and vivacity of conception here explained." (*E* 5.20)

■ Thus he argues that *custom* is an associational principle, "analogous" to *association of ideas* (*E* 5.13), but his carefully chosen examples make clear that he is distinguishing, rather than conflating them.

7

Hume's Attitude to Association

- Sometimes, Hume seems extremely positive:
 - Association is "a kind of ATTRACTION, which in the mental world" has remarkable effects like gravity in the physical world (T 1.1.4.6).
 - "if any thing can intitle the author to so glorious a name as that of an *inventor*, 'tis the use he makes of the principle of the association of ideas, which enters into most of his philosophy" (A 35)
- Hume indeed entirely approves of custom, as "the great guide of human life". But nevertheless, he retains much of the general suspicion of mere association that we saw in Locke and Chambers.

David Hume, 1711-1776



3. Hume's Faculty Psychology and His Logical Framework

Peter Millican Hertford College, Oxford

Last Time ...

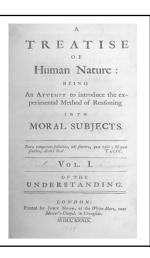
- We saw Hume's relative enthusiasm for association of ideas, in stark contrast with Locke and others, who had viewed it as a source of error.
 - Ideas can be associated by resemblance, contiguity, and causation (the three "natural relations"). But the associated ideas are still "separable" in imagination.
 - Inference from observed to unobserved operates by custom, which is a kind of associative principle (but is more than mere association by causation).
 - Custom thus provides the essential "guide of life", both for us and for animals. Without it, we could never draw inductive inferences.

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3(a)

Introducing Hume's Faculty Psychology



Hume and the Faculties

- Some of Hume's most famous arguments are expressed in terms of faculties:
 - T 1.3.6 (and E 4): inductive inference results from processes of the imagination, and is not "determin'd by" reason or the understanding.
 - T 1.4.2: belief in external objects is produced by the imagination rather than by reason.
 - T 2.3.3: <u>reason</u> alone cannot motivate action.
 - T 3.1.1 (and EPM): morals are "deriv'd from" moral sense or sentiment rather than reason.

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Faculties, Induction, and Body

- "... the next question is, whether experience produces the idea by means of the understanding or imagination; whether we are determined by reason to make the transition, or by ... association ... of perceptions." (T 1.3.6.4)
- "The subject, then, of our present enquiry, is concerning the causes which induce us to believe in the existence of body: ... we ... shall consider, whether it be the senses, reason, or the imagination, that produces the opinion of a continu'd or of a distinct existence." (T 1.4.2.2)

Faculties and Morality

- "... we need only consider, whether it be possible, from reason alone, to distinguish betwixt moral good and evil, or whether there must concur some other principles to enable us to make that distinction." (T 3.1.1.3-4)
- "... The rules of morality, therefore, are not conclusions of our reason" (T 3.1.1.6)
- "There has been a controversy started of late ... concerning the general foundation of MORALS; whether they be derived from reason, or from SENTIMENT ... " (M 1.3)

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Outline of Humean Faculties

■ The (external) Senses

These present to the mind *impressions of sensation* (e.g. of sight, touch, sound, smell, gustatory taste, bodily pain), thus creating within the mind *ideas* that are copies of those impressions.

■ Reflection (or internal sense)

Presents to the mind impressions of reflection
("secondary" impressions – see T 2.1.1.1 – that
arise from the interplay of ideas in our mind, such
as passions and emotions), thus again creating
ideas that are copies of those impressions.

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■ Imagination (or the Fancy)

Traditionally the faculty of having images (but not just visual). Hume takes all of our ideas to be imagistic (as copied from sense or feeling); hence this is our primary thinking faculty. The imagination can replay ideas in our thinking (often guided by associative relations), but can also transpose, combine and mix them.

■ Memory

Replays ideas in their original order (lacking the freedom of the imagination), and with great vivacity, almost like that of an impression. Thus Hume often refers to "impressions of the memory", and sometimes describes ideas in the imagination as copies of these (as at T 1.3.9.7, and note the title of T 1.3.5). Thinking about memories thus takes place in the imagination.

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Reason and Will: The Traditional Major Division

- Reason (or the Understanding) Traditionally the overall <u>cognitive</u> faculty: discovers and judges truth and falsehood.
- The Will

Traditionally the <u>conative</u> faculty: forms intentions in response to desires and passions.

Hume only rarely refers to the will as a faculty, and his view of reason, as we'll see later, is complicated by his treating all of our reasoning as taking place—through imagistic ideas—within "the imagination".

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Distinguishing Between Faculties

- imagination/reason (T 1.4.2.2); imagination/ memory (T 1.3.5); imagination/the senses (T 1.4.2.2); imagination/passions (T 2.2.2.16).
- reason/memory (*T* 3.3.4.13); reason/the senses (*T* 1.4.2.2); reason/the will (*T* 2.3.3.4).
- memory/the senses (T 1.1.2.1).
- Hume *never* distinguishes between "reason" and "the understanding", or between either of these and "the judgment". And he insists that our "intellectual faculty" is undivided (*T* 1.3.7.5 n.20).

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Hume on Reason and Understanding

Hume, like many other philosophers, uses the terms "reason" and "the understanding" interchangeably dozens of times, for example:

"When the mind [makes an inductive inference] it is not determin'd by *reason*, but by certain principles, which associate together the ideas of these objects, and unite them in *the imagination*. Had ideas no more union in *the fancy* than objects seem to have to *the understanding*, ..." (*T 1.3.6.12*)

Other examples are at *T* 1.3.6.4, 1.3.13.12, 1.4.1.1 & 12, 1.4.2.14, 46, & 57, 1.4.7.7, 2.3.3.2-6, 3.1.1.16-18 & 26; also compare 2.2.7.6 n. with 1.3.9.19 n.

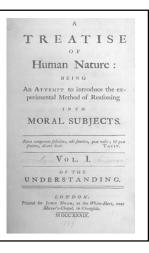
Hume on Reason as Cognition

- "Reason is the discovery of truth or falshood." (T 3.1.1.9)
- "That Faculty, by which we discern Truth and Falshood ... the Understanding" (E 1.14, note in 1748/1750 editions)
- "reason ... conveys the knowledge of truth and falsehood" (M App 1.21)
- "... reason, in a strict sense, as meaning the judgment of truth and falsehood ..." (DOP 5.1)
- See also T 2.3.3.3, 2.3.3.5-6, 2.3.3.8, 2.3.10.6, 3.1.1.4, 3.1.1.19 n. 69, 3.1.1.25-27, 3.2.2.20, M 1.7, M App 1.6.

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3(b)

Conceivability and Hume's Fork



Hume's Conceivability Principle

Hume frequently appeals to what is generally known as his Conceivability Principle:

"Tis an establish'd maxim in metaphysics, That whatever the mind clearly conceives includes the idea of possible existence, or, in other words, that nothing we imagine is absolutely impossible. ..." (T 1.2.2.8)

"To form a clear idea of any thing, is an undeniable argument for its possibility, and is alone a refutation of any pretended demonstration against it." $(T\,1.3.6.5)$

"whatever we *conceive* is possible, at least in a metaphysical sense: but wherever a demonstration takes place, the contrary is impossible, and implies a contradiction." (A 11, cf. E 12.28)

(See also e.g. T 1.3.3.3, 1.3.9.10, E 4.2, E 4.10, E 4.18.)

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Inconceivability and Impossibility

- Hume is sometimes thought to accept the so-called the Inconceivability Principle, that inconceivability implies impossibility. The best evidence for this is:
 - "... We can form the idea of a golden mountain, and from thence conclude that such a mountain may actually exist. We can form no idea of a mountain without a valley, and therefore regard it as impossible." (*T* 1.2.2.8)
- But this evidence is weak, and he appeals to the Conceivability Principle around 30 times without ever explicitly stating or implying the converse principle.
 - Hume also accepts that animals may have senses that yield ideas inconceivable to us, that there may be a vacuum or objects "specifically different" from our perceptions. For detailed discussion, see Millican ("Hume's Fork", 2017, §5).

87

Hume's Fork: Relations of Ideas ...

- Some propositions which Hume in the Enquiry calls "relations of ideas" – are such that their falsehood is inconceivable.
 - The closest modern term is <u>analytic propositions</u>, understood as <u>those whose meaning entails their truth</u>. These <u>can be known a priori</u> without any dependence on experience or real existence by inspecting ideas; hence their falsehood is inconceivable and they are <u>necessarily true</u>.

e.g. Pythagoras' Theorem. (E 4.1) $3 \times 5 = \frac{1}{2} \times 30$. (E 4.1) All bachelors are unmarried.

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... and Matters of Fact

- Matters of Fact <u>cannot be known a priori</u>, and their truth or falsehood are equally conceivable:
 - e.g. The sun will rise tomorrow. (E 4.2)
 The sun will not rise tomorrow. (E 4.2)
 This pen will fall when released in air.
- Perhaps the closest modern term is <u>synthetic</u>: a proposition whose truth "is determined by the facts of experience" (Ayer, *LTL* 1971, p. 105).
- But Hume (like Ayer) presumes that the analytic/synthetic, a priori/a posteriori, and necessary/contingent distinctions all coincide.

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Hume's Epistemological Empiricism

- Lecture 1 distinguished between conceptual empiricism (all ideas are derived from experience) and epistemological empiricism (roughly, all knowledge is derived from experience).
 - Hume's Fork expresses the latter, with a refinement: all knowledge (or even evidence) of matter of fact is founded on experience.
 - This is entirely compatible with knowledge of relations of ideas being a priori, based on the inconceivability of their falsehood (or more precisely, recognition that a proposition's falsehood would imply a contradiction).

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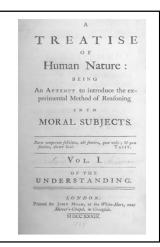
Is Hume's Fork Defensible?

- Though orthodox for many years, Hume's Fork has been seriously challenged more recently:
 - W. V. O. Quine's "Two Dogmas of Empiricism" (1951) attacked the analytic/synthetic distinction.
 - Saul Kripke's Naming and Necessity (1972) argued against identification of the a priori/a posteriori and necessary/contingent distinctions.
 - Hilary Putnam's "The Meaning of Meaning" (1975) attacked the idea that meaning resides in our "ideas" (or anything else "in the head").
 - Millican (2017) argues that Hume's Fork stands up surprisingly well to these and other challenges.

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3(c)

Hume's **Dubious** Dichotomy in the Treatise



The Progress of Hume's Logic

- Hume's Fork appears in *Enquiry* 4, but it is foreshadowed in the *Treatise*, where his logical framework is based on a theory of "philosophical" relations derived loosely from Locke's.
- Though very dubious, this theory of relations impacts on the argumentative structure of the Treatise (but fortunately, only quite superficially).
- For understanding Hume's philosophy in the Treatise as well as the Enquiry – Hume's Fork (based on the Conceivability Principle which is prominent in both works) is a more reliable guide.

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Locke on the Types of Relation

- Locke (*Essay* II xxv-xxviii) emphasises:
 - "Cause and Effect" (II xxvi 1-2)
 - "Relations of Time" (II xxvi 3-4)
 - "Relations of Place and Extension" (II xxvi 5)
 - "Identity and Diversity" (II xxvii)
 - "Proportional Relations" (II xxviii 1)
 - "Natural Relations" such as "Father and Son, Brothers ... Country-men" (Il xxviii 2)
 - "Instituted, or Voluntary" relations such as "General ..., Citizen, ... Client" (Il xxviii 3)
 - Various moral relations (II xxviii 4-16)

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Locke to Hume on Relations

LOCKE

HUME

"Agreement" Cause and effect Natural, Instituted, Moral Relations of time

Resemblance Cause and effect (see T 1.1.4.3, 1.1.4.5)

Relations of place

Proportional relations

Space and time

Identity Identity Diversity Contrariety

Proportions in quantity

Degrees in quality

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Hume's Dichotomy

- Hume starts *T* 1.3.1 by dividing his seven types of relation into two groups (T 1.3.1.1):
 - The Four "Constant" Relations Those relations that "depend entirely on the ideas, which we compare together" (i.e. resemblance, contrariety, degrees in quality, proportions in quantity or number);
 - The Three "Inconstant" Relations Those relations that "may be chang'd without any change in the ideas" (i.e. identity, relations of time and place, cause and effect).

A Taxonomy of Mental Operations

- Hume argues, rather simplistically, that his seven relations map neatly onto four different mental operations:
 - resemblance, contrariety, and degrees in quality are "discoverable at first sight" (T 1.3.1.2)
 - proportions of quantity or number are susceptible of demonstration (T 1.3.1.2-5)
 - identity and relations of time and place are matters of perception rather than reasoning (T 1.3.2.1)
 - causation is the only relation "that can be trac'd beyond our senses, [to] existences and objects, which we do not see or feel" (T 1.3.2.3)

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Hume's Dichotomy - the motive

- Hume gives his taxonomy of relations in order to facilitate his arguments:
 - That the Causal Maxim cannot be intuitively certain (*T* 1.3.3.2);
 - That relations of virtue and vice are not demonstrable (*T* 3.1.1.19).
- He seems to be arguing from the principle:
 - Any proposition that is intuitively or demonstratively certain can contain only constant relations.

9

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Demonstrability Is Not Analysable in Terms of Relations

■ It is now well understood that whether a complex proposition is logically provable will often depend on things like order, bracketing, and scope, not on the nature of the specific relations involved. The first of the formulae below is demonstrable, the second is not, but they contain exactly the same relations:

$$\exists x (\forall y Bxy) \rightarrow \forall y (\exists x Bxy)$$

$$\forall y (\exists x \, Bxy) \rightarrow \exists x (\forall y \, Bxy)$$

Constant relations

Inconstant relations

Perception Intuition

Sensory Perception

■ resemblance

■identity

■ contrariety

■ situations in time

■ degrees in quality

and place

Reasoning Demonstration

Probability

proportions in

■ causation *

quantity and number

* This explains why most of Treatise 1.3.2-14, nominally on "probability", focuses on causation and causal reasoning.

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The Failure of the Dichotomy

- Sadly, this is nonsense. There are many "intuitive" or "demonstrable" propositions involving identity, relations of time and place, or causation:
 - If A=B and B=C, then A=C.
 - Anything that lies inside a small building lies inside a building.
 - Every mother is a parent.
 - Anyone whose paternal grandparents have two sons, has an uncle.
- Garrett (2015, pp.92-3) attempts to defend Hume's theory, but this seems unlikely to work ...

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The Source of Hume's Mistake?

- I suggest that Hume confused, when considering propositions about objects:
 - Supervenience: what is implied by the properties of the objects themselves, independently of their relative situation etc.
 - Analyticity: what is implied by our ideas (or impressions) of the objects themselves, independently of ideas about their situation etc.

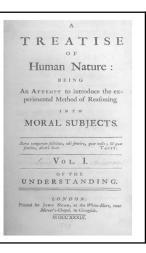
(See Bennett 1971: 250-6 and 2001: 242-4; also Millican 2017: §3, which highlights Hume's tendency to conflate objects and perceptions.)

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3(d)

Kinds of Evidence and Reasoning



"The Kinds of Evidence"

"It is common for Philosophers to distinguish the Kinds of Evidence into *intuitive*, *demonstrative*, *sensible*, *and moral*".

(Hume, Letter from a Gentleman, 1745, para. 26)

- By intuition, Hume means immediate selfevidence: the way we know that something is identical with itself, or that 2 is greater than 1.
- Sensible evidence means from the senses.
- Demonstrative and moral (or probable) reasoning are types of inference identified by John Locke ...

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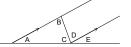
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Locke's Account of Reasoning

- In demonstrative reasoning, each link in the inferential chain is "intuitively" certain.
 - Characteristic of mathematical reasoning
 - Locke often cites the proof that a triangle's angles sum to two right angles (Essay IV i 2, IV xv 1 etc.):

A = E B = D

: A + B + C = E + D + C



 Hume too calls this "demonstrative", but also (in the Enquiry) "reasoning concerning relations of ideas".

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In probable reasoning, [some or all] links in the inferential chain are merely probable.

"Tell a Country Gentlewoman, that the Wind is South-West, and the Weather louring, and like to rain, and she will easily understand, 'tis not safe for her to go abroad thin clad, in such a day, after a Fever: she clearly sees the probable Connexion of all these, viz. South-West-Wind, and Clouds, Rain, wetting, taking Cold, Relapse, and danger of Death ..." (Locke, Essay IV xvii 4)

- Hume's Enquiry mainly calls this "moral reasoning" or "reasoning concerning matter of fact and existence" (we can say "factual inference" for short).
- For Locke, both types of reasoning involve rational perception of the links (Essay IV xvii 2).

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Hume on "Proof" and "Probability"

- Within the broad category of Lockean "probable arguments", Hume distinguishes between "proofs" and "probabilities" (*T* 1.3.11.2, *E* 6.0 n. 10, *E* 10.4).
 - A "proof" is an inference from <u>extensive</u> and <u>entirely consistent</u> experience, yielding inductive certainty.
 (For example, I have previously seen a million A's <u>all</u> followed by B's, then I see an A and predict a B.)
 - A (mere) "probable argument" is an inference from <u>mixed</u> experience, which therefore leaves some doubt.
- This is why Hume in the *Enquiry* prefers the term "reasoning concerning matter of fact" (rather than "probable reasoning") for the broader category.

A Common Misunderstanding

- Hume's Fork divides propositions between:
 - Relations of Ideas
 - Matters of Fact
- Enquiry 4.18 divides <u>arguments/reasonings</u> between:
 - "Reasoning concerning relations of ideas" (what Locke and Hume both call demonstrative reasoning)
 - "Reasoning concerning matter of fact" (what Locke and the *Treatise* call *probable* reasoning)
- This invites a misunderstanding (also encouraged by two other Humean claims, as we'll see), that demonstrative reasoning can only apply to "relations of ideas", and probable reasoning only to "matters of fact".

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But I maintain that Hume's distinction between demonstrative and factual arguments matches closely with the modern distinction between ...

- A deductive argument (in the informal sense) is an argument in which the premises logically guarantee the truth of the conclusion: it is not possible for the premises to be true and the conclusion to the false (at the same time).
 - There is also a related (but non-Humean) formal notion, where a deductive argument is one that is formally valid.
- An inductive argument is one that draws a conclusion about the unobserved, by extrapolating from past experience and observations.

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Problematic Humean Claim 1: "No Matter of Fact is Demonstrable"

- This claim (A 18, E 4.2, E 12.28, cf. T 1.3.7.3) is often interpreted as "no matter of fact can be the conclusion of a demonstrative argument".
 - But consider the following argument:
 - 1. All crows are birds.
 - 2. All birds are black.
 - :. All crows are black
 - This is clearly "demonstrative" on Locke's and Hume's criteria: the link from premises to conclusion is certain and self-evident (i.e. "intuitive"), depending on links between the ideas, not extrapolation from experience.

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An Important Distinction

- The swans argument is indeed <u>demonstrative</u> in that sense, but nobody of sense would say that it has <u>demonstrated</u> that all crows are black.
- To demonstrate <u>Q from P</u> is not the same as demonstrating <u>Q</u> full stop (without qualification). The latter requires that the argument's premises are known with certainty to be true.
- Hume denies that any matter of fact can be demonstrated (full stop). He nowhere denies that one matter of fact can be demonstrated from another matter of fact.

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Problematic Humean Claim 2: "Only Mathematics Has Demonstrations"

"There remain, therefore, algebra and arithemetic as the only sciences, in which we can carry on a chain of reasoning to any degree of intricacy, and yet preserve a perfect exactness and certainty." (*T* 1.3.1.5)

"It seems to me, that the only objects of the abstract sciences or of demonstration are quantity and number ..." (E 12.27)

- Hume's account of this limit is in terms of the relative clarity of mathematical and moral ideas.
- So if we want to find a posteriori demonstrative arguments of any complexity, we have to look to applied mathematics ...

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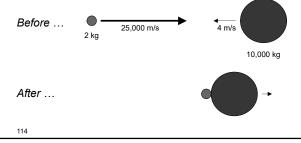
Hume on Applied Mathematics

Hume's most explicit discussion of "mixed mathematics" is in *Enquiry* Section 4:

"it is a law of motion, discovered by experience, that the moment or force of any body in motion [what we now call momentum] is in the compound ratio or proportion [i.e. is proportional to the product] of its solid contents [mass] and its velocity; and consequently, that a small force may remove the greatest obstacle ... if, by any contrivance ... we can encrease the velocity of that force, so as to make it an overmatch for its antagonist." (E 4.13)

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- The momentum of a body in motion is equal to its mass multiplied by its velocity.
- In any collision the total momentum of the colliding bodies (in any given direction) is conserved.



