

What Hume Really Thought about Causation

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Agenda

- Introduction – brief setting of the scene.
- The significance of causation in Hume's philosophy.
- 12 "Key Points" of Hume's theory of causation.
- Philosophical interpretation of Hume's theory: reductionist, subjectivist, projectivist, or sceptical realist?
- Are Humean powers in objects or the mind?

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Introduction

- "Of the idea of necessary connexion" (*Treatise* 1.3.14 and *Enquiry* 7):
 - Starts from Hume's "Copy Principle" that all ideas are copies of impressions;
 - Seeks the *impression* from which the *idea* of causal power or necessary connexion is copied;
 - This impression turns out to be the inductive "customary transition of the mind" that we make in response to constant conjunctions;
 - In both the *Treatise* and *Enquiry*, the argument culminates with two "definitions of cause", encapsulating Hume's results.

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Causation's Significance for Hume

- Only causation can ground inference to the unobserved, which is key to the *Treatise* project.
- *Treatise* 1.3, the longest part of the entire work, is framed by the analysis of causation.
- Other topics there include the Causal Maxim, induction, belief, probability, rationality, rules of scientific enquiry, and the reason of animals.
- Hume's analysis of causation impacts crucially on his later treatment of materialism (in *T* 1.4.5) and "liberty and necessity" (in *T* 2.3.1-2).
- The 1740 *Abstract* describes this nexus as constituting "the Chief Argument" of the *Treatise*.

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12 Key Points of Hume's Theory

1. Whether *A* causes *B* is an objective matter of fact, (often) discoverable by investigation.
2. Causes are standardly understood to be prior and contiguous to their effects.
3. The principal – and essential – component of the concept of causation is *necessary connexion*.
4. Causal necessity is not the same as *absolute* or *metaphysical* necessity.
5. Hume is a convinced determinist.
6. *Necessary connexion* is virtually synonymous with *efficacy*, *agency*, *power*, *force*, *energy* etc.

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7. Understanding these terms involves a simple *idea*, copied from an *impression of reflection*.
8. That impression arises from observed *constant conjunction* and our consequent experience of making inductive inference.
9. There are accordingly two "definitions of cause".
10. Hume also provides two definitions of necessity, applied to the issue of "liberty and necessity".
11. Where the two definitions come apart, *constant conjunction* dominates *inference of the mind*.
12. In the first *Enquiry*, Hume recognises quantitative powers, going beyond the *Treatise's* relatively crude relations between discrete events.

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1. Objective Causation

- “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 1.3.15.2, my emphasis)
- “philosophers, observing, that, almost in every part of nature, there is contained a vast variety of springs and principles, which are hid, by reason of their minuteness or remoteness, find, that it is at least possible the contrariety of events may ... proceed ... from the secret operation of contrary causes. This ... 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 opposition.” (E 8.13, copied from T 1.3.12.5)

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2. Causes are Prior and Contiguous

- “I find in the first place, that whatever objects are consider'd as causes or effects, are *contiguous*; and that nothing can operate in a time or place, which is ever so little remov'd from those of its existence.” (T 1.3.2.6 cf. T 1.3.15.1).
 - However a footnote refers to T 1.4.5 (§§10-14), where Hume explains that many perceptions have no spatial location. Contiguity is dropped in the *Enquiry* (7.29).
- “The second relation I shall observe as essential to causes and effects, is ... that of **PRIORITY** of time in the cause before the effect.” (T 1.3.2.7, cf. T 1.3.15.2)

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3. Necessary Connexion is Essential

- “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 is of much greater importance, ...” (T 1.3.2.11)
- “we have ... discover'd a new relation betwixt cause and effect, ... their **CONSTANT CONJUNCTION**. We may now see the advantage of quitting the direct survey of [cause and effect], ... to discover the nature of that *necessary connexion*, which makes so essential a part of it.” (T 1.3.6.3)
- “According to my definitions, necessity makes an essential part of causation” (T 2.3.1.18, cf. E 8.25)
- “I define necessity two ways, conformable to the two definitions of cause, of which it makes an essential part” (T 2.3.2.4, cf. E 8.27).