"Geometry assists us in the application of this law ... but still the discovery of the law itself is owing merely to experience, and all the <u>abstract reasonings</u> in the world could never [give us any] knowledge of it." (E 4.13)

"Abstract reasonings" encompasses demonstrative mathematics, as in the *Treatise*:

"Mathematics ... are useful in all mechanical operations ... But 'tis not of themselves they have any influence. ... Abstract or demonstrative reasoning ... never influences any of our actions, but only as it directs our

judgment concerning causes and effects." (T 2.3.3.2)

■ These passages show that Hume does not restrict "demonstrative" reasoning to the a priori, because it can be applied to empirical facts.

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Hume's Focus on Causal Reasoning

- Treatise Book 1 Part 3, the longest part of the work, is entitled "Of Knowledge and Probability".
 - T 1.3.1 deals with "Knowledge" (in a *strict* sense, requiring absolute certainty). Here he presents the dubious Dichotomy criticised in slides 92-102 above.
 - Building on this, at T 1.3.2.3 causation is identified as the only relation that can ground a "probable" inference from one object to another.
 - Accordingly the rest of *Treatise* 1.3 focuses on causation and causal reasoning, framed around the search for the impression from which the idea of causal necessity is derived ...

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117 118

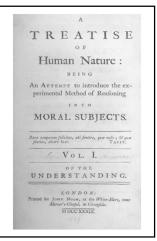
Second "Field": Causal Inference

- Treatise 1.3.4 argues that causal reasoning, if it is to result in real belief, must start from something perceived or remembered.
- *T* 1.3.5.1 sets out a corresponding agenda:

"Here therefore we have three things to explain, viz. First, The original impression. Secondly, The transition to the idea of the connected cause or effect [i.e. causal inference]. Thirdly, The nature and qualities of that idea [i.e. Hume's theory of belief]."

3(e)

Introducing *Treatise* 1.3



- At *T* 1.3.2.6-8, *individual* causes are (tentatively) found to be related to their effects by the relations of *contiguity* and *priority*.
- But a key element identified at *T* 1.3.2.11 as "NECESSARY CONNEXION" is more elusive.
 - At T 1.3.2.13, Hume decides to search two "neighbouring fields" to find this element's source:
 - First, he argues that the Causal Maxim is neither intuitively nor demonstratively certain (*T* 1.3.3.1-8).
 - Secondly, he turns to consider "why we conclude, that such particular causes must necessarily have such particular effects, and why we form an inference from one to another?" (*T* 1.3.3.9).

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T 1.3.5: "Of the impressions of the senses and memory"

- Memory "perceptions" are like impressions in being more strong and lively – with greater force and vivacity – than ideas of the imagination. As quoted earlier from T 1.3.5.7 (slide 44), Hume uses this to argue that force and vivacity constitutes assent.
- Hence memory "impressions", like those of the senses, can act as a "foundation of that reasoning, which we build ... when we trace the relation of cause and effect" (T 1.3.5.7), i.e. causal inference.
- The scene is now set for Hume's famous argument concerning induction, in *Treatise* 1.3.6 ...

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David Hume, 1711-1776



4. Hume's Argument concerning Induction, and More on Belief

Peter Millican
Hertford College, Oxford

Last Time ...

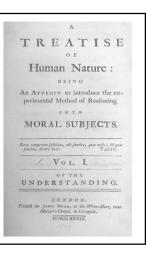
- We reviewed Hume's faculty psychology, within which some of his key arguments are framed.
- We discussed his logical theory, based overtly on a (dubious) theory of relations in the *Treatise*, but more fundamentally on the Conceivability Principle, which grounds "Hume's Fork" in the *Enquiry*.
- Hume inherits from Locke the distinction between demonstrative and probable reasoning, roughly equivalent to the modern distinction between (informally) deductive and inductive inferences.
 - But Hume adapts this terminologically, by distinguishing between proofs and (mere) probabilities.

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4(a)

The Role of Treatise 1.3.6



T 1.3.6: "Of the inference from the impression to the idea"

- This section contains the first presentation of Hume's famous argument concerning causal reasoning (or "induction"), which apparently raises the notorious "problem of induction".
- In context, however, this topic is reached as a "neighbouring field" in Hume's search for the origin of the idea of causal necessity, answering the question raised at *T* 1.3.3.9:

Why we conclude, that such particular causes must necessarily have such particular effects, and why we form an inference from one to another.

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Causal Inference Is Not A Priori (T)

- Hume starts by arguing that causal inference cannot be based only on surveying the objects concerned and contemplating our ideas of them, because we can clearly *conceive* of things coming out differently (*T* 1.3.6.1).
 - Here he evinces the [common, but debatable] assumption that any a priori inference would have to yield complete certainty.

"Tis therefore by EXPERIENCE only, that we can infer the existence of one object from that of another" (*T* 1.3.6.2).

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Experience and Constant Conjunction

- The kind of experience on which causal inference is based is repeated patterns of one thing, *A*, followed by another, *B*:
 - "Without any farther ceremony, we call the one *cause* and the other *effect*, and infer the existence of the one from that of the other." (*T* 1.3.6.2)
- Hume now announces major progress in his search for the origin of the idea of necessary connexion, with a comment which clearly refers back to *T* 1.3.2.11, and is best understood by comparing the texts:

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"Shall we then rest contented with these two relations of contiguity and succession, as affording a compleat idea of causation? By no means. An object may be contiguous and prior to another, without being consider'd as its cause. There is a NECESSARY CONNEXION to be taken into consideration; and that relation if of much greater importance, than any of the other two above-mention'd" (T 1.3.2.11)

"Thus in advancing we have insensibly discover'd a new relation betwixt cause and effect, ... This relation is their CONSTANT CONJUNCTION. Contiguity and succession are not sufficient to make us pronounce any two objects to be cause and effect, unless we perceive that these two relations are preserv'd in several instances. We may now see the advantage of quitting the direct survey of [causation], in order to discover the nature of that necessary connexion, which makes so essential a part of it." (T 1.3.6.3)

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- So at *T* 1.3.2.11, Hume is saying that *causation* requires *necessary connexion* in addition to [single-case] *contiguity* and *succession*. At *T* 1.3.6.3, he is saying that *causation* requires *constant conjunction* in addition i.e. the *contiguity* and *succession* have to be *repeated*, rather than being single-case.
- How can mere repetition give rise to the new idea of necessary connexion? Hume comments that this seems mysterious, but goes on to say (T 1.3.6.3):
 - "Perhaps 'twill appear in the end, that the necessary connexion depends on the inference, instead of the inference's depending on the necessary connexion".
 - This anticipates T 1.3.14.20, where inference is what gives rise to the impression of necessary connexion.

A Question of Faculties

Since causal reasoning from the impression of cause A to the idea of effect B is "founded on past experience, and on our remembrance of their constant conjunction" (T 1.3.6.4),

"the next question is, whether experience produces the idea [i.e. expectation of *B*] by means of the understanding or imagination; whether we are determin'd by reason to make the transition, or by a certain association and relation of perceptions?"

Hume famously goes on to argue that reason (i.e. the understanding) cannot ground this inference, concluding that it must be due to the imagination.

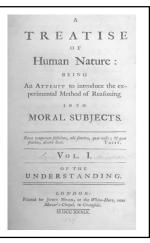
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4(b)

The Argument Concerning Induction (*T*, *A*, and *E*)



Hume's Alternative Explanation

■ We'll learn that neither demonstrative nor probable reason can ground inductive inference; so instead, it must arise from associative principles of the imagination [specifically, the principle which Hume later – at *T* 1.3.7.6 – calls *custom*]:

"When the mind, therefore, passes from the idea or impression of one object [the cause *A*] to the idea or belief of another [the effect *B*], it is not determin'd by reason, but by certain principles, which associate together the ideas of these objects, and unite them in the imagination."

(*T* 1.3.6.12)

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The Famous Argument (×3)

- In Treatise 1.3.6, Hume doesn't seem fully to appreciate his new argument's significance – it is mainly a staging post in his search for the origin and nature of our idea of causation, and is not explicitly presented as sceptical in nature.
- In the Abstract of 1740 its role is more general, and it takes a much more prominent position, as the centre-piece of Hume's "Chief Argument".
- The fullest and clearest version is in the Enquiry, Section 4, whose title acknowledges that it raises "Sceptical Doubts" (moreover the Enquiry had 11 editions, the Treatise and Abstract just one each).

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A Major Structural Change

- In *Treatise* 1.3.6, Hume's focus throughout is on a paradigm *causal inference*, whereby observation of A (the cause) leads to expectation of B (the effect). This is "the inference from the impression to the idea" of the section's title.
- In the Abstract and Enquiry, Hume aims to reveal the basis of "all reasonings concerning matter of fact", and starts by arguing that these "are founded on the relation of cause and effect" (A 8, E 4).
 - This significantly improves the argument, because now any conclusion drawn about causal inference automatically applies to all "reasoning concerning matter of fact", i.e. all probable inference (in the broad Lockean sense).

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■ This again strengthens Hume's argument, clarifying that he's not relying on mere *conceivability* that an inference might fail, but emphasising (far more than *T* 1.3.6.1) the *arbitrariness* of any conclusion:

"The mind can always *conceive* any effect to follow from any cause, and indeed any event to follow upon another: whatever we *conceive* is possible, at least in a metaphysical sense" (A 11)

"Were any object presented to us, and were we required to pronounce concerning the effect, which will result from it, without consulting past observation; after what manner, I beseech you, must the mind proceed in this operation? It must invent or imagine some event, which it ascribes to the object as its effect; and it is plain that this invention must be entirely arbitrary. ..." (E 4.9)

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UP: The Uniformity Principle

- Hume then focuses on the principle (UP) presupposed by such extrapolation:
 - "If reason determin'd us, it wou'd proceed upon that principle, that instances of which we have had no experience, must resemble those of which we have had experience, and that the course of nature continues always uniformly the same." (T 1.3.6.4)
 - This seems conditional: IF reason is involved,
 THEN the inference must be based on this principle.
 - Elsewhere, it's unconditional: "probability is founded on the presumption of a resemblance ..." (T 1.3.6.7)

Causal Inference Is Not A Priori (A, E)

■ In the *Abstract* and *Enquiry*, Hume imagines Adam (or ourselves, prior to experience), trying to predict the result of a billiard-ball collision:



how could he possibly make any prediction at all in advance of experience?





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The Need for Extrapolation

- So all inference to matters of fact beyond what we perceive or remember is based on causation, and our knowledge of causal relations (since it cannot be a priori) must come from experience.
- But learning from experience clearly takes for granted that observed phenomena provide a (positive) guide to unobserved phenomena.
- So we have to be able to extrapolate from observed to unobserved on the assumption that they resemble. Indeed this is what we do all the time, but is there a rational basis for doing so?

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UP in the Enquiry

- In the *Enquiry* UP is less explicitly stated:
 - We "put trust in past experience, and make it the standard of our future judgment ... all our experimental [experiential] conclusions proceed upon the supposition, that the future will be conformable to the past". (E 4.19)
 - No suggestion of conditionality here (likewise E 5.2: "in all reasonings from experience, there is a step taken by the mind" corresponding to UP).
 - It's vaguer than the original *Treatise* UP, and so more plausible: we expect the future to "resemble" (E 4.21) the past, but not to copy it exactly.

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The Role of the Uniformity Principle

- Hume need not be suggesting that we think of UP explicitly when making inductive inferences (and T 1.3.8.13 says we mostly don't: such inferences are typically immediate and unreflective).
- Rather, in making an inductive inference, we manifest the assumption of UP:
 - Inferring from observed to unobserved is ipso facto treating "the past [as a] rule for the future" (E 4.21)
 - Hence the question arises: can this assumption of UP be founded on reason (and if not, what is the alternative explanation for why we make it)?

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- Both forms of argument for UP are ruled out, demonstration by the Conceivability Principle:
 - "We can at least conceive a change in the course of nature; which ... proves, that such a change is not absolutely impossible [and thus yields] a refutation of any pretended demonstration against it." (*T* 1.3.6.5)
- And probable argument by circularity:
 - "probability ... is founded on the presumption of a resemblance betwixt [observed and unobserved]; and therefore 'tis impossible this presumption can arise from probability." (*T* 1.3.6.7)

(At *T* 1.3.6.6-7 Hume needs the lemma that probable inference is causal and hence dependent on UP: diagram below shows duplication in *Treatise* version)

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Argument Summary

- The logical structure of the argument can be represented in outline using the "founded on" relation (FO), together with:
 - p Probable/factual inference to the unobserved
 - c Causal reasoning
 - e (Reasoning from) Experience d Demonstration
 - u Uniformity Principle
- i Intuition
- R Reason

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s Sensation

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Can UP be Founded on Argument?

After stating UP in the *Treatise*, Hume immediately continues:

"In order therefore to clear up this matter, let us consider all the arguments, upon which such a proposition may be suppos'd to be founded; and as these must be deriv'd either from *knowledge* or *probability*, let us cast our eye on each of these degrees of evidence, and see whether they afford any just conclusion of this nature." (*T* 1.3.6.4)

■ By *knowledge*, Hume means *demonstration*, as becomes evident in the next sentence.

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The *Enquiry* is More Thorough

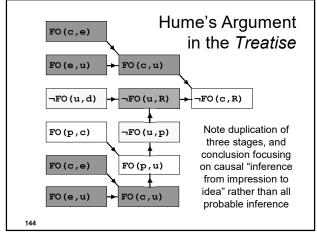
■ At *T* 1.3.6.4 and *A* 14, Hume assumes that *demonstration* and *probable inference* are the only possible foundations for UP. In the *Enquiry*, he first rules out *sensation* and *intuition*:

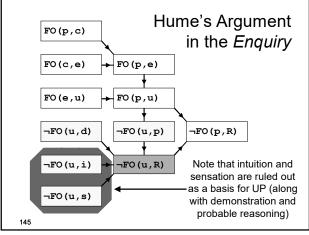
"there is no known connexion between the sensible qualities and the secret powers; and consequently, ... the mind is not led to form such a conclusion concerning their constant and regular conjunction, by any thing which it knows of their nature." (*E* 4.16)

"The connexion ... is not intuitive." (E 4.16)

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"Sceptical Doubts ..." (Enquiry 4)

■ Recall Hume's 1745 statement:

"It is common for Philosophers to distinguish the Kinds of Evidence into *intuitive*, *demonstrative*, *sensible*, *and moral*".

- His argument in the *Enquiry*:
 - Starts by showing that all factual inference is founded on the Uniformity Principle;
 - Then goes on to undermine all four possible evidential foundations for UP;
 - This looks very much like a sceptical strategy, as the title of the section suggests (in contrast to the *Treatise*, which evinces no such intent).

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The "Sceptical" Conclusion

"even after experience has inform'd us of [causal] constant conjunction, 'tis impossible for us to satisfy ourselves by our reason, why we shou'd extend that experience beyond those particular instances, which have fallen under our observation." (*T* 1.3.6.11, cf. 1.3.12.20)

"even after we have experience of the operations of cause and effect, our conclusions from that experience are *not* founded on reasoning, or any process of the understanding" (*E* 4.15)

"in all reasonings from experience, there is a step taken by the mind, which is not supported by any argument or process of the understanding" (*E* 5.2)

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Epistemology, or Cognitive Science?

- Does Hume view his discussion of induction, and its upshot, as being epistemological (concerning the possibility of good reasons for inductive belief) or psychological (concerning how our mind works)?
- The plausible answer here is: "both!":
 - Hume does indeed draw conclusions about how our mind works in making inductive inferences.
 - But his argument proceeds by <u>ruling out</u> the competing hypothesis that we suppose continuing uniformity on the basis of having good evidence for it. It shows that we do not in fact base our inferences on "reason", because it would be impossible for us to do so.

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But Is Hume Himself Sceptical?

■ In the final section of the *Enquiry*, Hume revisits his argument of Section 4, apparently putting it in the mouth of "the sceptic":

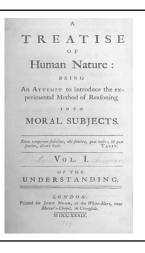
"The sceptic ... seems to have ample matter of triumph; while he justly insists ... that we have no argument to convince us" of UP (E 12.22)

■ Hume then (at E 12.23) goes on to answer the sceptic, suggesting that his extreme doubts are pointless, and ultimately advocating (in the final Part 3 of Section 12) a form of "mitigated scepticism" which looks rather like scientifically informed common sense.

- Summarising "the sceptic's" argument:
 - 1. All inference to the unobserved depends on UP.
 - 2. UP cannot be given any independent (e.g. non-circular) epistemological foundation.
 - .. We should give up inference to the unobserved.
- This way of arguing emphasises the sceptical premise 2, but Hume's response to "the sceptic" implicitly emphasises instead premise 1:
 - 1. All inference to the unobserved depends on UP.
 - .. We should take UP for granted.
- We shall be saying more about Hume's attitude to scepticism in due course ...

4(c)

More on Belief. Association, and Probability



Custom and Belief

- We have already seen (in Lecture 2) some of how Hume proceeds after Treatise 1.3.6, having identified custom as the crucial mechanism that determines our belief in the unobserved.
 - Paradigmatically, having seen A followed by B repeatedly, when we next see A, we automatically expect B. The force and vivacity of the impression of A is communicated through the customary associational link from A to B, thus changing our idea of B into a lively idea (i.e. a belief that B will occur).
- T 1.3.7.5 defines belief accordingly, after which Section 1.3.8 discusses "the causes of belief", and presents Hume's hydraulic theory (slides 44, 46).

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■ In the *Treatise*, Hume expresses the upshot of his theory in terms that are (misleadingly) hyperbolic:

"Thus all probable reasoning is nothing but a species of sensation. ... When I am convinc'd of any principle, 'tis only an idea, which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence." (T 1.3.8.12)

■ The Enquiry also stresses the involutariness of belief:

"belief is the necessary result of placing the mind in such circumstances. It is an operation of the soul, when we are so situated, as unavoidable as to feel the passion of love, when we receive benefits; ... All these operations are a species of natural instincts, which no reasoning ... is able, either to produce, or to prevent." (E 5.8)

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A Puzzle in Treatise 1.3.9

- At T 1.3.9.2, Hume notes that *causation* is not the only associative relation that conveys force and vivacity to a related idea: resemblance and contiguity do too (cf. T 1.1.4.1). And he asks why only causation - of the three - generates belief.
- Hume proposes a neat associative answer:
 - §3-4: causal inference enables us to construct a system of realities that we combine with the realities that we perceive or remember.
 - §6-7: resemblance and contiguity lead our minds capriciously in various directions; causation presents objects that "are fixt and unalterable" (quotes follow).

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"There is no manner of necessity for the mind to feign any resembling and contiguous objects; and if it [does], there is as little necessity for it always to confine itself to the same, ... [N]othing but pure caprice can determine the mind to form it; and that principle being fluctuating and uncertain, ... it [cannot] operate with ... force and constancy. The mind forsees and anticipates the change; and ... feels the looseness of its actions, and the weak hold it has of its objects." (T 1.3.9.6)

The relation of cause and effect has all the opposite advantages. The objects it presents are fixt and unalterable. The impressions of the memory never change in any considerable degree; and each impression draws along with it a precise idea, which takes its place in the imagination, as something solid and real, certain and invariable. The thought is always determin'd to pass from the impression to the idea, and from that particular impression to that particular idea, without any choice or hesitation." (T 1.3.9.7)

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Religion and the Imagination

- 71384 The "mummeries" of Roman Catholicism enhance belief in saints (etc.) by perception of statues and associational resemblance.
- 7 1.3.8.6 Relics have a similar effect, associated to saints through causation.
- T 1.3.9.9 Contiguity enhances the belief of pilgrims to Mecca or the Holy Land.
- T 1.3.9.12 Credulity of others' testimony is based in custom (cf. Enquiry 10, "Of Miracles").
- T 1.3.9.13-15 Lack of resemblance undermines belief in the afterlife; "in matters of religion men take a pleasure in being terrify'd", showing it's not really believed.
- T 1.3.9.16-19 Custom can create beliefs by "education" (i.e. repetitive indoctrination). "As liars, by the frequent repetition of their lies, come at last to remember them".

T 1.3.10: "Of the Influence of Belief"

- §3: A belief (unlike "an idle fiction") has a strong influence on our passions and actions, like that of an impression, which corroborates Hume's claim that belief is characterised by greater force and vivacity.
- §4: This also explains why the passions often enhance our beliefs (e.g. people are more likely to believe "quacks" if they present their claims dramatically).
- §§5-7: Poets give their work "an air of truth", and make reference to familiar myths "to produce a more easy reception in the imagination". Vividness is "convey'd, as by so many pipes or canals", to related ideas.
- §11-12: General rules can help to prevent our credulity being carried away by lively eloquence. [Added 1740]

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T 1.3.12: "Probability of Causes"

- §1: "what the vulgar call chance is nothing but a secret and conceal'd cause". *Hume is a determinist*.
- §2: Probable judgment is derived from custom, i.e. "the association of ideas to a present impression". Strength of association builds up gradually as more instances are observed, even if A is always followed by B.
- §§8-12: The hydraulic theory again after inconstant experience, the force and vivacity of our inductive expectation (on seeing *A*) is divided between the ideas of the various experienced effects (*B*, *C*, *D* etc.) in proportion to their past observed frequencies.
- §25: Reasoning from analogy involves weakening of resemblance (rather than of the union, i.e. constancy).

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Science: Seeking Hidden Causes

"The vulgar ... attribute the uncertainty of events to such an uncertainty in the causes, as makes them often fail of their usual influence, ... But philosophers observing, that almost in every part of nature there is contain'd a vast variety of springs and principles, which are hid, by reason of their minuteness or remoteness, find that 'tis at least possible the contrariety of events may not proceed from any contingency in the cause, but from the secret operation of contrary causes. This possibility is converted into certainty by farther observation, when they remark, that upon an exact scrutiny, a contrariety of effects always betrays a contrariety of causes, and proceeds from their mutual hindrance and opposition. ... From the observation of several parallel instances, philosophers form a maxim, that the connexion betwixt all causes and effects is equally necessary, and that its seeming uncertainty in some instances proceeds from the secret opposition of contrary causes."

(T 1.3.12.5; E 8.13 is almost verbatim)

T 1.3.11: "Probability of Chances"

- §2: Locke divides "human reason into knowedge and probability". But "One wou'd appear ridiculous, who wou'd say, that 'tis only probable the sun will rise to-morrow, or that all men must dye". So it fits better with common language if we talk of "probability" only in cases of genuine uncertainty (e.g. where the evidence is mixed), and use the word "proof" to talk of "those arguments, which are deriv'd from the relation of cause and effect, and which are entirely free from doubt and uncertainty".
- §§9-13: Gives the most detailed account of Hume's hydraulic theory of probabilistic judgment.

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■ If people find this theory hard to accept ...

"Let men be once fully perswaded of these two principles, That there is nothing in any object, consider'd in itself, which can afford us a reason for drawing a conclusion beyond it; and, That even after the observation of the frequent or constant conjunction of objects, we have no reason to draw any inference concerning any object beyond those of which we have had experience; I say, let men be once fully convinc'd of these two principles, and this will throw them so loose from all common systems, that they will make no difficulty of receiving any, which may appear the most extraordinary." (T 1.3.12.20)

This may suggest that Hume has belatedly noticed the potentially dramatic sceptical impact of his argument concerning induction!

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T 1.3.13: "Unphilosophical Probability"

- Some types of reasoning from "the same principles" (i.e. custom) are viewed with less respect:
 - §§1-2: Giving recent instances (which can be either observed causes [1] or effects [2]) more weight than remote instances, because they are more vivid in the memory;
 - §3: Fading of conviction through lengthy reasoning;
 - §7: "General rules" leading to PREJUDICE, e.g. continuing to believe "An *Irishman* cannot have wit, and a *Frenchman* cannot have solidity", even given clear counterexamples.
 - §§9-12: We can avoid such prejudice by using higher-level general rules (which are "attributed to our judgment; as being more extensive and constant") to counter our prejudices (which are attributed "to the imagination; as being more capricious and uncertain", T 1.3.13.11).

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David Hume, 1711-1776

5. Hume's Theory of Causation



Peter Millican Hertford College, Oxford

Hertford College, Oxford

Last Time ...

- We discussed in detail Hume's argument concerning induction, from both *Treatise* 1.3.6 and *Enquiry* 4.
 - The Treatise argument starts from his search for the impression of necessary connexion (since T 1.3.2.12).
 - Causal relations are not a priori, but learned through experience of constant conjunction (1.3.6.1-3). This, apparently, becomes the third component (with contiguity and succession) of the philosophical relation of causation (1.3.6.16).
 - Hume argues that induction takes for granted a principle of uniformity (UP) which cannot be "founded on" reason, but is instead due to custom, an operation of the imagination.
 - The Enquiry (but not the Treatise) presents this argument as sceptical, though Hume offers an answer (E 12.22-23).

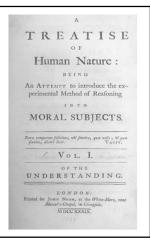
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5(a)

The Argument of Treatise 1.3.14 and Enquiry 7



The *Treatise* and *Enquiry* Versions

- Treatise 1.3.14 and Enquiry 7 are both entitled "Of the Idea of Necessary Connexion", and their overall purpose is the same: to hunt down the impression from which the idea of necessary connexion is derived (see T 1.3.14.1, E 7.5).
- Hume's presentation is progressively refined:
 - The 1740 Appendix adds paragraph T 1.3.14.12, arguing that we cannot "feel an energy, or power, in our own mind" – this is later expanded to E 7.9-20!
 - As with induction and free will, the Enquiry version is significantly more polished – and no less extensive – than the Treatise version. Hence it makes sense to accord most authority to that later version.

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Applying the Copy Principle

- Hume's *Copy Principle* (*T* 1.1.1.7, *E* 2.5) is that all simple ideas are copied from (or "are deriv'd from" and "exactly represent") impressions.
- The principle provides "a new microscope" (*E* 7.4) for investigating the nature of ideas, by finding the corresponding impressions.
- In "Of the Idea of Necessary Connexion" (both versions) Hume repeatedly refers or alludes to this principle see T 1.3.14.1, 4, 6, 10, 11, 12, 16, 20, 22; and E 7.4, 9, 15, 26, 28, 30.
- 1.3.14.1 summarises the argument to come ...

"What is our idea of necessity, when we say that two objects are necessarily $\emph{connected together.}\ \dots$ as we have no idea, that is not deriv'd from an impression, we must find some impression, that gives rise to this idea of necessity, if we assert we have really such an idea. ... finding that necessity is ... always ascrib'd to causes and effects, I turn my eye to two objects suppos'd to be plac'd in that relation; ... I immediately perceive, that they are contiguous in time and place, and that the object we call cause *precedes* the other we call effect. In no one instance can I go any farther, nor is it possible for me to discover any third relation betwixt these objects. I therefore enlarge my view to comprehend several instances; where I find like objects always existing in like relations of contiguity and succession. At first sight this seems to serve but little to my purpose. The reflection on several instances only repeats the same objects; and therefore can never give rise to a new idea. But upon farther enquiry I find, that the repetition is not in every particular the same, but produces a new impression, and by that means the idea, which I at present examine. For after a frequent repetition, I find, that upon the appearance of one of the objects, the mind is determin'd by custom to consider its usual attendant, and to consider it in a stronger light upon account of its relation to the first object. 'Tis this impression, then, or determination, which affords me the idea of necessity.

168 (*T* 1.3.14.1)

The Structure of the Argument

- Causes are contiguous to their effects, and prior but necessary connexion is also essential (T 1.3.2.11).
- We accordingly aim to understand this idea of power, force, or necessary connexion (T 1.3.14.4, E 7.3).
- 3. To do so, we need to find the *impression* from which that idea is copied (*T* 1.3.14.6, *E* 7.5).
- We cannot acquire an impression of power by observing the interaction of bodies (T 1.3.14.7-11, E 7.6-8).
- Nor do we get an internal impression of the power of our own minds, e.g. our will (T 1.3.14.12, E 7.9-20).
- Nor can we acquire a general idea of power without first having an idea of a particular power (T 1.3.14.13).

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- Some philosophers find the answer in occasionalism according to which everything that happens is caused directly by God's power (E 7.21, cf. T 1.3.14.9-10).
 - But this takes us "into fairy land ... and there we [cannot] trust our common methods of argument (E 7.24).
 - Besides, it is just as difficult to understand how we can acquire an idea of the power of God (E 7.25).
- 8. All negative results so far, but there are grounds for having another look (*T* 1.3.14.14, *E* 7.26)
- The impression does not come from *one* instance, but from *repeated* instances (*T* 1.3.14.15-16, *E* 7.27).
- 10. Repetition generates a new impression, not in the observed objects, but in the observing mind namely, the "determination of the mind" (T 1.3.14.20) or "customary transition of the imagination" (E 7.28) when we find ourselves making an inductive inference.

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Stage 2: A Family of Terms

"I begin with observing that the terms of efficacy, agency, power, force, energy, necessity, connexion, and productive quality, are all nearly synonimous; and therefore 'tis an absurdity to employ any of them in defining the rest." (*T* 1.3.14.4)

"There are no ideas, which occur in metaphysics, more obscure and uncertain, than those of *power*, *force*, *energy*, or *necessary connexion*, of which it is every moment necessary for us to treat in all our disquistions. We shall ... endeavour in this section, to fix ... the precise meaning of these terms" (*E* 7.3)

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Two Puzzles

- Why does Hume treat "efficacy", "power", "force", "energy", "necessity" etc. as virtual synonyms?
- Why, in his subsequent procedure of seeking for a single source impression, does he apparently assume that the idea of "necessary connexion" is simple, and hence cannot be explicitly defined? (This is made explicit at E 7.8 n. 12, which implies that the quest is for "a new, original, simple idea".)
- <u>Suggested solution</u>: Hume's interest lies in *a* single common element of the relevant ideas, what we might call the element of consequentiality see my "Against the New Hume" (2007), §2.2.

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Stage 3: Seeking the Impression

"as we have no idea, that is not deriv'd from an impression, we must find some impression, that gives rise to this idea of necessity, if we assert we have really such an idea" (*T* 1.3.14.1)

"the idea of efficacy ... must be deriv'd from ... some particular instances ... which make their passage into the mind by ... sensation or reflection. Ideas always represent their ... impressions; ..." (*T* 1.3.14.6)

"To be fully acquainted ... with the idea of power or necessary connexion, let us examine its impression; and in order to find the impression with greater certainty, let us search for it in all the sources, from which it may possibly be derived" (*E* 7.5)

Stage 4: No Such Impression from Observing Causation in Bodies

To explain causation, philosophers have resorted to all sorts of "principles of substantial forms, and accidents, and faculties", which "are not in reality any of the known properties of bodies, but are perfectly unintelligible and inexplicable. ... we may conclude, that 'tis impossible in any one instance to shew the principle, in which the force and agency of a cause is plac'd" (*T* 1.3.14.7)

Cartesians have concluded that "Matter ... is in itself entirely unactive, and depriv'd of any power, by which it may ... communicate motion". Hence "the power, that [does so] must lie in the DEITY ... who ... bestows on [matter] all those motions" (T 1.3.14.9 – see Stage 7)

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"When we look about us towards external objects, and consider the operation of causes, we are never able, in a single instance, to discover any power or necessary connexion; any quality, which binds the effect to the cause, and renders the one an infallible consequence of the other. We only find, that the one does actually, in fact, follow the other. The impulse of one billiard-ball is attended with motion in the second. This is the whole that appears to the outward senses. The mind feels no sentiment or inward impression from this succession of objects: Consequently, there is not, in any single, particular instance of cause and effect, any thing which can suggest the idea of power or necessary connexion." (E 7.5)

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Is the "Key Move" Plausible?

- Recall Hume's "Adam" thought-experiment (A 11, *E* 4.6), where he convincingly claims that without prior experience, Adam could have no idea what events (e.g. impact of one billiard ball on another) would have what effects (e.g. communication of motion).
- This supposedly proves that Adam has no impression of power or necessity from observing the motion of the first billiard ball. For if he had such an impression (Hume now says), then Adam would be able to predict, in advance of the collision, what the effect would be.
 - But it seems an implausibly strong requirement on an impression of power, that it should yield something like a priori knowledge of cause and effect!

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Repeating the Key Move (*Enguiry*)

- In the Enquiry, Hume applies his Key Move six times to rule out various potential internal sources of the impression of necessary connexion.
- First he considers "the influence of volition over the organs of the body" (E 7.10).
- Then he moves on to consider the mind's power over its own ideas (E 7.16).
- In each case he gives three arguments to show that we have no such impression.

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Hume's "Key Move" in the *Enquiry*

■ At E 7.7, Hume introduces a form of argument that he will be repeating: let's call this his "Key Move":

"From the first appearance of an object, we never can conjecture what effect will result from it. But were the power or energy of any cause discoverable by the mind, we could foresee the effect, even without experience; and might, at first, pronounce with certainty concerning it, by the mere dint of thought and reasoning." (E 7.7)

■ There is a hint of this move in the 1739 *Treatise*, but only once – at T 1.3.14.13. Another is at T 1.3.14.12, added in the 1740 Appendix.

Stage 5: An Internal Impression?

"Some have asserted, that we feel an energy, or power, in our own mind; ... The motions of our body, and the thoughts and sentiments of our mind, (say they) obey the will; nor do we seek any farther to acquire a just notion of force or power." (T 1.3.14.12 – 1740)

"Since, therefore, external objects as they appear to the senses, give us no idea of power ... by their operation in particular instances, let us see, whether this idea be derived from reflection on the operations of our own minds, and be copied from any internal impression", which "arises from reflecting on ... the command which is exercised by [our] will, both over the organs of the body and the faculties of the soul." (E 7.9)

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5.1: Our Power over our Body

- First, Hume points out that we have no understanding of "the union of soul with body" (E 7.11).
- Secondly, we cannot understand why we have voluntary control over some parts of the body, but not over others (E 7.12-13).
- Thirdly, our voluntary control operates not directly on our limbs (etc.), but on muscles and nerves (etc.) of which we are usually entirely ignorant (E 7.14).

5.2: Our Power over our Mind

- First, we do not understand "the nature of the human soul", "the nature of an idea", or how one can produce the other (£ 7.17).
- Secondly, we can only discover through experience the limits of our command over our thoughts and passions (E 7.18).
- Thirdly, this self-command varies over time, in ways that we cannot explain and learn only through experience (E 7.19).

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The Earliest Key Move (*Treatise*)

"... We must distinctly and particularly conceive the connexion betwixt the cause and effect, and be able to pronounce, from a simple view of the one, that it must be follow'd or preceded by the other. This is the true manner of conceiving a particular power in a particular body: and a general idea being impossible without an individual; where the latter is impossible, 'tis certain the former can never exist. Now nothing is more evident, than that the human mind cannot form such an idea of two objects, as to ... comprehend distinctly that power or efficacy, by which they are united. Such a connexion wou'd amount to a demonstration, and wou'd imply the absolute impossibility for the one object not to follow, or to be conceiv'd not to follow upon the other: Which kind of connexion has already been rejected in all cases." (*T* 1.3.6.14)

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Stage 8: Having Another Look

Treatise

"Thus ... when we speak of a necessary connexion betwixt objects, and suppose ... an efficacy or energy, with which any of these objects are endow'd; in all these expressions, so apply'd, we have really no distinct meaning, and make use only of common words, without any clear and determinate ideas. But as 'tis more probable, that these expressions do here lose their true meaning by being wrong apply'd, than that they never have any meaning; 'twill be proper to bestow another consideration on this subject, to see if possibly we can discover the nature and origin of those ideas, we annex to them." (T 1.3.14.14)

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Stage 6: No Abstract Idea (*Treatise*)

- At 7 1.3.14.13, Hume gives an argument to deny that we can acquire a general (or abstract) idea of power without first acquiring a specific idea of power.
- This refers back to his account of such ideas in *T* 1.1.7 (but absent from the *Enquiry*), which implies:

"that general or abstract ideas are nothing but individual ones taken in a certain light, ... If we be possest, therefore, of any idea of power in general, we must also be able to conceive some particular species of it; and as power cannot subsist alone, ... we must be able to place this power in some particular being, and conceive that being as endow'd with a real force and energy, by which such a particular effect necessarily results from its operation. ..."

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Stage 7: Rejecting Occasionalism

- In the *Treatise*, we saw Hume criticising "Cartesian" (Malebranche's) occasionalism at T 1.3.14.9-10.
- The Enquiry critique is more extensive, ultimately rejecting ocasionalism on the grounds that:
 - It is too bold and bizarre to be credible: "We are got into fairy land, long ere we have reached the last steps of our theory, and *there* we have no reason to trust our common methods of argument" (*E* 7.24).
 - Malebranche can't explain the origin of our idea of necessity as coming from God, since "we are ... ignorant of the manner ... by which a mind, even the supreme mind, operates ..." (E 7.25)

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Enquiry

"It appears, that, in single instances of the operation of bodies, we never can ... comprehend any force or power ... The same difficulty occurs in contemplating the operations of mind on body ... [and the] authority of the will over its own faculties and ideas ... So ... there appears not, throughout all nature, any one instance of connexion, which is conceivable by us And as we can have no idea of any thing, which never appeared to our outward sense or inward sentiment, the necessary conclusion *seems* to be, that we have no idea of connexion or power at all, and that these words are absolutely without any meaning, ... either in philosophical reasonings, or common life.

But there still remains one method of avoiding this conclusion, and one source which we have not yet examined." (*E* 7.26-27)

Stage 9: Repeated Instances

Treatise

"Tis not, therefore, from any one instance, that we arrive at the idea of cause and effect, of a necessary connexion of power, of force, of energy, and of efficacy.

But ... suppose we observe several instances, in which the same objects are always conjoin'd together, we immediately conceive a connexion betwixt them, and begin to draw an inference from one to another. This multiplicity of resembling instances, therefore, constitutes the very essence of power or connexion, and is the source, from which the idea of it arises."

(T 1.3.14.15-16)

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Stage 10: Identifying the Impression

Treatise

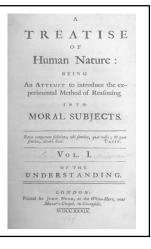
"after we have observ'd the resemblance in a sufficient number of instances, we immediately feel a determination of the mind to pass from one object to its usual attendant, and to conceive it in a stronger light upon account of that relation. This determination is the only effect of the resemblance; and therefore must be the same with power or efficacy, whose idea is deriv'd from the resemblance. ... Necessity, then, is the effect of this observation, and is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another."

(*T* 1.3.14.20)

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5(b)

The "Impression of Necessary Connexion"



Enquiry

Enquiry

"When any natural object or event is presented, it is impossible for us ... to discover, or even conjecture,

without experience, what event will result from it ... Even

after one instance \dots , we are not entitled to form a general rule, or foretel what will happen in like cases \dots But when

one particular species of event has always, in all instances,

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

It appears, then, that this idea of a necessary connexion

among events arises from a number of similar instances

which occur, of the constant conjunction of these events"

(E7.26-27)

been conjoined with another, we make no longer any scruple of foretelling one upon the appearance of the other,

some connexion between them; some power ...

"there is nothing in a number of instances, different from every single instance, which is supposed to be exactly similar; except only, that 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 connexion, 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 connexion. ... When we say, therefore, that one object is connected with another, we mean only, that they have acquired a connexion in our thought, and give rise to this inference, by which they become proofs of each other's existence: A conclusion, which is somewhat extraordinary; but which seems founded on sufficient evidence." (E7.28)

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Notorious "Subjectivism" about Necessity

- "Necessity, then, ... is nothing but an internal impression of the mind" (T 1.3.14.20);
- "necessity is something, that exists in the mind, not in objects" (T 1.3.14.22);
- "the necessity or power ... lies in the determination of the mind ... The efficacy or energy of causes is [not] plac'd in the causes themselves ...; but belongs entirely to the soul ... 'Tis here that the real power of causes is plac'd, along with their connexion and necessity. (T 1.3.14.23);
- "power and necessity ... are ... qualities of perceptions, not of objects, and are internally felt by the soul, and not perceiv'd externally in bodies" (T 1.3.14.24);
- See also *T* 1.4.7.5, 2.3.1.4, 2.3.1.6.

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Misunderstanding and Bias

- Hume is not saying that we perceive some kind of objective necessity within the operations of the mind, but not body (see T 1.3.14.29). Rather ...
- We find ourselves inferring from A to B, and this relation "in the mind" is all we can understand by "necessity" (whether in body or mind). We can't even make sense of anything more.
- There is a natural bias against this view: "the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions, which they occasion" (T 1.3.14.25).
 - Hume is criticising this propensity, not endorsing it!

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Is the Impression a Feeling?

"we ... feel a determination of the mind to pass from one object to its usual attendant" (T 3.1.14.20, cf. 29)

"This connexion ... 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 connexion." (*E* 7.28).

- Stroud (1977, pp. 85-6) takes the impression to be a "feeling of determination" that happens to accompany the operation of customary inference. But the Enquiry talks of "transition" in this context (as on the next slide), never "determination".
- Besides, it's not obvious that there is any characteristic feeling of inference (cf. T 1.3.8.2, 13; 1.3.12.7). And even if there were, "No internal impression has an apparent energy, more than external objects" (T 1.3.14.12, cf. E 7.15 n. 13).

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Reflective Awareness of Inference?

- If Hume had in mind Lockean "reflection" internal monitoring of mental activity (as hinted by E 1.13-14, 7.9), rather than literal feeling – then his "impression" could be our awareness of making causal inferences.
- This would fit with the idea that mental *inference* is the only form of genuine *consequentiality* of which we can be intimately aware: "that inference of the understanding, which is the only connexion, that we can have any comprehension of" (*E* 8.25)
- This ingeniously finds the source of our consequential thinking about *causation* in our own *inferential* behaviour. When Hume calls his impression a "feeling", he is probably being misled by his pervasive assumption that all "impressions of reflection" are feelings.

The Confused Vulgar Idea of Power

- Another common instance of "the same propensity" is our natural tendency to assign spatial location to our impressions of sounds and smells.
 - T 1.3.14.25 includes a footnote to 1.4.5.14, which says:
 "All this absurdity proceeds from our endeavouring to bestow a place on what is utterly incapable of it".
- In the Enquiry, Hume alludes to a similar projective tendency "to apply to external objects every internal sensation, which they occasion" (E 7.29 n. 17).
 - The same note also mentions "the sentiment of a *nisus* or endeavour" which "enters very much into" the vulgar idea of physical power (*E* 7.29 n. 17, cf. 7.15 n. 13).

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From "Determination" (*Treatise*) to "Transition" (*Enquriry*) of Thought

"Tis this impression, then, or *determination*, which affords me the idea of necessity." (*T* 1.3.14.1)

"Necessity, then, ... is nothing but an internal impression of the mind, or a determination to carry our thoughts from one object to another." (*T* 1.3.14.20)

"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 connexion" (*E* 7.28)

"We ... feel a new sentiment or impression, to wit, a customary connexion in the thought ... and this ... is the original of that idea which we seek for ... this customary connexion or transition of the imagination" (E 7.30)

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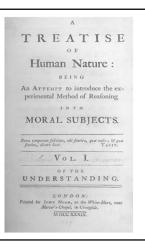
What Happened to the Key Move?

- Awareness of inference, rather than a feeling, helps to explain why Hume's own candidate "impression" is not rejected for failing to satisfy his "Key Move" (i.e. yielding demonstrative causal knowledge a priori).
- The Key Move occurs only in the first part of Hume's argument, *before* he has considered *repetition* (and thus identified his own "impression" of necessity).
 - Hume's use of the criterion makes sense there given his standard assumption (e.g. T 1.3.6.1, A 11, E 4.18) that any legitimate inference prior to experience (e.g. from observing a single A) must yield demonstrative certainty.
 - Once repetition is observed, the causal inference from A to B is made through custom, and is no longer a priori.

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5(c)

The Two
Definitions of
Cause and of
Necessity



(T1.3.14.31)

Two "Definitions of Cause"

- Hume's discussions of "the idea of necessary connexion" both famously culminate with his paired definitions (at *T* 1.3.14.31 and *E* 7.29).
 - The first definition is based on regular succession of the "cause" A followed by "effect" B (plus contiguity in the Treatise).
 - The second definition is based on the mind's tendency to infer B from A.
- Note that "a cause" here is a *specific* "object" (e.g. an instance of *A*), but that its being a cause depends on the *regular sequence* of *A*'s and *B*'s (hence on objects "foreign to the cause").

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"There may two definitions be given of this relation, which are only different, by their presenting a different view of the same object ... We may define a CAUSE to be 'An object precedent and contiguous to another, and where all the objects resembling the former are plac'd in like relations of precedency and contiguity to those objects, which resemble the latter.' If this definition be esteem'd defective, because drawn from objects foreign to the cause, we may substitute this other definition in its place, viz. 'A CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other.' Shou'd this definition also be rejected for the same reason, I know no other remedy, than that the persons, who express this delicacy, should substitute a juster definition in its place. But for my part I must own my incapacity for such an undertaking."

this we have experience. Suitably to this experience, therefore, we may define a cause to be <u>an object</u>. followed by another, and where all the objects, similar to the first, are followed by objects similar to the <u>second</u>. Or in other words, where, if the first object had not been, the second never had existed. 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 another definition of cause; and call it, <u>an object followed by another, and whose appearance always conveys the thought to that other.</u>"

"Similar objects are always conjoined with similar. Of

(E7.29)

(Note that "Or in other words ... existed" gloss seems to be a mistake – it is not saying the same thing!)

Having once acquired the idea, we need not restrict its application only to the manifest sorts of constant

■ Hume clearly thinks that we can – and should – go

beyond these natural cases by systematising our

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"But the Definitions Aren't Coextensive!"

- Hume is clearly aware that our inferences don't always correspond with genuine constant conjunctions. So it seems rather unlikely that he intends both definitions to specify necessary and sufficient conditions.
 - His "genetic" conception of meaning suggests a different view. The meaning of causal necessity can only be understood through the "impression" from which its idea is derived (perhaps most charitably interpreted as reflective awareness of our own inferential behaviour in response to observed constant conjunctions).
 - The second definition, accordingly, can be seen as specifying a paradigm case in which we experience this "impression" and thus can acquire the idea.

application of the idea. For he immediately goes on to propose "Rules by which to judge of causes and effects" (*T* 1.3.15), and he has already advocated:

conjunctions that naturally generate it.

- Searching for hidden causes (*T* 1.3.12.5);Working out high-level general rules (*T* 1.3.13.11-12).
- Accordingly the two definitions can be seen as complementary rather than conflicting. The second definition identifies the relevant idea; the first summarises the criteria for applying it.

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Applying the Definitions

- Hume goes on to draw some important "corollaries" from his definitions, and then his "rules" of T 1.3.15.
- In later sections, he is especially keen to establish causality and necessity in respect of the mind:
 - In principle, matter could be the cause of thought (T 1.4.5.29-32, "Of the Immateriality of the Soul")
 - The "doctrine of necessity" applies as much to the mental world as to the physical world (T 2.3.1-2 and E 8 "Of Liberty and Necessity")
- Both turn on the claim that there is nothing to causal necessity beyond the two definitions (thus refuting the once-fashionable "New Hume" interpretation).

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Corollaries of the Definitions

- "All causes are of the same kind ... For the same reason we must reject the distinction betwixt cause and occasion ... If constant conjunction be imply'd in what we call occasion, 'tis a real cause. If not, 'tis no relation at all ..." (T 1.3.14.32) So what Nicolas Malebranche thought of as mere occasional causes are real causes.
- "there is but one kind of necessity ... and ... the common distinction betwixt moral and physical necessity is without any foundation in nature." (T 1.3.14.33) So Samuel Clarke is refuted with regard to liberty and necessity.
- It is now easy to see why the Causal Maxim of T 1.3.3 is not intuitively or demonstratively certain. (T 1.3.14.35)
- "we can never have reason to believe that any object exists, of which we cannot form an idea." (*T* 1.3.14.36)

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The Two Definitions of Necessity

In his discussions "Of Liberty and Necessity", in both the *Treatise* and *Enquiry*, Hume gives two definitions of necessity, parallel to the earlier definitions of cause:

"Necessity may be defined two ways, conformably to the two definitions of *cause*, of which it makes an essential part. It consists either in the constant conjunction of like objects, or in the inference of the understanding from one object to another." (*E* 8.27; *T* 2.3.2.4 is very similar)

■ In Hume's index to Essays and Treatises on Several Subjects (which includes the two Enquiries) "CAUSE and EFFECT ... Its Definition" refers to E 7.29 and 8.25 n. 19; "NECESSITY, its definition" refers to E 8.5 and 8.27.

So he clearly takes both pairs of definitions to be significant.

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Where is the Notorious Subjectivism?

- Hume's first definition of cause and his first definition of necessity define both of these in terms of constant conjunction an *objective* matter which is not merely "in the mind". But what about all those famous subjectivist passages from *T* 1.3.14.19-28?
- Hume seems to have decided (correctly) that they were a serious mistake! For the Enquiry contains only two passages seeming to suggest that causal necessity is subjective, and neither really does so.
 - These are shown on the next two slides, with the apparently subjectivist parts highlighted. The underlined parts clarify that the subjectivism is *merely* apparent.

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- a) E 8.22 n. 18 is in a footnote largely copied verbatim from T 2.3.2.2, which aims to explain "the prevalence of the doctrine of liberty". And it clearly describes necessity in terms of potential (not actual) inference:
 - "... The necessity of any action, whether of matter or of mind, is not, properly speaking, a quality in the agent, but in any thinking or intelligent being, who may consider the action; and it consists chiefly in the determination of his thoughts to infer the existence of that action from some preceding objects; ... however we may imagine we feel a liberty within ourselves, a spectator can commonly infer our actions from our motives and character; and even where he cannot, he concludes in general, that he might, were he perfectly acquainted with every circumstance of our situation and temper, and the most secret springs of our complexion and disposition. Now this is the very essence of necessity, according to the foregoing doctrine."

b) E 7.28 seems subjectivist, but it occurs in the paragraph immediately before the two definitions of cause. As soon as the definitions have been presented, an alternative objectivist understanding becomes available:

"When we say, therefore, that one object is connected with another, we mean only, that they have acquired a connexion in our thought, and give rise to this inference, ..." (E 7.28)

<E 7.29: Two definitions of cause>

■ We say, for instance, that the vibration of this string is the cause of this particular sound. But what do we mean by that affirmation? We either mean, that this vibration is followed by this sound, and that all similar vibrations have been followed by similar sounds: Or, that this vibration is followed by this sound, and that upon the appearance of one, the mind anticipates the senses, and forms immediately an idea of the other. We may consider the relation of cause and effect in either of these two lights; but beyond these, we have no idea of it. (£7.29)

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David Hume, 1711-1776



6. From Book 1 Part 3 to Part 4: "Sceptical Systems of Philosophy"

Peter Millican
Hertford College, Oxford

From Last Time ...

- We studied *Treatise* 1.3.14, the culmination of Hume's search for the source of the idea of causal necessity, which largely structures Book 1 Part 3.
- We noted some interpretative complications, which can be largely resolved by reference to Hume's later presentation of the same topic in *Enquiry* 7, also titled "Of the Idea of Necessary Connexion".
- Despite some misleading passages, Hume seems clearly to be a believer in *objective* causal necessity (understood in terms of regularity). He identifies what he takes to be a *legitimate* impression for the crucial idea, and advocates causal investigation ...

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6(a)

Causal Rules, to Liberty and Necessity

TREATISE

OF

Human Nature:

BEING

An ATTEMPT to introduce the experimental Method of Reafoning

INTO

MORAL SUBJECTS.

Rese temporom filialism, that finites, que vollis 1 ft que finitus, dure lists.

VOLL L. TACIT.

VOLL L. MERCETT.

OF THE

UNDERSTANDING.

Printed for Jones Nowa, at the Hillier-Hers, near Mercet-Cloppel, in Changlish.

MDCCXXXIX.

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The Rules of *Treatise* 1.3.15

- Following the two definitions of cause and their corollaries (at the end of *Treatise* 1.3.14), Hume in the next section gives his (clearly objectivist) "Rules by which to judge of causes and effects":
 - "Since therefore 'tis possible for all objects to become causes or effects to each other, it may be proper to fix some general rules, by which we may know when they really are so." (T 1.3.15.1, emphasis added)
 - "[Phenomena] in nature [are] compounded and modify'd by so many different circumstances, that ... we must carefully separate whatever is superfluous, and enquire by new experiments, if every particular circumstance of the first experiment was essential to it". (T 1.3.15.11)

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- "1. The cause and effect must be contiguous in space and time.
- 2. The cause must be prior to the effect.
- 3. There must be a constant union betwixt the cause and effect. 'Tis chiefly this quality, that constitutes the relation.
- 4. The same cause always produces the same effect, and the same effect never arises but from the same cause. ...
- 5. ... where several different objects produce the same effect, it must be by means of some quality, ... common amongst them ...
- $6.\ \dots$ The difference in the effects of two resembling objects must proceed from that particular, in which they differ. $\ \dots$
- 7. When any object encreases or diminishes with the encrease or diminution of its cause, 'tis to be regarded as a compounded effect, deriv'd from the union of the several different effects, which arise from the several different parts of the cause."
- 8. ... an object, which exists for any time in its full perfection without any effect, is not the sole cause of that effect ..."

(T 1.3.15.3-10)

Quantitative Powers in the *Enquiry*

- In the Enquiry, Hume recognises that mechanical causation cannot be analysed in the crude discrete manner of his rules, but involves continuously varying forces: theoretical entities that can be quantified, and enter into equations describing objects' behaviour:
 - "it is a law of motion, discovered by experience, that the moment or force of any body in motion is in the compound ratio or proportion of its solid contents and its velocity; ..." (E 4.13)
 - Two footnotes in *Enquiry* 7 (7.25 n.16, 7.29 n.17) help to bring such quantitative "powers" within the scope of Hume's theory of causation, generalising beyond constant conjunction and the rules of *Treatise* 1.3.15.

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"We find by experience, that a body at rest or in motion continues for ever in its present state, till put from it by some new cause; and that a body impelled takes as much motion from the impelling body as it acquires itself. When we call this a *vis inertiae*, we only mark these facts, without pretending to have any idea of the inert power; in the same manner as, when we talk of gravity, we mean certain effects, without comprehending that active power." (*E* 7.25 n.16)

"According to these explications and definitions, the idea of power is relative as much as that of cause; and both have a reference to an effect, or some other event constantly conjoined with the former. When we consider the unknown circumstance of an object, by which the degree or quantity of its effect is fixed and determined, we call that its power: And accordingly, it is allowed by all philosophers, that the effect is the measure of the power. ... The dispute whether the force of a body in motion be as its velocity, or the square of its velocity; ..." (E 7.29 n. 17)

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- Hume's main point in *T* 1.3.16 is to argue in favour of his "system concerning the nature of the understanding" (§4) by showing that "it will equally account for the reasonings of beasts".
 - "let any philosopher make a trial, and endeavour to explain that act of the mind, which we call *belief*, and give an account of the principles, from which it is deriv'd, independent of the influence of custom on the imagination, and let his hypothesis be equally applicable to beasts as to the human species; and after he has done this, I promise to embrace his opinion." (§8)
- "Reason" in both humans and animals "is nothing but a wonderful and unintelligible instinct" that enlivens our ideas according to custom (§9).

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Of Liberty and Necessity

- In the Treatise, the discussion "Of Liberty and Necessity" is postponed until late in Book 2, and this has led to its unfortunate neglect by interpreters. In the Enquiry, it is appropriately placed immediately after "Of the Idea of Necessary Connexion".
- Hume argues here that <u>exactly the same necessity</u> that applies in the physical realm applies equally in the moral realm (a point we saw made also in the corollaries to his definitions at T 1.3.14.32-33).
 - This depends on <u>our understanding of necessary</u> <u>connexion as being completely exhausted by the two</u> <u>factors of constant conjunction and customary inference</u>, both of which can be seen to apply in the moral realm.

"Of the Reason of Animals" (T 1.3.16)

- Significantly, *three* parts of the *Treatise* (1.3, 2.1, and 2.2) end with sections comparing humans with animals (and the last paragraph of *T* 2.3.9 says the similarity regarding "the will and direct passions" is too "evident" to need discussing).
 - Hume is a "biological naturalist", in the sense of seeing humans as continuous with other animals, and operating by similar principles (as opposed to being separate beings "made in the image of God").
 - A century later, Charles Darwin was reading Hume "Of the reason of animals" (Enquiry 9) around the time he came up with the theory of natural selection.

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A Positive View of Causation

Later in the *Treatise*, Hume continues to use his account of causation to positively identify causal relations (so it is certainly *not* a sceptical or debunking account, as sometimes claimed):

"all objects, which are found to be constantly conjoin'd, are *upon that account only* to be regarded as causes and effects. ... the constant conjunction of objects constitutes *the very essence* of cause and effect ..."

(T 1.4.5.32, emphasis added)

"two particulars [are] essential to necessity, *viz.* the constant *union* and the *inference* of the mind ... wherever we discover these we must acknowledge a necessity." (*T* 2.3.1.4)

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No Further Idea of Causal Necessity

- "[Opponents] ... must allow ... union and inference with regard to human actions. They will only deny, that this makes the whole of necessity. But then they must shew, that we have an idea of something else in the actions of matter; which, according to the foregoing reasoning, is impossible." (A 34)
- "I define necessity two ways, conformable to the two definitions of cause, ... I place it either in the constant union ... of like objects, or in the inference of the mind ... [Opponents] ... will maintain there is something else in the operations of matter. ... [I assert] that we have no idea of any other connexion in the actions of body" (T 2.3.2.4)
- "[Opponents] ... will maintain it possible to discover something farther in the operations of matter. ... [I assert] that there is no idea of any other necessity or connexion in the actions of body" (E 8.27)

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"A New Definition of Necessity"

- Hume presents this argument as turning crucially on his distinctive definition(s) of necessity:
 - "Our author pretends, that this reasoning puts the whole controversy in a new light, by giving a new definition of necessity." (A 34, cf. T 2.3.1.18, E 8.2)
- This requires that his definitions be understood as specifying "the very essence of necessity", an emphatic phrase used four times in this context (*T* 2.3.1.10, 2.3.2.2; *E* 8.22 n. 18, 8.25 n. 19).
 - This important application of his definitions of necessity might well be Hume's primary motivation for investigating the idea of necessity connexion!

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Treatise Book 1 Part 4 "Of the Sceptical and Other Systems of Philosophy"

- We have seen that *Treatise* Book 1 Part 3 was mostly focused on causation and associated topics: causal reasoning, belief, probability, and the source of the idea of necessary connexion or causal power.
- Book 1 Part 4 has a radically different flavour, starting with an extreme sceptical argument in Section 1.4.1, scepticism about external objects in 1.4.2-4 and about mental substance in 1.4.5, then denying a substantial self in 1.4.6, and leading ultimately to what looks like a sceptical meltdown in the concluding Section 1.4.7.

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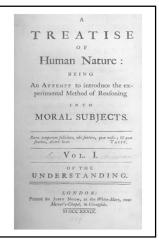
Scepticism with regard to the Senses

- Treatise 1.4.2, "Of Scepticism with regard to the Senses", is notoriously complex and confusing, but widely respected as deep and insightful.
- Hume starts out noting that the sceptic continues to believe even when he discovers that his beliefs cannot be defended. Hume made this point about his "scepticism with regard to reason" at T 1.4.1.7, and now applies it to the belief in body:

"We may well ask, What causes induce us to believe in the existence of body? But 'tis in vain to ask, Whether there be body or not? That is a point, which we must take for granted in all our reasonings." (T 1.4.2.1). 6(b)

Treatise 1.4.2

"Of Scepticism with Regard to the Senses"



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Scepticism with Regard to Reason

- "Of Scepticism with Regard to Reason" (Treatise 1.4.1) contains a radical sceptical argument which seems to wreak havoc in the Conclusion of Book 1.
 - It first argues that we are humanly fallible, even in mathematical reasoning; hence "all knowledge degenerates into probability". To take this into account, we have to judge the probability of error in all of our judgments.
 - But such judgments of error are themselves fallible, so we are rationally obliged to judge that probability of error too, leading to a fatal regress. Thus "all the rules of logic require ... a total extinction of belief and evidence".
 - For discussion of this dubious argument, see "Hume's Sceptical Texts 2" at https://davidhume.org/teaching/.

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Doubts About the Existence of Body

- Hume accordingly announces that his agenda is to explain "the *causes* which induce us to believe in the existence of body" (*T* 1.4.2.2)
- But by the end of the section, his explanation of these causes is generating sceptical doubts:
 - "I begun ... with premising, that we ought to have an implicit faith in our senses ... But ... I feel myself at present of a quite contrary sentiment, and am more inclin'd to repose no faith at all in my senses, or rather imagination, than to place in it such an implicit confidence." (*T* 1.4.2.56 continued on slide 246).

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Analysing the Belief

- Hume analyses the belief in body into two aspects, each of which is to be explained:
 - "why we attribute a CONTINU'D existence to objects, even when they are not present to the senses"
 - "why we suppose them to have an existence DISTINCT from the mind and perception"
 - He goes on to explain that the distinctness of bodies involves both their external position and also their independence. (T 1.4.2.2)
 - He then states that continued existence implies distinct existence, and vice-versa (this point becomes prominent at T 1.4.2.44 below).

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Eliminating the Senses

- In discussing the senses as a potential source of the belief in body, Hume seems to treat them as bare sources of impressions. As such,
 - They obviously cannot "give rise to the notion of the continu'd existence of their objects, after they no longer appear to the senses". (*T* 1.4.2.3)
 - Nor can they "offer ... their impressions as the images of something distinct, or independent, and external ... because they convey to us nothing but a single perception, and never give us the least intimation of any thing beyond." (T 1.4.2.4)

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Externality to the Body

It might seem relatively unproblematic for our senses to present things as external to our body, but this presupposes that we have identified our body to start with:

"ascribing a real and corporeal existence to [our limbs etc.] is an act of the mind as difficult to explain, as that which we examine at present." (*T* 1.4.2.9)

Hume adds considerations from the nature of our various senses, and the primary/secondary quality distinction (*T* 1.4.2.12-13).

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Which Faculty?

■ Hume now declares his aim, to consider:

"whether it be the senses, reason, or the imagination, that produces the opinion of a continu'd or of a distinct existence. These are the only questions, that are intelligible on the present subject. For as to the notion of external existence, when taken for something specifically different from perceptions, we have already shewn its absurdity. [note: T 1.2.6]" (T 1.4.2.2)

At T 1.2.6.8, Hume had appealed to the Copy Principle as proving "that 'tis impossible for us so much as to conceive or form an idea of any thing specifically different from ideas and impressions".

Fallacy, Illusion, and Transparency

- "If our senses, therefore, suggest any idea of distinct existences, they must convey the impressions as those very existences, by a kind of fallacy and illusion." (*T* 1.4.2.5)
- This is an illusion because the perceptions of the senses are, so to speak, *transparent*:
 - "all sensations are felt by the mind, such as they really are" (T 1.4.2.5)
 - "since all actions and sensations of the mind are known to us by consciousness, they must ... appear in every particular what they are ..." (T 1.4.2.7)

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Reason and the Vulgar View

■ Children, peasants, and the "vulgar" in general clearly believe in the external world without consulting philosophical reason (*T* 1.4.2.14):

"For philosophy informs us, that every thing, which appears to the mind, is nothing but a perception, and is interrupted, and dependent on the mind; whereas the vulgar confound perceptions and objects, and attribute a distinct continu'd existence to the very things they feel or see. This sentiment, then, as it is entirely unreasonable, must proceed from some other faculty than the understanding."

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Eliminating Reason

- Even if we adopt the philosophers' view, and "distinguish our perceptions from our objects", we still can't reason from one to the other.
- Hume spells this out at *T* 1.4.2.47 (cf. *E* 12.12), arguing that since we are directly acquainted only with the perceptions, we are unable to establish any causal correlation with objects, and so cannot infer the latter by causal reasoning, the only kind of "argument ... that can assure us of matter of fact" (*T* 1.4.2.14).

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Constancy and Coherence

- Constancy of perceptions involves their similarity, when they "return upon me" (e.g. after closing then opening my eyes) "without the least alteration" (*T* 1.4.2.18).
- Coherent perceptions change, but in regular (and hence expected) or explicable patterns.
 - §19 introduces coherence; §20 gestures towards what we now call "inference to the best explanation"; §21 says this is not standard induction (since it infers more regularity that is observed); §22 ascribes it instead to a "galley principle"; but §23 then alleges that this is "too weak" to support our belief in body.

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to their perfect identity, and makes us regard the first impression as annihilated, and the second as newly created, we find ourselves somewhat at a loss, and are involv'd in a kind of contradiction. In order to free ourselves from this difficulty, we disguise, as much as possible, the interruption, or rather remove it entirely, by supposing that these interrupted perceptions are connected by a real existence, of which we are insensible. This supposition, or idea of continu'd existence, acquires a force and vivacity from the memory of these broken impressions, and from that propensity, which they give us, to suppose them the same; and ... the

very essence of belief consists in the force and

vivacity of the conception." (T 1.4.2.24)

"But as this interruption of their existence is contrary

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Turning to the Imagination

- With the senses and reason eliminated, our belief in "the continu'd and distinct existence of body ... must be entirely owing to the IMAGINATION" (*T* 1.4.2.14).
- Most of the rest of the section is devoted to an explanation of how the imagination generates the belief.
- At T 1.4.2.18-19, Hume identifies constancy and coherence as the key factors that induce us to judge perceptions as external to us.

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Explaining the Vulgar View

■ Focusing now on *constancy*, Hume summarises the account he is about to give, explaining our natural and unreflective ("vulgar") belief in body:

"When we have been accustom'd to observe a constancy in certain impressions, and have found, that the perception of the sun or ocean, for instance, returns upon us after an absence or annihilation with like parts and in a like order, as at its first appearance, we are not apt to regard these interrupted perceptions as different, (which they really are) but on the contrary consider them individually the same, upon account of their resemblance. ..."

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The Four-Part Account

- At *T* 1.4.2.25 (cf. *T* 1.4.2.43), Hume summarises the four parts of this account, which he then discusses in depth:
 - The principle of individuation, T 1.4.2.26-30
 - How resemblance leads us to attribute identity to interrupted perceptions, T 1.4.2.31-36
 - Why we unite interrupted perceptions by "feigning a continu'd being", *T* 1.4.2.37-40
 - Explaining the force and vivacity of conception, which constitutes belief (though it's a vivacious fiction rather than bona fide idea), T 1.4.2.41-42

2

A Problematic Assumption

- In Hume's complex discussion of parts two to four of his "system" – from paragraphs 31 to 46 – he speaks with the vulgar by supposing "that there is only a single existence, which I shall call indifferently object or perception, according as it shall seem best to suit my purpose" (§31).
 - But the causal explanation of the vulgar belief is not a rational explanation: it turns out to involve subcognitive confusions and conflations on the part of the believer.
 - So we should not expect this explanation to be expressible in vulgar terms: philosophical distinctions (e.g. between object and perception) might be essential.

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The Key Experiment

- "When we press one eye with a finger, we immediately perceive all the objects to become double" (T 1.4.2.45)
 - "But as we do not attribute a continu'd existence to both these perceptions"
 - "and as they are both of the same nature"
 - "we clearly perceive that all our perceptions are dependent on our organs, and the disposition of our nerves and animal spirits."
- A similar argument will come at *T* 1.4.4.4.

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Recapitulation and Overview

- In spelling out these points, Hume repeats or expands some of his earlier arguments:
 - Reason cannot establish continuing objects causing our perceptions (*T* 1.4.2.47).
 - The imagination leads naturally to the vulgar, rather than philosophical, view (*T* 1.4.2.48).
 - Hence the philosophical view must acquire its force from the vulgar view (*T* 1.4.2.49-52).
 - This explains various aspects of the philosophical view (*T* 1.4.2.53-55).

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Fallacy and Fiction

- Having explained how the vulgar view arises, Hume emphasises (T 1.4.2.43) how much falsehood and error it involves:
 - False attribution of identity, into which we are "seduced" by the resemblance of perceptions.
 - The fiction of a continued existence, which "is really false" but serves "to remedy the interruption of our perceptions".
 - "experiments [reveal that] ... the doctrine of the independent existence of our sensible perceptions is contrary to the plainest experience" (*T* 1.4.2.44).

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The Philosophical System

- Philosophers realise that perceptions are not independent of us, but they are very reluctant (or psychologically unable) to give up belief in the continued and distinct existence of body.
- Hence they invent a new theory "of the double existence of perceptions and objects" as a "palliative remedy" (T 1.4.2.46).
- This "has no primary recommendation either to reason or the imagination", and acquires all its imaginative appeal from the vulgar view.

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The Despairing Conclusion

"I cannot conceive how such trivial qualities of the fancy, conducted by such false suppositions, can ever lead to any solid and rational system. ... Philosophers deny our resembling perceptions to be identically the same, and uninterrupted; and yet have so great a propensity to believe them such, that they arbitrarily invent a new set of perceptions, to which they attribute these qualities. I say, a new set of perceptions [because] ... 'tis impossible for us distinctly to conceive, objects to be in their nature any thing but exactly the same with perceptions. What then can we look for from this confusion of groundless and extraordinary opinions but error and falshood? And how can we justify to ourselves any belief we repose in them?" (*T* 1.4.2.56)

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Carelessness and Inattention are the only "Remedy"

"As long as our attention is bent upon the subject, the philosophical and study'd principle may prevail; but the moment we relax our thoughts, nature will display herself, and draw us back to our former opinion." (T 1.4.2.51 cf. 53)

"Tis impossible upon any system to defend either our understanding or senses; and we but expose them farther when we endeavour to justify them in that manner. As the sceptical doubt arises naturally from a profound and intense reflection on those subjects, it aways encreases, the farther we carry our reflections, whether in opposition or conformity to it. Carelessness and in-attention alone can afford us any remedy." (T 1.4.2.57)

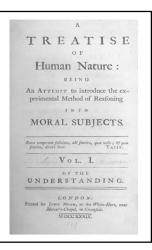
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6(c)

Treatise 1.4.3

"Of the Antient Philosophy"



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False Simplicity and Identity

- "The most judicious philosophers" [e.g. Locke, Essay II xxiii] consider "that our ideas of bodies are nothing but collections form'd by the mind of the ideas of the several distinct sensible qualities, of which objects are compos'd".
- But the sorts of confusions outlined in *T* 1.4.2 lead us naturally to think of objects as simple things that retain their identity through time:

"The smooth and uninterrupted progress of the thought ... readily deceives the mind, and makes us ascribe an identity to the changeable succession ..." (T 1.4.3.3)

"Tis impossible ... to defend either our understanding or senses"

- The passage just quoted implicitly refers back to the "scepticism with regard to reason" of T 1.4.1 (note that "the understanding" and "reason" are the same).
- T 1.4.1 and 1.4.2 thus *combine* to deliver a radically sceptical message: that the only thing able to protect us from extreme scepticism is our own failure to attend to, or follow, the sceptical arguments (cf. T 1.4.1.9-11).
- Laying such scepticism aside, Hume will now go on to consider some philosophical systems, "antient and modern" (T 1.4.2.57) regarding the external world.

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Of the Antient Philosophy

■ Section 1.4.3 of the *Treatise* is largely devoted to debunking Aristotelianism:

"the fictions of the antient philosophy, concerning substances, and substantial forms, and accidents, and occult qualities; which, however unreasonable and capricious, have a very intimate connexion with the principles of human nature." (T 1.4.3.1)

Hume explains these "fictions" as naturally arising from the imagination, by which the "Peripatetics" (i.e. Aristotelians) allowed themselves – far too easily and naively - to be seduced.

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Inventing Substance

■ When we realise these supposedly identical things have actually changed over time,

"the imagination is apt to feign something unknown and invisible, which it supposes to continue the same under all these variations; and this unintelligible something it calls a substance, or original and first matter." (T 1.4.3.4)

■ We likewise imagine this original substance to be simple and uncompounded, supplying

"a principle of union or cohesion among [the object's] qualities" (T 1.4.3.5)

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Substantial Forms and Accidents

- The Peripatetics (i.e. Aristotelians) then ascribe the differences between substances to their different *substantial forms* (*T* 1.4.3.6).
- Qualities of objects such as colour and figure are then considered as accidents (i.e. accidental as opposed to essential qualities) "inhering in" the substance, so these philosophers:

"suppose a substance supporting, which they do not understand, and an accident supported, of which they have as imperfect an idea. The whole system, therefore, is entirely incomprehensible." (*T* 1.4.3.8)

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Ridiculing Sympathies and Antipathies

"But among all the instances, wherein the Peripatetics have shown they were guided by every trivial propensity of the imagination, no one is more remarkable that their sympathies, antipathies, and horrors of a vacuum. There is a very remarkable inclination in human nature, to bestow on external objects the same emotions, which it observes in itself ... This inclination, 'tis true, is suppress'd by a little reflection, and only takes place in children, poets, and the antient philosophers. ... We must pardon children, because of their age; poets, because they profess to follow implicitly the suggestions of their fancy: But what excuse shall we find to justify our philosophers in so signal a weakness?" (T 1.4.3.11)

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Imaginative Principles, Good and Bad

- Hume has criticised the Aristotelians for basing their philosophy on the imagination. But this might seem very unfair, when he has earlier (in *T* 1.3.6) argued that all inductive "experimental reasoning" which he advocates as the only legitimate basis of science (and trumpets in the subtitle of the *Treatise*) is itself founded on custom, which he seems to view as a principle of the imagination (*T* 1.3.6.4, 1.3.7.6).
- He addresses this objection in a famous passage at T 1.4.4.1, distinguishing between two sorts of imaginative principles, one sort philosophically respectable and the other disreputable ...

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Faculties and Occult Qualities

Alluding back to his theory of causal inference, Hume remarks that men naturally "imagine they perceive a connexion" between constantly conjoined objects. Philosophers who investigate further cannot find any such connexion,

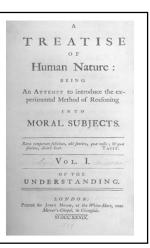
"But ... instead of drawing a just inference from this observation, and concluding, that we have no idea of power or agency, separate from the mind, and belonging to causes ..., they ... [invent] the words faculty and occult quality. ... They need only say, that any phaenomenon, which puzzles them, arises from a faculty or an occult quality ..." (T 1.4.3.9-10)

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6(d)

Treatise 1.4.4

"Of the Modern Philosophy"



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"In order to justify myself, I must distinguish in the imagination betwixt the principles which are permanent, irresistible, and universal; such as the customary transition from causes to effects, and from effects to causes: And the principles, which are changeable, weak, and irregular; such as those I have just now taken notice of. The former are the foundation of all our thoughts and actions, so that upon their removal human nature must immediately perish and go to ruin. The latter are neither unavoidable to mankind, nor necessary, or so much as useful in the conduct of life; but on the contrary are observ'd only to take place in weak minds, and being opposite to the other principles of conduct and reasoning, may easily be subverted by a due contrast and opposition. For this reason the former are receiv'd by philosophy, and the latter rejected." (T 1.4.4.1)

Hume's Way Out?

- It initially seems as though the distinction at T 1.4.4.1 is intended to give Hume a way of distinguishing his own positive scientific position (based on causal inference and probability etc.) from the "fancies" and "fictions" of the ancient philosophers and others.
- If so, this paragraph is one of the most important in the entire *Treatise*, providing a basis for rational normativity by distinguishing between the respectable and disreputable "principles of the imagination".
- But as we shall see, Hume himself proceeds to cast doubt on the distinction, both in *Treatise* 1.4.4 and – more radically – in *Treatise* 1.4.7.

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A Causal Argument from Variation

"Tis certain, that when different impressions of the same sense arise from any object, every one of these impressions has not a resembling quality existent in the object. ... Now from like effects we presume like causes. Many of the impressions of colour, sound, &c. are confest to be nothing but internal existences, and to arise from causes, which in no way resemble them. These impressions are in appearance nothing different from the other impressions of colour, sound, &c. We conclude, therefore, that they are, all of them, deriv'd from a like origin." (T 1.4.4.4)

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Annihilating Matter

- Colour "is excluded from any real existence" (as a subjective secondary quality).
- "The idea of solidity is that of two objects, which ... cannot penetrate each other" (T 1.4.4.9). So understanding solidity requires some antecedent grasp of what an object is, and with colour and solidity itself excluded, there's nothing left which can give this.
- "Our modern philosophy, therefore leaves us no just nor satisfactory idea ... of matter."

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"Of the Modern Philosophy"

- Modern (Lockean) philosophy claims to be based on the "solid, permanent, and consistent principles of the imagination" (*T* 1.4.4.2). But now Hume will argue – by attacking the primary/secondary quality distinction – that it has no such secure foundation.
- He suggests that the only "satisfactory" argument for the distinction "is deriv'd from the variations of [sensory] impressions" depending upon our health, constitution, situation etc. (*T* 1.4.4.2).
 - This is actually a bit unfair to Locke, who argued for the distinction on explanatory grounds: the primary qualities of objects explain how they appear (e.g. Essay II viii 21).

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A Berkeleian Objection

Against the primary/secondary quality distinction, Hume focuses on one objection, which takes inspiration from George Berkeley:

"If colours, sounds, tastes, and smells be merely perceptions, nothing we can conceive is possest of a real, continu'd, and independent existence; not even motion, extension and solidity, which are the primary qualities chiefly insisted on [by Lockeans]." (*T* 1.4.4.6)

■ To form an idea of a moving extended body, my idea of extension must have some content, which can only come from sight or touch, hence ultimately from coloured or solid simples.

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Reason Against the Senses

- Hume elaborates this argument further over T 1.4.4.10-14, and then sums up:
 - "Thus there is a direct and total opposition betwixt our reason and our senses; or more properly speaking, betwixt those conclusions we form from cause and effect, and those that perswade us of the continu'd and independent existence of body." (§15)
- Causal reasoning concludes that secondary qualities aren't objective; but without appeal to (thus subjective) colour and feel, we cannot form any coherent notion of an extended body.

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David Hume, 1711-1776



7. Hume's View of Body, Mental Substance, and Personal Identity

Peter Millican Hertford College, Oxford

From Last Time

- After looking at Hume's applications of his theory of causation, we moved on to Treatise Book 1 Part 4.
- We noted Hume's extreme "scepticism with regard to reason" of T 1.4.1 (which will return in T 1.4.7), and moved on to survey his complex "Scepticism with Regard to the Senses" of T 1.4.2, which seems to offer no remedy to scepticism but "carelessness and inattention".
- "Of the Antient Philosophy" (T 1.4.3) and "Of the Modern Philosophy" (T 1.4.4) together raised the question of how far we should submit to principles of the imagination. An initially promising distinction between respectable and disreputable principles seemed to be undermined when considering ideas of primary and secondary qualities.

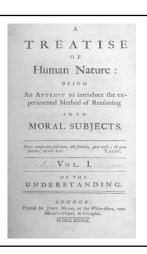
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7(a)

How Does Hume View the Belief in the Continued and Distinct Existence of Body?



(i) The Belief is Dubiously Coherent

- "I cannot conceive how such trivial qualities of the fancy, conducted by such false suppositions, can ever lead to any solid and rational system. ... 'Tis a gross illusion to suppose, that our resembling perceptions are numerically the same; and 'tis this illusion, which leads us into the opinion, that these perceptions ... are still existent, even when they are not present to the senses. ... What ... can we look for from this confusion of groundless and extraordinary opinions but error and falshood?" (T 1.4.2.56)
- "Thus there is a direct and total opposition betwixt our reason and our senses; or more properly speaking, betwixt those conclusions we form from cause and effect, and those that persuade us of the continu'd and independent existence of body." (T 1.4.4.15)

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(ii) Clearly False in its Vulgar Form

- "the vulgar suppose their perceptions to be their only objects, and at the same time believe the continu'd existence of matter ... Now upon that supposition, 'tis a false opinion that any of our objects, or perceptions, are identically the same after an interruption; and consequently the opinion ... can never arise from reason, but must arise from the imagination" (T 1.4.2.43)
- "a very little reflection and philosophy is sufficient to make us perceive the fallacy of that opinion ... we quickly perceive, that the doctrine of the independent existence of our sensible perceptions is contrary to the plainest experience" (T 1.4.2.44)

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- "we clearly perceive, that <u>all our perceptions are dependent on our organs</u>, and ... our nerves and animal spirits" (T 1.4.2.45)
- "Whoever wou'd explain the origin of the common opinion concerning the continu'd and distinct existence of body ... must proceed upon the supposition, that our perceptions are our only objects, and continue to exist even when they are not perceiv'd. Tho' this opinion be false, 'tis the most natural of any, and has alone any primary recommendation to the fancy." (T 1.4.2.48)
- "a little reflection destroys this conclusion, that our perceptions have a continu'd existence, by shewing that they have a dependent one" (T 1.4.2.50)

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(iii) Nevertheless Universal and Irresistible

- "The persons, who entertain this opinion ... are in general all the unthinking and unphilosophical part of mankind, (that is, <u>all of us</u>, at one time or other) ..." (T 1.4.2.36)
- "almost all mankind, and even philosophers themselves, for the greatest part of their lives, take their perceptions to be their only objects, and suppose, that the very being, which is intimately present to the mind, is the real body ..." (7 1.4.2.38)
- "philosophers ... upon leaving their closets, mingle with the rest of mankind in those exploded opinions, that our perceptions are our only objects, and continue identically and uninterruptedly the same in all their interrupted appearances" (T 1.4.2.53)
- "I ... take it for granted, whatever may be the reader's opinion at this present moment, that an hour hence he will be persuaded there is ... an external ... world" (7 1.4.2.57)

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(v) Rejecting Both Forms of the Belief?

"Tis a gross illusion to suppose, that our resembling perceptions are numerically the same ... [as does the] popular system. And as to our philosophical one, 'tis liable to the same difficulties; and is over-and-above loaded with this absurdity, that it at once denies and establishes the vulgar supposition. Philosophers deny our resembling perceptions to be identically the same, and uninterrupted; and yet have so great a propensity to believe them such, that they arbitrarily invent a new set of perceptions, to which they attribute these qualities. I say, a new set of perceptions: For we may well suppose in general, but 'tis impossible for us distinctly to conceive, objects to be in their nature any thing but exactly the same with perceptions. What then can we look for from this confusion of groundless and extraordinary opinions but error and falshood? And how can we justify to ourselves any belief we repose in them?" (T 1.4.2.56)

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The Discussion in the Enquiry

- Again the vulgar belief is natural and universal:
 - "It seems evident, that men are carried, by a natural instinct ..., to repose faith in their senses; and that, without any reasoning, or even almost before the use of reason, we always suppose an external universe, which depends not on our perception, ... Even the animal creation are governed by a like opinion, ..." (E 12.7)
 - It seems also evident, that, when men follow this blind and powerful instinct of nature, they always suppose the very images, presented by the senses, to be the external objects, and never entertain any suspicion, that the one are nothing but representations of the other. This very table, which we see white, and which we feel hard, is believed to exist, independent of our perception, and to be something external to our mind" (E 12.8)

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(iv) Is the Philosophical Form Worse?

- The philosophical double-existence view "has no primary recommendation either to reason or the imagination" (7 1.4.2.46)
- "'tis only a palliative remedy, and ... contains all the difficulties of the vulgar system, with some others, that are peculiar to itself. There are no principles either of the understanding or fancy, which lead us directly to embrace this opinion of the double existence of perceptions and objects, ..." (T 1.4.2.46)
- "This philosophical system ... is the monstrous offspring of two principles, which are contrary to each other, which are both at once embrac'd by the mind, and which are unable mutually to destroy each other. ... Not being able to reconcile these two enemies, we endeavour to set ourselves at ease as much as possible, ... by feigning a double existence, where each may find something, that has all the conditions it desires." (T 1.4.2.52)

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(vi) And Yet ...

- If the vulgar view is so obviously false, can Hume really become a vulgar believer as soon as he leaves his study?
- Even within his study where he is clearly aware of the falsehood of the vulgar view – Hume generally evinces a firm belief in external objects such as billiard balls (*T* 1.3.14.18, *E* 4.8-10) and dice (*T* 1.3.11.6-13, *E* 6.2-3).
- Likewise in the people whose thought and behaviour constitutes the subject-matter of so much of his philosophy.
- Thus many interpreters have considered that Hume must, in the end, be a "representative realist", adopting the "double existence" or "philosophical" view (which, despite his harsh words, at least has the merit of not being so obviously false!).

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And again the vulgar belief is easily seen to be false:

- "But this universal and primary opinion of all men is soon destroyed by the slightest philosophy, which teaches us, that nothing can ever be present to the mind but an image or perception, and that the senses are only the inlets, through which these images are conveyed ... The table, which we see, seems to diminish, as we remove farther from it: But the real table, which exists independent of us, suffers no alteration: It was, therefore, nothing but its image, which was present to the mind. These are the obvious dictates of reason; and no man, who reflects, ever doubted, that the existences, which we consider, when we say, this house and that tree, are nothing but perceptions in the mind, and fleeting copies or representations of other existences, which remain uniform and independent." (E 12.9)
- This last sentence, however, appears to commit Hume to some form of representative realism after all!

- But then Hume goes on to say that the representative realist view cannot be justified either, with an elegant summary of the argument from *T* 1.4.2.47:
 - "By what argument can it be proved, that the perceptions of the mind must be caused by external objects, entirely different from them, though resembling them (if that be possible) [rather than] from the energy of the mind itself, or ... some invisible ... spirit, or ... some other cause still more unknown to us?" (E 12.11)
 - "It is a question of fact, whether the perceptions of the senses be 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 has never any thing present to it but the perceptions, and cannot possibly reach any experience of their connexion with objects. The supposition of such a connexion is, therefore, without any foundation in reasoning." (E 12.12)

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- This "second objection", spelled out in *E* 12.15, focuses on the alleged impossibility of forming an idea of primary qualities like extension as mind-independent, given that our visual idea of extension is inevitably *coloured*, our tactile idea of extension is inevitably *felt*, while both *colour* and *feeling* are acknowledged by Lockean "modern philosophers" to be only in the mind.
- The only way out of this, Hume suggests, is by appeal to <u>abstraction</u> – e.g. abstracting the idea of the <u>shape</u> of a coloured rectangle without thinking about its <u>colour</u>. But this, he thinks, has already been refuted by Berkeley:
 - "An extension, that is neither tangible nor visible, cannot possibly be conceived: And a tangible or visible extension, which is neither hard nor soft, black nor white, is equally beyond the reach of human conception." (*E* 12.15)

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Of the Immateriality of the Soul

7(b)

TREATISE
OF
Human Nature:
BEING
An ATTEMPT to introduce the experimental Method of Reasoning
INTO
MORAL SUBJECTS.

Rese temperum fidician, shi fenier, gast valit, if que finita, diare lita.

VOL. I.
OF THE
UNDERSTANDING.

LONDON!

Printed for Jonn's Rese, at the Witer-Here, near Meteory-Copyle, in Configle.
MDCCXXXXX.

- If the truth of the philosophical view "is a question of fact", then that view must at least be *coherent*, which did not seem to be the view of the *Treatise*.
 - Perhaps Hume has given up the view that identity of an object over time requires *invariableness* (cf. *T* 1.4.2.31, 1.4.3.2, 1.4.6.6)? The *Enquiry* does not discuss identity.
 - E 12.16 also seems to imply that the philosophical view of T 1.4.2 is at least coherent, since (unlike the instinctive vulgar view) it is not said to be "contrary to reason", but only "contrary to natural instinct" and without "rational evidence ... to convince an impartial enquirer".
 - But apparently the "second objection" (descended from the discussion of T 1.4.4) "goes farther", representing the belief in body as "contrary to reason" (E 12.16).

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Hume's Tantalizing Last Words on Body

"The second objection goes farther, and represents this opinion as contrary to reason: at least, if it be a principle of reason, that all sensible qualities are in the mind, not in the object. Bereave matter of all its intelligible qualities, both primary and secondary, you in a manner annihilate it, and leave only a certain unknown, inexplicable something, as the cause of our perceptions; a notion so imperfect, that no sceptic will think it worth while to contend against it." (E 12.16)

- Question 1: Does Hume think it is indeed a "principle of reason" that "all sensible qualities are in the mind, not in the object"?
- Question 2: What is the final sentence added only in the posthumous 1777 edition of the Enquiry — saying? That the belief in "a certain unknown, inexplicable something, as the cause of our perceptions" is so hopeless as to be unworthy of critical consideration, or that it is so thin as to be harmless?

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Turning to the Internal World

- "Of the Immateriality of the Soul" marks a turn to "the intellectual world". This, "tho' involv'd in infinite obscurities", is not perplex'd with any such contradictions, as those we have discovered in the natural" (T 1.4.5.1).
- From T 1.4.5.2-6, Hume attacks the notion of mental substance – and the related notion of inhesion – in various ways, including an appeal to the Copy Principle (at T 1.4.5.4). Both notions are condemned as meaningless.

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Taking Separability Too Far?

At T 1.4.5.5, Hume responds to the attempt to "evade the difficulty, by saying, that the definition of a substance is something which may exist by itself":

"this definition agrees to every thing, that can possibly be conceiv'd; ... Whatever is clearly conceiv'd may exist; ... every thing, which is different, is distinguishable, and every thing which is distinguishable, is separable by the imagination. My conclusion ... is, that since all our perceptions are different from each other, and from every thing else in the universe, they are also distinct and separable, and may be consider'd as separately existent, and may exist separately, and have no need of any thing else to support their existence. They are, therefore, substances, as far as this definition explains a substance."

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The Location of Perceptions

- From T 1.4.5.7-16, Hume discusses the issue of the location and extension of perceptions:
 - Note in particular his insistence that only perceptions of sight and feeling have spatial location (*T* 1.4.5.10).
 Other, non-spatial, perceptions prove that "an object may exist, and yet be no where". So causation cannot require spatial contiguity (cf. *T* 1.3.2.6 n.16).
 - Note also the illusion whereby we are seduced by the imagination into ascribing sensations of taste (which have no physical location) to the object – e.g. a fig – that produces them (*T* 1.4.5.13-14); this discussion was referenced by the footnote at 1.3.14.25 n.32.

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Defending Materialism

■ The most important part of *Treatise* 1.4.5 for Hume's own philosophy – noted in lectures 5 and 5 (slides 205 and 220) – is his attack on the popular argument standardly used against Hobbist materialism, where he crucially appeals to his own theory of causation as constant conjunction:

"Matter and motion, 'tis commonly said in the schools, however vary'd, are still matter and motion, and produce only a difference in the position and situation of objects. Divide a body as often as you please, 'tis still body. ..." (T 1.4.5.29)

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Reification of Perceptions

Many have considered that Hume's "reification" of perceptions – his assertion that impressions and ideas are "substances" that could exist without a perceiver, is utterly absurd, for example John Cook (1968, p. 8, quoted by Noonan 1999, p. 195):

"[It follows from Hume's position] that there could be a scratch or a dent without there being anything scratched or dented. Indeed if we take Hume at his word, we must take him to be saying that he would see no absurdity in Alice's remark: 'Well, I've often seen a cat without a grin, but a grin without a cat! It's the most curious thing I ever saw in all my life!"

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A Spinozistic Parody

- From *T* 1.4.5.17-28, Hume parodies standard arguments against the "hideous hypothesis" (*T* 1.4.5.19) of Spinoza, deploying them against the orthodox theological idea of a simple soul.
- Spinoza sees "the universe of objects" as being modifications of a "simple, uncompounded, and indivisible" substance (*T* 1.4.5.21). This is supposed to be outrageous. And yet theologians see "the universe of thought" my impressions and ideas as being all modifications of a simple, uncompounded and indivisible soul.

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"... Place it in any figure, nothing ever results but figure, or the relation of parts. Move it in any manner, you still find motion or a change of relation. 'Tis absurd to imagine, that motion in a circle, for instance, shou'd be nothing but merely motion in a circle; while motion in another direction, as in an ellipse, shou'd also be a passion or moral reflection: That the shocking of two globular particles shou'd become a sensation of pain, and that the meeting of two triangular ones shou'd afford a pleasure. Now as these different shocks, and variations, and mixtures are the only changes, of which matter is susceptible, and as these never afford us any idea of thought or perception, 'tis concluded to be impossible, that thought can ever be caus'd by matter." (T 1.4.5.29)

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"itis only by our experience of ... constant conjunction, we can arrive at any knowledge of causation"

"Few have been able to withstand the seeming evidence of this argument; and yet nothing in the world is more easy than to refute it. We need only to reflect on what has been prov'd at large, that we are never sensible of any connexion betwixt causes and effects, and that 'tis only by our experience of their constant conjunction, we can arrive at any knowledge of this relation. Now as all objects, which are not contrary, are susceptible of a constant conjunction, ..." (*T* 1.4.5.30)

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- Hume then goes further to insist that material motion is indeed found to be the cause of thought:
 - "we find ... by experience, that they are constantly united; which being all the circumstances, that enter into the idea of cause and effect ... we may certainly conclude, that motion may be, and actually is, the cause of thought and perception." (T 1.4.5.30, my emphasis)
 - "as the constant conjunction of objects constitutes the very essence of cause and effect, matter and motion may often be regarded as the causes of thought, as far as we have any notion of that relation." (T 1.4.5.33, my emphasis)

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Applying the Definition of Cause

- Thus at the end of *Treatise* 1.4.5 just as in the discussion of "Liberty and Necessity" which is to come in 2.3.1 and 2.3.2 (and *Enquiry* 8) Hume is applying his (first) definition of cause in terms of constant conjunction.
- As emphasised in earlier lectures, these are positive (rather than sceptical) implications of his definition: they vindicate the application of causation to mental phenomena.
- Hume's analysis of causation, culminating at Treatise 1.3.14-15, has thus served the purpose of supporting materialism and determinism.

"To consider the matter a priori, any thing may produce any thing"

"... and as no real objects are contrary; [note 48] I have inferr'd from these principles, that to consider the matter *a priori*, any thing may produce any thing, and that we shall never discover a reason, why any object may or may not be the cause of any other, however great, or however little the resemblance may be between them " (*T* 1.4.5.30)

■ Here note 48 refers to *T* 1.3.15, "Rules by which to judge of causes and effects", paragraph 1.

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- *T* 1.4.5.31 poses a dilemma, whether causation is to be understood as involving some intelligible connexion, or instead just constant conjunction.
- Hume clearly opts for the second of these, thus implying that thought could have a material cause:

"all objects, which are found to be constantly conjoin'd, are upon that account only to be regarded as causes and effects. Now as all objects, which are not contrary, are susceptible of a constant conjunction, and as no real objects are contrary; it follows, that for ought we can determine by the mere ideas, any thing may be the cause or effect of any thing; which evidently gives the advantage to the materialists above their antagonists." (*T* 1.4.5.31)

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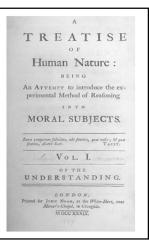
A Puzzling Conclusion

- The final paragraph, *T* 1.4.5.35, starts by repeating Hume's key principle (cf. *T* 1.3.15.1 and 1.4.5.30) that causes and effects can be known only by experience, since "whatever we can imagine, is possible" (i.e. the Conceivability Principle).
- However the last two sentences refer to "the immortality of the soul", which hasn't so far been mentioned! This seems to be a trace of one of the "noble parts" on religion which Hume excised from the *Treatise* manuscript when he "castrated" it in 1737 (cf. letter to Henry Home, NHL 2)

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7(c)

Of Personal Identity



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The Bundle Theory

■ Hence the only genuine idea of self is that of:

"nothing but a bundle or collection of different perceptions [impressions and ideas], which succeed each other with an inconceivable rapidity, and are in a perpetual flux and movement. ... The mind is a kind of theatre, where several perceptions successively make their appearance ... There is properly no *simplicity* in it at one time, nor *identity* in different. ... The comparison of the theatre must not mislead us. They are the successive perceptions only, that constitute the mind; nor have we the most distant notion of the place, where these scenes are represented ..." (*T* 1.4.6.4)

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But Identity Requires Constancy?

In the passage just quoted, Hume seems to allow for qualitative change without loss of identity. However this is contrary to his more usual claims:

"one of the essential qualities of identity [is] *invariableness*" (*T* 1.4.2.31)

"The acknowledge'd composition is evidently contrary to this suppose'd *simplicity*, and the variation to the *identity*. ... such evident contradictions" (*T* 1.4.3.2)

"We have a distinct idea of an object, that remains invariable and uninterrupted thro' a suppos'd variation of time; and this idea we call that of *identity* or *sameness*." (*T* 1.4.6.6)

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Of Personal Identity

- Treatise 1.4.6 addresses the topic of personal identity, wielding the Copy Principle (T 1.4.6.2) to deny that we have any idea of the self which is anything like the conventionally presumed notion with its "perfect identity and simplicity" (T 1.4.6.1).
- There is no such impression, and hence no such idea, of self (T 1.4.6.2). When I look inside 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 any thing but the perception." (T 1.4.6.3)

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Later Hume suggests another comparison:

"the true idea of the human mind, is to consider it as a system of different perceptions or different existences, which are link'd together by the relation of cause and effect, $\dots\,$ Our impressions give rise to their correspondent ideas; and these ideas in their turn produce other impressions. ... In this respect, I cannot compare the soul more properly to any thing than to a republic or commonwealth, in which the several members are united by the reciprocal ties of government and subordination, and give rise to other persons, who propagate the same republic in the incessant changes of its parts. And as the same individual republic may not only change its members, but also its laws and constitutions; in like manner the same person may vary his character and disposition, as well as his impressions and ideas, without losing his identity. Whatever changes he endures, his several parts are still connected by the relation of causation. And in this view our identity with regard to the passions serves to corroborate that with regard to the imagination, by the making our distant perceptions influence each other, and by giving us a present concern for our past or future pains or pleasures...." (T 1.4.6.19)

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Explaining the Attribution of Identity

- Hume accordingly sets out to explain what he takes to be (strictly speaking) our confused "propension to ascribe an identity to these successive perceptions, and to suppose ourselves possest of an invariable and uninterrupted existence" (T 1.4.6.5).
- He takes this to involve the same sort of imaginative principles at play when we attribute identity "to plants and animals". The similarity and very gradual change in the sequence of perceptions over time "facilitates the transition of the mind from one object to another, and renders its passage as smooth as if it contemplated one continu'd object" (*T* 1.4.6.6). Thus we come to think of them as "as invariable and uninterrupted".

3

Confusion, Absurdity, and Fictions

- So just as with external objects (cf. T 1.4.2 and 1.4.3), when we consider a gradually changing sequence of perceptions, we are apt to confuse this with one that is self-identical, "uninterrupted and invariable" (1.4.6.6).
- Reflection on the changing sequence reveals our error here, so to resolve "this absurdity, we ... feign some new and unintelligible principle, that connects the objects together ... and run into the notion of a soul, and self, and substance, to disguise the variation."
- So one type of fiction arises from our propensity to merge perceptions together and consider them as unchanging; another is when we "imagine something unknown and mysterious, connecting the parts".

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Explaining Personal Identity

- The attribution of personal identity is just another instance of this phenomenon: "The identity, which we ascribe to the mind of man, is only a fictitious one, and of a like kind with that which we ascribe to vegetables and animal bodies." (*T* 1.4.6.15)
- Hume appeals here to his Separability Principle and his theory of causation, which tell us "that the understanding never observes any real connexion among objects, and that even the union of cause and effect ... resolves itself into a customary association of ideas". So identity cannot really apply between our perceptions, but is something we attribute because of mental association (*T* 1.4.6.16).

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Just Who is Confused Here?

- It is natural to ask: if "our notions of personal identity, proceed entirely from the smooth and uninterrupted progress of the thought along a train of connected ideas" leading to the confused view of them as identical, then who is the thinker whose thought is proceeding and getting confused in this way?
- For accessible discussion of this issue, see for example Harold Noonan, *Hume on Knowledge*, pp. 193-4, who goes on to link it (pp. 194-8) with the related issue of Hume's reification of perceptions. This is also related to the issue of "bundling", discussed below and by Noonan at pp. 205-9.

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Association and Identity

- "To prove this hypothesis", Hume aims "to show ... that the objects, which are variable or interrupted, and yet are suppos'd to continue the same, are such only as consist of a succession of parts, connected together by resemblance, contiguity, or causation", that is, by the association of ideas (*T* 1.4.6.7).
- We tend to attribute identity when changes are proportionately small and gradual (T 1.4.6.9-10), or when the changing parts are relevant to "some common end or purpose", and all the more so when they bear "the reciprocal relation of cause and effect" to each other (T 1.4.6.11-12).

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Resemblance, Causation, Memory

- So "our notions of personal identity, proceed entirely from the smooth and uninterrupted progress of the thought along a train of connected ideas" (*T* 1.4.6.16).
- Contiguity plays little role here (maybe because most perceptions have no spatial relations – T 1.4.5.10), so it must be the mutual resemblance and causation between our perceptions that are crucial (T 1.4.6.17).
- Memory produces resemblance between our perceptions, and our concern about our future adds to their causal linkages. Memory also reveals the sequence of linked perceptions to us, and so is the chief "source of personal identity" (*T* 1.4.6.18-20).

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Notorious Second Thoughts

- In the Appendix to the Treatise, published with Book 3 in late 1740 (just 21 months after Books 1 and 2), Hume famously expresses despair about his account:
 - "upon a more strict review of the section concerning personal identity, I find myself involv'd in such a labyrinth, that, I must confess, I neither know how to correct my former opinions, nor how to render them consistent." (*T App* 10).
- Unfortunately, Hume leaves it very obscure what exactly he takes the problem to be:

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Two Inconsistent Principles?

"In short there are two principles, which I cannot render consistent; nor is it in my power to renounce either of them, viz. that all our distinct perceptions are distinct existences, and that the mind never perceives any real connexion among distinct existences. Did our perceptions either inhere in something simple and individual, or did the mind perceive some real connexion among them, there would be no difficulty in the case." (T App 21)

But the two cited principles aren't apparently inconsistent! So this has left an attractively intriguing puzzle for Hume's interpreters.

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A "Bundling Problem"?

- Many have seen the heart of Hume's difficulty as some sort of bundling problem, e.g.:
 - What is it that makes our perceptions part of "our bundle" in the way that enables us to be seduced into thinking of them as a continuing self?
 - After all, I have no temptation to think of your perceptions as part of my self, because they don't even come to my awareness!
 - This all seems to presuppose that the perceptions must genuinely be bundled in some way before Hume's account of the error can even get going.

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Conjunctive Causation

Taken together, the following are individually necessary and jointly sufficient for the existence of a causal relation between two objects: (i) priority in time; (ii) contiguity in time and, where applicable, in place; and (iii) constant similar conjunction of like objects.

Causal Bundling

Perceptions are in the same mind if and only if they are elements in a system of relevant causal relations holding among them.

Garrett argues that these three doctrines together made it impossible for Hume to achieve a coherent conception of how perceptions have a "place" within any particular mind.

Multiple Interpretations

Don Garrett starts his paper "Rethinking Hume's Second Thoughts about Personal Identity" (2011) by remarking:

"Why did Hume become so dissatisfied with [his] 'former opionions' ...? ... The question ... has received what is surely a far greater number of distinct answers - well over two dozen, even by a conservative count - than has any other interpretive question about Hume's philosophical writings. ... I believe it is fair to say that no commentator has ever simply endorsed the answer of any other commentator." (p. 16)

Garrett's Proposal

Garrett's carefully argued proposal in his 2011 paper seems as good as any other. He sees Hume's problem as arising from three of his "central doctrines":

Placeless Perceptions

No nonvisual and nontactile perception is in any "place," either spiritual (such as a soul or mental substance) or spatial, by which it is located relative to any other perception. Even visual and tactile perceptions are not in any place by which they are located relative to any other perceptions except to those (if any) with which they form a spatially complex perception.

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Changes of Mind?

- The issue of identity doesn't arise in the Enquiry, and the only mention of personal identity in Hume's later works is in his posthumously published Dialogues concerning Natural Religion, at D 4.2-3). There "the soul of man" is described by Demea as constantly changing, and Cleanthes responds that a mind by its nature cannot be immutable. So neither considers mental identity incompatible with change.
- The Separability Principle also disappears in the later works (at least in anything more than a very lightweight form), so Hume might have changed his mind on the principles that made identity, especially of persons, so intractable in the *Treatise*.

David Hume, 1711-1776



8. Hume's Sceptical Crisis, and His Second Thoughts

Peter Millican
Hertford College, Oxford

So Far in Treatise 1.4 ...

- Treatise 1.4.1, "Of Scepticism with Regard to Reason", and 1.4.2, "Of Scepticism with Regard to the Senses", conclude that our beliefs whether concerning the inferences we draw, or the objects we seem to perceive, are rationally unsustainable. But in both cases, we are humanly unable to maintain such radical scepticism, and retain our beliefs through "carelessness and in-attention".
- In Treatise 1.4.3, "Of the Ancient Philosophy", Hume ridicules Aristotelians for following their imagination (like children and poets) in attributing purposes to objects.
 - But his own philosophy of induction and belief is founded on custom and hence "the imagination"; so isn't he being unfair?
 - At T 1.4.4.1, Hume sketches a defence against this objection, distinguishing between two categories of "imaginative" principle:

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"In order to justify myself, I must distinguish in the imagination betwixt the principles which are permanent, irresistible, and universal; such as the customary transition from causes to effects, and from effects to causes: And the principles, which are changeable, weak, and irregular; such as those I have just now taken notice of. The former are the foundation of all our thoughts and actions, so that upon their removal human nature must immediately perish and go to ruin. The latter are neither unavoidable to mankind, nor necessary, or so much as useful in the conduct of life; but on the contrary are observ'd only to take place in weak minds, and being opposite to the other principles of conduct and reasoning, may easily be subverted by a due contrast and opposition. For this reason the former are receiv'd by philosophy, and the latter rejected."

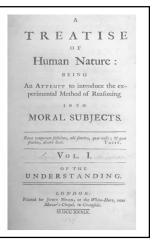
(T 1.4.4.1 – copied from slide 258)

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Complications
Regarding
the Humean
"Imagination"



- Treatise 1.4.4, "Of the Modern Philosophy", then goes on to reveal yet another problem with the conventional Lockean belief in external objects, making at least three in all:
 - False attribution of temporal identity (T 1.4.2.31-2, 1.4.3.2-4);
 - Impossibility of inference to objects (T 1.4.2.47);
 - We cannot form an idea of primary qualities without relying on secondary qualities, which are acknowledged to be "nothing but impressions in the mind" (*T* 1.4.4.3). So we can form no coherent idea of a mind-independent object (*T* 1.4.4.6-9).
- Treatise 1.4.5-6, "Of the Immateriality of the Soul" and "Of Personal Identity", may well be radically sceptical from a traditional perspective, but Hume does not see them as leading to "such contradictions and difficulties" as he claims to have found by now "in every system concerning external objects, and in the idea of matter" (T 1.4.5.1).

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"Imagination" as the Faculty of Having, and Operating on, Ideas

- Hume's Copy Principle leads him to assimilate thinking to the having of ideas that are imagistic, in being literal copies of sensory (or quasi-sensory) impressions, either of "outer" sensation or "inner" reflection.
- Hume accordingly denies that we can form "pure and intellectual" ideas, e.g. in mathematics (T 1.3.1.7).
- This implies that the imagination, traditionally conceived of as the faculty we use when imagining things (e.g. fanciful ideas that we have created ourselves), becomes more generally where all of our thinking takes place (not counting ideas or "impressions" of memory).

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"Imagination" as Opposed to "Reason" or "the Understanding"

- In Lecture 3 (slides 77-84), we saw that Hume implicitly identifies "reason" with "the understanding", and two of his most famous discussions of induction and the external world set this faculty in opposition to "the imagination" (also called "the fancy").
- Moreover these discussions proceed by showing first that reason cannot explain the belief in question (either about the unobserved, or about the existence of body), and then concluding that the imagination must be responsible, apparently because the belief requires a non-rational explanation.

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Causal Inference Continues to be Considered an Operation of Reason

- T 1.3.11.2 ("human reason" includes *proofs* and *probabilities*);
- 1.4.2.47, 1.4.4.15 ("reason" includes inference from cause and effect);
- 2.3.3.3 ("reason is nothing but the discovery of" cause and effect relations);
- 3.1.1.12 ("reason, in a strict and philosophical sense, ... discovers the connexion of causes and effects");
- 3.1.1.18 ("the operations of human understanding [include] the inferring of matter of fact").

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A Tension in "the Imagination"

- A related tension emerges in the course of T 1.3.9.4, given that custom itself is supposedly a principle of the imagination:
 - "All this, and every thing else, which I believe, are nothing but ideas; tho' by their force and settled order, arising from custom and the relation of cause and effect, they distinguish themselves from the other ideas, which are merely the offspring of the imagination."
- Thus custom is apparently distinguished from less reliable principles which are merely "the offspring of the imagination". This phrase occurs only one other time in Hume's writings ...

Yet Custom Remains Respectable

- Although Hume consistently treats our belief in body as rationally dubious and even incoherent (Lecture 7, slides 268-273), he treats our causal reasoning with far more respect (Lecture 6, slides 213-223).
- Moreover, he treats causal, inductive inference as an operation of reason, even after Treatise 1.3.6-7 has apparently proved that it is "determin'd by" custom, an associative principle of the imagination.
- In the Abstract and first Enquiry, moreover, he explicitly praises custom as the guide of life:
 - "Tis not, therefore, reason, which is the guide of life, but custom." (A 16)
 - "Custom, then, is the great guide of human life." (E 5.6)

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A Distinction between Types of Principle, Not Parts of the Mind

■ In *T* 1.3.15 (slides 214-15) we saw Hume formulating "general rules" that can enable us to identify the real causal factors in resembling situations, avoiding crude prejudice (of the sort illustrated at *T* 1.3.13.7, slide 162). Note what Hume says about this in faculty terms:

"The general rule is attributed to <u>our judgment</u>; as being more extensive and constant. The exception to <u>the imagination</u>; as being more capricious and uncertain." (*T* 1.3.13.11)

The distinction is being drawn between types of principle – apparently on the basis of their *reliability* – rather than in terms of parts of the mind.

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A Last-Minute Footnote

Hume inserted a footnote at the end of Section 1.3.9 – while the *Treatise* was in press – by means of a specially printed "cancel" leaf. He trimmed the previously existing text to make space for this:

"as our assent to all probable reasonings is founded on the vivacity of ideas, it resembles many of those whimsies and prejudices, which are rejected under the opprobrious character of being the offspring of the imagination. By this expression it appears that the word, imagination, is commonly us'd in two different senses; and ... in the following reasonings I have often [fallen] into [this ambiguity]." (T 1.3.9.19 n. 22)

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An Ambiguity in "the Imagination"

■ The footnote at *T* 1.3.9.19 continues:

"When I oppose the imagination to the memory, I mean the faculty, by which we form our fainter ideas. When I oppose it to reason, I mean the same faculty, excluding only our demonstrative and probable reasonings."

- The narrower sense of "the imagination" includes "whimsies and prejudices", but excludes "probable reasonings", even though the latter are based on custom, which in *T* 1.3.6 had clearly been considered to be an associative principle of the imagination.
 - So one of Hume's "two different senses" of imagination includes customary inference, and one does not.

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My Normative Account

■ Inclusive Imagination

Similar in scope to Garrett's interpretation: the "canvas" on which all of our (impression-copied and hence imagistic) ideas play out. Accordingly, this embraces all of our reasoning, as well as fantasies and "fictions".

■ Fanciful Imagination

Restricted to those imaginative operations that lack the respectability to count as "reason". In this sense, the imagination – aptly called *the fancy* – excludes not only (suitably disciplined) *demonstrative and probable reasoning* – *i.e. customary inference* – but also *intuition*: these count as operations of *reason* on the normative basis that they are cognitively respectable.

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Defending the Normative Account

- Objection: In the footnote at T 1.3.9.19, Hume seems to exclude "only our demonstrative and probable reasonings" from "the imagination" in the narrower sense. This fits closely with Garrett's reading.
 - My Reply: the footnote was a last-minute insertion, fitted into a very limited space that Hume had made at the end of the section. So it's not surprisingly imprecise.
- Objection: In Treatise 1.3.6 (paras 4 and 12-15), Hume repeatedly denies that inductive inference is "determin'd by reason", and treats custom as being instead an operation of the imagination.
 - My Reply: Hume's view of the reason/imagination distinction developed while he was writing the *Treatise*.

Garrett's Account of the Ambiguity

Inclusive Imagination

"In this broad sense of the term 'imagination', in which it denotes a faculty of having any ideas that are naturally less lively or 'fainter' than memories, all of the operations that determine the ways in which the mind generates or modifies non-memory ideas qualify as operations of the imagination. This includes what he calls 'reason'."

Unreasoning Imagination

"Hume also uses the term 'imagination' in a narrower sense, ... differing from the broader sense only in its exclusion of reason* from its scope." (2015, pp. 87-8)

* Note here that Garrett takes Humean "reason" to encompass only demonstrative and probable reasoning.

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Why Does This Matter?

■ Understanding Hume's Faculty Structure

There is debate over what Hume means by "reason". Garrett understands this as restricted to *inference* or *argument* (i.e. ratiocination), whereas I understand it as our general *cognitive* faculty (Lecture 3, slides 81-4).

■ Understanding The Impact of *Treatise* 1.4.7

Garrett interprets *Treatise* 1.4.7 as carefully choreographed and under control; I consider it to be a sceptical meltdown as Hume's would-be faculty structure comes tumbling down.

■ For a fairly recent skirmish within this debate, see our articles in *Hume Studies*, November 2014, where Garrett poses the following two objections to my account ...

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In Favour of the Normative Account

- The criterion Hume gives (i.e. resemblance or otherwise to "whimsies and prejudices") would clearly place intuition together with "our demonstrative and probable reasonings", contrary to Garrett's interpretation.
- Since the T 1.3.9.19 footnote was inserted hastily at the last minute, it seems likely to involve a distinction that was <u>already</u> prominent in Hume's mind as he completed Treatise Book 1, but was not yet mentioned in Part 3.
- Hume draws what looks like a similar distinction in three different places, and always on a similar normative basis. He also refers back to such a distinction in the Conclusion of Book 1 (as we shall see). It seems unlikely that these would be different distinctions.

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Is This The Same Distinction?

- "as our assent to all probable reasonings is founded on the vivacity of ideas, it resembles many of those whimsies and prejudices, which are rejected under the opprobrious character of being the offspring of the imagination."
 (7 1.3.9.19 n. 22)
- "The general rule is attributed to our judgment; as being more extensive and constant. The exception to the imagination; as being more capricious and uncertain."
 (T 1.3.13.11)
- "I must distinguish in the imagination betwixt the principles which are permanent, irresistible, and universal; such as the customary transition from causes to effects, and from effects to causes: And the principles, which are changeable, weak, and irregular; ..." (7 1.4.4.1)

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Principles of "the Imagination"

That last quotation, from T 1.4.7.7, seems to be alluding to the same distinction that Hume invokes at T 1.4.4.1, but this time labelled as "general" versus "trivial":

- The Respectable "General" Principles
 - These are the "permanent, irresistible, and universal" principles (e.g. customary inference) that Hume himself relies on in his experimental philosophy.
- The Disreputable "Trivial" Principles
 - These are the "changeable, weak, and irregular" principles (e.g. imaginative fancies) for which Hume criticises ancient philosophers and the superstitious.

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A Humean Perspective on the Faculties

- Recall again that Hume thinks <u>all</u> our ideas are imagistic, as copies of impressions (either of sensation or reflection).
 - If so, then <u>all</u> of our reasoning must take place in the "imagination" as traditionally conceived, and "reason" cannot be some separate part of the mind.
- So it makes sense that Hume would be driven to draw the distinction between "reason" and "the imagination" on the basis of <u>the kinds of principles</u> that govern the processing of our ideas:
 - Rational principles are disciplined and reliable;
 - Imaginative principles are unreliable and capricious.

Blurring the Reason/Imagination Divide

- "... the understanding or imagination can draw inferences from past experience ..." (*T* 1.3.8.13)
- "... the judgment, or rather the imagination ..." (*T* 1.3.9.19)
- "The memory, senses, and understanding are \dots all \dots founded on the imagination" (T 1.4.7.3)
- "... the imagination or understanding, call it which you please ..." (*T* 2.3.9.10, also *DOP* 1.8)

"[suppose that we resolve] to reject all the trivial suggestions of the fancy, and adhere [instead] to the understanding, that is, to the general and more establish'd properties of the imagination" (*T* 1.4.7.7)

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A Significant Identification

- But if this is indeed the case, then when Hume refers to "the understanding, that is, … the general and more establish'd properties of the imagination", he appears to be identifying "the understanding" with the "general" principles of the imagination. (As Garrett himself seems to agree in his 1997 book, p. 29).
- And as we have observed before (Lecture 3, slide 83), Hume identifies "reason" with "the understanding" literally dozens of times. (One highly pertinent example of this identification is implicit in the rewording of the footnote originally at T 2.2.7.6 to create the last-minuteinserted footnote at T1.3.9.19, where "the understanding" has been replaced by "reason".)

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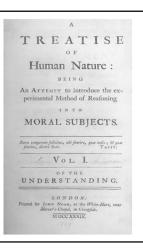
The Significance of the Distinction

- Although Hume seems to have no sceptical intent when presenting his famous argument concerning induction at *T* 1.3.6, it seems that he later saw the need to draw a clear distinction between the respectable and disreputable principles that act on the imagination, considering the former (notably *customary inference*, at least when disciplined by general rules) to be part of "reason", but the latter mere fanciful "imagination".
 - This distinction seems to be potentially crucial to Hume's attempt to vindicate custom as providing a respectable basis of probable reasoning. If that's correct, but the distinction ultimately fails, then this could seriously threaten his attempt to build a rational science of human nature!

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8(b)

Treatise 1.4.7: "Conclusion of this Book"



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- An even more devastating sceptical result came in *Treatise* 1.4.1, with Hume's "scepticism with regard to reason" (see slide 226, and Appendix below):
 - We are rationally obliged, whenever we make a judgment of probability, to take into account our likelihood of error in making that judgment. But that judgment of likelihood is itself liable to a similar correction, and so rationally we should be led into an infinite regress and "a total extinction of belief and evidence" (*T* 1.4.1.6).
- But our beliefs aren't actually extinguished by the argument, are they! How does Hume explain this?
 - "I answer, that after the first and second decision; as the action of the mind becomes forc'd and unnatural, and the ideas faint and obscure; tho' the principles ... be the same ...; yet their influence on the imagination [weakens] ..." (T 1.4.1.10)

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■ "But on the other hand,

if [we] take a resolution to reject all the trivial suggestions of the fancy, and adhere to the understanding, that is, to the general and more establish'd properties of the imagination; even this resolution, if steadily executed, wou'd be dangerous, and attended with the most fatal consequences. For I have already shewn, [note to T 1.4.1] that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life. We save ourselves from this total scepticism only by means of that singular and seemingly trivial property of the fancy, by which we enter with difficulty into remote views of things, and are not able to accompany them with so sensible an impression, as we do those, which are more easy and natural." (T 1.4.7.7)

"Conclusion of This Book"

- Treatise 1.4.7 is especially hard to interpret, partly because it is presented as a dynamic sequence of firstpersonal reflections on the position in which Hume has been left by his sceptical results from earlier sections.
- Most of our mental processes have been revealed as dependent on the imagination and its mechanisms, which generate "the vivacity of ideas" (7 1.4.7.3).
- Worse, T 1.4.4 has found a "manifest contradiction" between our causal reasoning and our belief in the independent existence of matter (T 1.4.7.4).
- The analysis of causation in T 1.3.14 also shows our thoughts about that to be deeply confused (T 1.4.7.5).

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The "Dangerous Dilemma"

- After reviewing various seductive "illusions of the imagination" to which we are naturally prone (as in slide 338 above), "the question is, how far we ought to yield to these illusions. This question is very difficult, and reduces us to a very dangerous dilemma, which-ever way we answer it." (T 1.4.7.6)
- On the one hand,

"if we assent to every trivial suggestion of the fancy; beside that these suggestions are often contrary to each other; they lead us into such errors, absurdities, and obscurities, that we must at last become asham'd of our credulity." (*T* 1.4.7.6)

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Could the sceptical calamity of T 1.4.1 be avoided if we "establish it for a general maxim, that no refin'd or elaborate reasoning is ever to be receiv'd"? Such a principle would be hugely damaging:

"By this means you cut off entirely all science and philosophy: You proceed upon one singular quality of the imagination, and by a parity of reason must embrace all of them: And you expresly contradict yourself; since this maxim must be built on the preceding reasoning, which will be allow'd to be sufficiently refin'd and metaphysical. What party, then, shall we choose among these difficulties? If we embrace this principle, and condemn all refin'd reasoning, we run into the most manifest absurdities. If we reject it in favour of these reasonings, we subvert entirely the human understanding. We have, therefore, no choice left but betwixt a false reason and none at all." (*T* 1.4.7.7)

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"A Manifest Contradiction"

"For my part, I know not what ought to be done in the present case. I can only observe what is commonly done; which is, that this difficulty is seldom or never thought of ... Very refin'd reflections have little or no influence upon us; and yet we do not, and cannot establish it for a rule, that they ought not to have any influence; which implies a manifest contradiction.

But what have I here said, that reflections very refin'd and metaphysical have little or no influence upon us? ..." (*T* 1.4.7.7-8)

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Carelessness and Inattention Again

Psychological (though not philosophical) resolution comes from a now-familiar direction, the "carelessness and in-attention" of T 1.4.2.57:

"Most fortunately it happens, that since reason is incapable of dispelling these clouds, nature herself suffices to that purpose, and cures me of this philosophical melancholy and delirium, ... I dine, I play a game of back-gammon, I converse, and am merry with my friends; and [afterwards] these speculations ... appear so cold, and strain'd, and ridiculous, that I cannot find it in my heart to enter into them any farther." (*T* 1.4.7.9)

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The Title Principle

- Don Garrett sees a promising *philosophical* resolution to these sceptical quandaries in what he calls Hume's "Title Principle", which seems to be proposed at *T* 1.4.7.11 (though it's unclear textually whether this represents a settled view):
 - "... if we are philosophers, it ought only to be upon sceptical principles, and from an inclination, which we feel to the employing ourselves after that manner. Where reason is lively, and mixes itself with some propensity, it ought to be assented to. Where it does not, it never can have any title to operate upon us."

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In "the Deepest Darkness"

"The *intense* view of these manifold contradictions and imperfections in human reason has so wrought upon me, and heated my brain, that I am ready to reject all belief and reasoning, and can look upon no opinion even as more probable or likely than another. Where am I, or what? From what causes do I derive my existence, and to what condition shall I return? ... I am confounded with all these questions, and begin to fancy myself in the most deplorable condition imaginable, inviron'd with the deepest darkness, and utterly depriv'd of the use of every member and faculty." (*T* 1.4.7.8)

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A Sceptical Disposition

"Here then I find myself absolutely and necessarily determin'd to live, and talk, and act like other people in the common affairs of life. ... I may, nay I must yield to the current of nature, in submitting to my senses and understanding; and in this blind submission I show most perfectly my sceptical disposition and principles. Does it follow, that I must strive against the current of nature ... and that I must torture my brain with subtilities and sophistries ... Under what obligation do I lie of making such an abuse of time?" (*T* 1.4.7.10)

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- The Title Principle is supposed to play the role of blocking the corrosively sceptical argument of *Treatise* 1.4.1 on the ground that this leads to reasoning which is faint, unconvincing, and out of line with our propensities while allowing customary inference (in everyday life and empirical science) to survive unscathed.
 - Hsueh Qu, Hume's Epistemological Evolution (2020, ch. 6, pp. 129-31) explains this clearly, suggesting that the Title Principle is indeed the best textual candidate for making sense of Hume's apparent change in manner between the dark depths of T 1.4.7.7-8 and the relatively sunlit uplands of T 1.4.7.12-13, seemingly motivated by the positive propensities of curiosity and ambition ...

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Curiosity and Ambition

"I cannot forbear having a curiosity to be acquainted with the principles of moral good and evil, the nature and foundation of government, and the cause of those several passions and inclinations, which actuate and govern me. ... I feel an ambition to arise in me of contributing to the instruction of mankind, and of acquiring a name by my inventions and discoveries." (*T* 1.4.7.12)

■ This seems to point forward to *Treatise* Books 2 and 3, on the passions and morals, plausibly fitting with the idea that the Title Principle has provided a basis on which to continue philosophy.

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An Impasse

- But how, given all his sceptical arguments, can Hume claim any solid basis for saying that philosophy (which on his own account contradicts itself) is safer or more agreeable than superstition?
- He is reduced to the apparently rather lame observation that "the errors in religion are dangerous; those in philosophy only ridiculous" (7 1.4.7.13).
- This invites the response that religious truth is crucial for the avoidance of hellfire etc., and so we should follow religion if we want to be "safest" with regard to our future prospects. Without a rational basis for discrimination, Hume seems to have no answer.

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A Developmental Hypothesis

- Hume's discussion "Of the Academical of Sceptical Philosophy", Section 12 of the 1748 Enquiry (originally published as Philosophical Essays concerning Human Understanding), evinces a very different attitude to scepticism, facing up to the extreme sceptic and advocating instead a "mitigated" variety.
- One key driver of this change might have been Hume's realisation on writing up his arguments for the new publication that the extreme sceptical argument of Treatise 1.4.1 cannot be coherently expounded with any practical example beyond the first couple of stages. The "and so on" move in T 1.4.1.6 (and likewise in commentators' attempts to defend the argument) is really just hand-waving ...

Philosophy versus Superstition

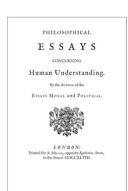
Unfortunately, "philosophy" (or what we would call science) is not the only kind of reasoning that is "lively and mixes itself with some propensity", for humans have a strong propensity towards lively superstitions. Hume's answer:

"we ought only to deliberate concerning the choice of our guide, and ought to prefer that which is safest and most agreeable. And in this respect I make bold to recommend philosophy, and ... give it the preference to superstition of every kind ..." (T 1.4.7.13)

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8(c)

Enquiry 12: Hume's Second Thoughts



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"we are oblig'd by our reason to add a new doubt deriv'd from the possibility of error in the estimation we make of the truth and fidelity of our faculties. ... [which] must weaken still farther our first evidence, and must itself be weaken'd by a fourth doubt of the same kind, and so on in infinitum; and ... must in this manner be reduc'd to nothing. ... all the rules of logic require a continual diminution, and at last a total extinction of belief and

■ In "Hume's Pivotal Argument, and His Supposed Obligation of Reason" (*Hume Studies*, 2018), I suggest that Hume would have come to realise the failure of this argument in the 1740s if he tried to illustrate it with

examples, in line with the rest of the *Enquiry* (compare: just one in T 1.3.6, but over 20 in *Enquiry* 4; five [very brief] examples in T 1.3.14, but over 15 in *Enquiry* 7).

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evidence." (T 1.4.1.6)

Implicitly Rejecting *T* 1.4.1?

- Hume's dismissal of antecedent scepticism in the Enquiry (at E 12.3) seems to involve denying that reflexive checking is a rational requirement for relying on our faculties.
 - If so, that also casts doubt on the argument of T 1.4.1, which functioned precisely by insisting that we should perform such checking (and indeed should do so ad infinitum).
- Now Hume seems to think that we should start with trust in our faculties by default, unless and until we find positive reason to distrust them.

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Rejecting the Appropriateness of High-Level Iterated Checking?

- In the following paragraph, Hume recommends a more moderate "antecedent scepticism":
 - "To begin with clear and self-evident principles, to advance by timorous and sure steps, to review frequently our conclusions, and examine accurately all their consequences" (*E* 12.4)
- This also fits well with the hypothesis that he has seen what is wrong with his argument of *T* 1.4.1: checking should be done at the bottom level (e.g. our arithmetical calculations), not by iterating to higher and higher meta-levels.

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"Ample Matter of Triumph"

"The sceptic ... seems to have ample matter of triumph; while he justly insists, that all our evidence for any matter of fact, which lies beyond the testimony of sense or memory, is derived entirely from the relation of cause and effect; that we have no other idea of this relation than that of two objects, which have been frequently conjoined together; that we have no argument to convince us, that objects, which have, in our experience, been frequently conjoined, will likewise, in other instances, be conjoined in the same manner; and that nothing leads us to this inference but custom or a certain instinct of our nature; which it is indeed difficult to resist, but which, like other instincts, may be fallacious and deceitful. ." (E 12.22)

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Dismissing "Antecedent" Scepticism

"There is a species of scepticism, antecedent to all study and philosophy, which is much inculcated by Des Cartes and others ... It recommends an universal doubt ... of our very faculties; of whose veracity, say they, we must assure ourselves, by a chain of reasoning, deduced from some original principle, which cannot possibly be fallacious ... But neither is there any such original principle, which has a prerogative above others ... Or if there were, could we advance a step beyond it, but by the use of those very faculties, of which we are supposed to be already diffident. The Cartesian doubt, therefore, were it ever possible to be attained by any human creature (as it plainly is not) would be entirely incurable; and no reasoning could ever bring us to a state of assurance and conviction upon any subject."

Convergence: the Onus of Proof

- What the *Enquiry* calls *consequent* skepticism (*E* 12.5) instead puts the onus *on the sceptic* to identify problems with our faculties.
- At E 12.22-3, we see the same strategy deployed very effectively to answer Hume's famous "sceptical doubts" about induction (presented in Section 4).
- Here we see a striking convergence in Hume's approach to topics that were treated quite differently in the Treatise. He now finds a satisfactory resolution of scepticism, and a plausible criterion of respectable scientific enquiry, in mitigated scepticism (E 12.24-5) and his Fork (E 12.26-34).

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What is the Sceptic's Point?

■ Hume's response is to stress that such "Pyrrhonian" scepticism is pointless:

"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 any thing, that all human life must perish, were his principles universally and steadily to prevail. ... It is true; so fatal an event is very little to be dreaded. Nature is always too strong for principle." (*E* 12.23)

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Why Rely on Custom?

As in the Treatise, Hume thinks that practical scepticism is pre-empted by our animal nature:

[Belief arising from inference through custom] "is the necessary result of placing the mind in such circumstances. It is an operation of the soul, when we are so situated, as unavoidable as to feel the passion of love, when we receive benefits; or hatred, when we meet with injuries. All these operations are a species of natural instincts, which no reasoning or process of the thought or understanding is able, either to produce, or to prevent." (*E* 5.8, cf. *T* 1.4.1.7)

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Two Types of Mitigated Scepticism

- The first type leads to "more modesty and reserve", less confidence in our opinions and "prejudice against antagonists".
- The second type whose basis Hume does not make entirely clear, involves:

"the limitation of our enquiries to such subjects as are best adapted to the narrow capacity of human understanding. ... avoiding all distant and high enquiries, confin[ing] itself to common life, and to such subjects as fall under daily practice and experience". (*E* 12.25)

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Opposing Superstition

- Now Hume has an answer to "superstition":
 - Arguments from miracle reports (Enquiry 10) rely on the inductive strength of testimony; but if properly weighed, the evidence of induction – that such things don't actually happen in practice – points against miracles more than for them.
 - The Design Argument (Enquiry 11) relies on analogy (which is a weaker form of induction), but if properly analysed, the analogies in favour of theism are weak and others are stronger.
 - Hume's Fork rules out a priori metaphysics, such as the Cosmological Argument (see E 12.28-29).

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The Whimsical Condition of Mankind

■ The Pyrrhonian arguments, in the end,

"can have no other tendency than to show the whimsical condition of mankind, who must act and reason and believe; though they are not able, by their most diligent enquiry, to satisfy themselves concerning the foundation of these operations, or to remove the objections, that may be raised against them." (*E* 12.23)

But this can have a beneficial effect, by leading us to "a more mitigated scepticism or academical philosophy" (E 12.24).

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Virtuous Bootstrapping

- If custom is indeed our primary belief-forming mechanism, is irresistible (at least in "obvious" cases), vital to our survival and daily life, and if the sceptic can give no strong consequent argument against it, then:
 - We can use induction to refine our own use of induction: to discover what more sophisticated methods actually work in practice (e.g. confining our enquiries to some subjects rather than others).
 - On the same basis we can reject methods that prove to be unreliable, such as hasty prejudice.

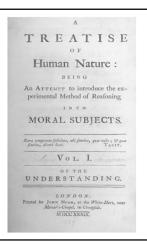
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From the *Treatise* to the *Enquiry*

- In the first Enquiry, several sources of radical sceptical doubt are dropped, in particular:
 - The extreme sceptical argument of 1.4.1;
 - The claim that identity over time (either of objects or selves) is incompatible with change;
 - The Separability Principle;
 - Scepticism about personal identity.
- The Enquiry thus finds a coherent way of defending inductive science based on customary inference (a key respectable principle). For more on this and on the reconciliation between Hume's "naturalism" and "scepticism", see my "Hume's Chief Argument" (2016).

APPENDIX

Of Scepticism with Regard to Reason



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"Hume's Pivotal Argument"

- Hume's argument "Of Scepticism with Regard to Reason", in *Treatise* 1.4.1, is not as commonly studied as his familiar discussions of induction, necessary connexion, the external world, and personal identity. Yet in the context of the *Treatise*, it is hugely important, bringing apparent disaster to the Conclusion of Book 1.
- However, it completely disappears from Hume's later work, and I have recently suggested that his realisation that it fails might well have been pivotal in significantly changing his attitude to scepticism, as manifested in the first *Enquiry*.

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Stage 1 – the *Uncertainty Argument*

- The *Treatise* 1.4.1 argument falls into two main stages. The first stage which I call the *Uncertainty Argument* argues that, even if we assume that in "demonstrative sciences the rules are certain and infallible" (*T* 1.4.1.1), some doubt is still appropriate because our faculties are imperfect and we sometimes make mistakes.
- If we take proper account as we should of our experienced frequency of having made such mistakes in the past, "All knowledge degenerates into probability" (*T* 1.4.1.1).

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An Arithmetical Example

- Suppose, for example, that I am trying to solve a quadratic equation, and conclude that the only positive solution is *x*=16. Should I believe this with *total conviction*? Hume argues that if experience suggests I sometimes go wrong, then I should not.
 - To make this question vivid, suppose that getting the answer wrong will cost me £1000, and I am given the opportunity to take out insurance against error: should I be prepared to pay to insure, and if so, how much?
 - If in practice I have got such equations right about 95% of the time, then it indeed seems prudent to pay up to £50 to insure (thus backing up Hume's argument).

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"A history of all the instances"

"We must, therefore, ... enlarge our view to comprehend a kind of history of all the instances, wherein our understanding has deceiv'd us, compar'd with those, wherein its testimony was just and true. Our reason must be consider'd as a kind of cause, of which truth is the natural effect; but such-a-one as by the irruption of other causes, and by the inconstancy of our mental powers, may frequently be prevented. By this means all knowledge degenerates into probability; and this probability is greater or less, according to our experience of the veracity or deceitfulness of our understanding, and according to the simplicity or intricacy of the question."

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■ When Hume says "Our reason must be consider'd as a kind of cause", he is alluding back to *Treatise* 1.3.12, "Of the Probability of Causes". There he gave an associationist account of probable reasoning from *inconstant* past experience, typically where a mix of unknown causes is involved, so we have to base our expectation on past statistics alone.

"when an object is attended with contrary effects, we judge of them only by our past experience, ... and that effect, which has been the most common, we always esteem the most likely." (*T* 1.3.12.8)

"when in considering past experiments we find them ... contrary ... each partakes an equal share of ... force and vivacity, ... Any of these past events may again happen; and we judge, that when they do happen, they will be mix'd in the same proportion as in the past." (*T* 1.3.12.10)

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An Obligation to Embark on "Reflex Judgment"

Hence when we consider what confidence to place in a mathematical calculation that we have carried out (for instance), we need to make, and take account of, a reflexive judgment about the reliability of our reason or understanding:

"we ought always to correct the first judgment, derived from the nature of the object [e.g. the mathematical judgment that x=16], by another judgment, deriv'd from the nature of the understanding [e.g. the experiential judgment that we tend to go wrong 5% of the time]." (T 1.4.1.5)

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Iterative Weakening to Nothing

■ This obligation iterates, repeatedly weakening the evidence left by the previous judgments:

"this decision, tho' it should be favourable to our preceding judgment, being founded only on probability, must weaken still farther our first evidence, and must itself be weaken'd by a fourth doubt of the same kind, and so on in infinitum; and even the vastest quantity ... must in this manner be reduc'd to nothing. $\,\dots\,$ all the rules of logic require a continual diminution, and at last a total extinction of belief and evidence." (T 1.4.1.6)

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Does Hume Accept the Conclusion?

"Shou'd it be ask'd me, whether I sincerely assent to this argument ... and whether I be really one of those sceptics, who hold that all is uncertain, and that our judgment is not in any thing possest of any measures of truth and falshood; I shou'd reply, that this question is entirely superfluous, and that neither I, nor any other person was ever sincerely and constantly of that opinion. Nature, by an absolute and uncontroulable necessity has determin'd us to judge as well as to breathe and feel; ..." (T 1.4.1.7)

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Stage 2 – the Regress Argument

- Hume thinks exactly the same sort of correction is rationally required for probable judgments – which will include our reflexive judgments about our own reliability (*T* 1.4.1.5), leading to a infinite regress.
- Thus since that first reflexive judgment e.g. that I'm 95% reliable in solving quadratic equations – is itself subject to error, I need to take this into account by making a second correction:

"we are oblig'd by our reason to add a new doubt deriv'd from the possibility of error in the estimation we make of the truth and fidelity of our faculties." (T 1.4.1.6)

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Hume's Assessment of the Argument

Hume repeatedly implies that he considers the sceptical argument to be rationally compelling:

"all the rules of logic require a continual diminution, and at last a total extinction of belief and evidence." (T 1.4.1.6)

"I have here prov'd, that the very same principles, which make us form a decision upon any subject, and correct that decision by the consideration of our genius and capacity, ... when we examin'd that subject; I say, I have prov'd, that these same principles, when carry'd farther, and apply'd to every new reflex judgment, must, by continually diminishing the original evidence, at last reduce it to nothing, and utterly subvert all belief and opinion." (T 1.4.1.8 - see also T 1.4.2.57, 1.4.7.7)

The Irresistibility of Belief

"... nor can we any more forbear viewing certain objects in a stronger and fuller light, upon account of their customary connexion with a present impression, than we can hinder ourselves from thinking as long as we are awake, or seeing the surrounding bodies when we turn our eyes towards them in broad sunshine. Whoever has taken the pains to refute the cavils of this total scepticism, has really disputed without an antagonist ..." (T 1.4.1.7)

Hume's Intention Here

"My intention then in displaying so carefully the arguments of that fantastic sect, is only to make the reader sensible of the truth of my hypothesis, that all our reasonings concerning causes and effects are deriv'd from nothing but custom; and that belief is more properly an act of the sensitive, than of the cogitative part of our natures. ... I have prov'd, that ... If belief ... were a simple act of the thought, without any peculiar manner of conception, or the addition of a force and vivacity, it must infallibly destroy itself, and in every case terminate in a total suspence of judgment." (T 1.4.1.8)

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How Does Hume Avoid the Regress?

- How does Hume's own account of belief escape this iterative weakening and eventual reduction to complete suspension?
 - "I answer, that after the first and second decision; as the action of the mind becomes forc'd and unnatural, and the ideas faint and obscure; tho' the principles ... be the same ...; yet their influence on the imagination [weakens] ..." (*T* 1.4.1.10)
- As Hume remarks, this difficulty of following and being moved by abstruse arguments is very familiar to us. (*T* 1.4.1.11, cf. 1.3.13.17)

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A Trivial Property of the Fancy

- As discussed in Lecture 8 on *Treatise* 1.4.7, this point is extremely significant: we are saved "from ... total scepticism only by means of that singular and seemingly trivial property of the fancy [i.e. the imagination], by which we enter with difficulty into remote views of things".
- This ultimately raises serious doubts about the adequacy of Hume's response to scepticism in the *Treatise*: scepticism seems to be avoidable only by relying on what we would normally consider to be *trivial* and *irrational* principles of the imagination.

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Rejecting Alternative Theories of Belief

- Hume thus attacks alternative theories of belief based on the general notion that our beliefs (do or should) result from *rational* oversight and judgment as inevitably leading to total absence of belief, an outcome which is clearly empirically false.
 - This attack presupposes that the sceptical argument is rationally correct (hence that a rational-oversight theory of belief would indeed be compelled by it).
 - By contrast, Hume's own theory is that belief arises from the causal operation of *custom* – which acts by enhancing the vivacity of ideas – in a way that "mere ideas and reflections" cannot prevent (*T* 1.4.1.8).

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The Significance of the Argument

- Hume anticipates *T* 1.4.1 in the previous Part:
 - "we shall find afterwards, [note to T 1.4.1] ... one very memorable exception [to iterative psychological weakening], which is of vast consequence in the present subject of the understanding." (T 1.3.13.5)
- He also draws on it in the conclusion of Book 1:
 - "I have already shown, [note to *T* 1.4.1] that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life." (*T* 1.4.7.7)

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Is Hume's Argument Strong?

- The *T* 1.4.1 argument seems very dubious:
 - Suppose I make a mathematical judgment.
 - Suppose experience suggests to me that I go wrong about 5% of the time in such judgments; so I adjust my credence to 95%.
 - Then it occurs to me that my estimate of 5% might be wrong ... but why should this make me assume that my estimate is likely to be too optimistic rather than pessimistic? Maybe my credence should be greater than 95%?

A Spreading "Margin of Error"?

- Some defenders of Hume (e.g. Bennett, Owen) admit that reduction isn't forced, but suggest that iteration implies a "spreading" of the probability estimate, so it becomes completely non-specific.
- But this doesn't fit Hume's account of belief as a vivacious idea – belief involves a specific level of felt vivacity, not reflective judgment over a range.
- Moreover like other defences of Hume, it has never been spelled out beyond vague handwaving, and no such defence has achieved sufficient rigour to yield mathematical plausibility.

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- Where is the Obligation of Reason?

 Even if there were some good reason in principle to
 - iterate up lots of levels, *in practice* doing so:

 Is psychologically impossible for us (*T* 1.4.1.10);
 - Confuses and pulls us away from the true statistics;
 - If we were able to do it, would obliterate all belief.

So how can it possibly be an obligation of reason to iterate, as *T* 1.4.1.6 insists?

On Hume's own conception of reason, reflexive checking can only make sense if it is warranted by experience (applying reflective rules such as those of Treatise 1.3.15). Hence the lack of any a posteriori benefit entirely undermines the supposed obligation.

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Examples in the Treatise

- "Of the inference from the impression to the idea"
 - Treatise 1.3.6 briefly mentions only one example (flame and heat at T 1.3.6.2).
- "Of the idea of necessary connexion"
 - Treatise 1.3.14 barely mentions the examples of billiard balls (T 1.3.14.18), a couple of mathematical relations (T 1.3.14.23), and a blind man's false suppositions that scarlet is like a trumpet sound, and light like solidity (T 1.3.14.27).

By contrast in the Enquiry ...

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Why Iterate?

- More fundamentally, the case for repeated iteration is hopeless. My credence in my mathematical judgment should – on the very principles explained at T 1.4.1.1 – depend on my reliability [and hence remembered track record] in judging mathematics, not on my reliability in judging my reliability in judging ... (etc.).
 - Hume's argument itself relies on memory and records, explicitly appealing to the "history of the instances" of my past judgments (T 1.4.1.1), and expressing no scepticism about our memory or record-taking ability etc. These remembered/recorded statistics remain what they are, irrespective of how good or bad I might be at iterative reflexive judgments.

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A Failed Argument

- Many other scholars have attempted to defend Hume's argument of *Treatise* 1.4.1, but I have recently argued that they all fail decisively ("Hume's Pivotal Argument, and His Supposed Obligation of Reason", *Hume Studies* 2018).
 - I argue that it is impossible even to elucidate the argument with any plausibility if one focuses on examples (rather than relying on the handwaving "and so on" of T 1.4.1.6). And I speculate that this makes it extremely likely that Hume himself would have come to appreciate the problem when he came to work on the Enquiry, which (in striking contrast to the Treatise) illustrates its discussions with a large number of examples.

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Examples in the *Enquiry*

- "Sceptical Doubts concerning ... the understanding"
 - Enquiry 4 contains over twenty examples, some of which are developed extensively (e.g. billiard balls at E 4.8-10; momentum at E 4.13, 16; the nourishing qualities of bread at E 4.16, 21).
- "Of the idea of necessary connexion"
 - Enquiry 7 mentions billiard balls repeatedly (E 7.6, 21, 28, 30), heat and flame (E 7.8), the influence of will on our limbs and other organs (E 7.9, 12, 14), a man struck with palsy (E 7.13), our power to raise up a new idea (E 7.16), the effects of sickness, time of day, and food (E 7.19), descent of bodies, growth of plants, generation, and nourishment (E 7.21), and vibration of a string causing a sound (E 7.29).