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4. Causal Necessity is Not Absolute

- “[it is not] possible ... to conceive any thing contrary to a demonstration. But ... in reasonings from causation ..., this absolute necessity cannot take place, and the imagination is free to conceive both sides ...” (T 1.3.7.3)
- “... without consulting experience, ... Any thing may produce any thing. Creation, annihilation, motion, reason, volition; all these may arise from one another, or from any other object we can imagine.” (T 1.3.15.1)
- “to consider the matter *a priori*, any thing may produce any thing” (T 1.4.5.30, cf. 1.4.5.32)
- “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, cf. E 12.28 9)

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5. Hume's Determinism

- Hume argues at length that “the actions of the mind” are as determined as “the operations of external bodies” (T 2.3.1.3, 5-15; E 8.4, 7-20).
- He denies genuine chance or indifference (e.g. T 1.3.12.1, 2.3.1.18; E 6.1, 8.25).
- “The same cause always produces the same effect, and the same effect never arises but from the same cause.” (T 1.3.15.6)
- Determinism features in Hume's discussions on Evil (e.g. E 8.32 ff.) and suicide (“Of Suicide” para. 5).
- “I never asserted so absurd a Proposition as that any thing might arise without a Cause: I only maintain'd, that our Certainty of [its] Falshood ... proceeded neither from Intuition nor Demonstration; ...” (HL i 186)

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6. A Family of “Power” Terms

- “I begin with observing that the terms of *efficacy*, *agency*, *power*, *force*, *energy*, *necessity*, *connexion*, and *productive quality*, are all nearly synonymous; and therefore 'tis an absurdity to employ any of them in defining the rest. By this observation we reject at once all the vulgar definitions, which philosophers have given of power and efficacy; and instead of searching for the idea in these definitions, must look for it in the impressions, from which it is originally deriv'd. If it be a compound idea, it must arise from compound impressions. If simple, from simple impressions.” (T 1.3.14.4, cf. E 7.3, 8.25 n. 19)

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7. A Simple Idea (and hence Impression)

- “Mr. LOCKE, in his chapter of power, says, that, finding from experience, that there are several new productions in matter, and concluding that there must somewhere be a power capable of producing them, we arrive at last by this reasoning at the idea of power. But *no reasoning can ever give us a new, original, simple idea*; as this philosopher himself confesses. This, therefore, can never be the origin of that idea.” (*E* 7.8 n. 12, emphasis added)
- Note that *Hume’s quest for the impression succeeds*, so the “idea of necessary connexion” is *legitimated*: his account is not *debunking* the idea.

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8. The Impression depends on Inductive Inference (initially at least)

- “Perhaps ‘twill appear in the end, that the necessary connexion depends on the inference, instead of the inference’s depending on the necessary connexion” (*T* 1.3.6.3)
- But having ascribed a causal connexion between *A* and *B*, we can then go on to make further inferences – often of great complexity – based on that ascription (so now the inference depends on the ascription of causal necessity). This is no longer instinctive: careful reflective reasoning is often needed to identify genuine causes (see point 11 below).

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9. Hume Provides Two Definitions of Cause

- “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.’” (*T* 1.3.14.31, cf. *E* 7.29)

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10. Hume Also Provides Two Corresponding Definitions of Necessity

- “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 the index to *Essays and Treatises on Several Subjects*, “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.

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11. When the Two Definitions Come Apart, *Constant Conjunction* Dominates

- We should seek for reliable causal conjunctions underlying superficial inconsistencies (*T* 1.3.12.5, *E* 8.13-15), identify high-level *general rules* that can overcome prejudices (*T* 1.3.13.11-12), and apply the rules by which to judge of causes and effects (*T* 1.3.15).
- When we cannot identify *constant* relationships, we should base our expectations on experienced frequencies (i.e. *probability*, e.g. *E* 10.3-4, *T* 1.3.11-12).
- “The very essence” or power, cause and effect, or necessity, is constituted by constant conjunction (*T* 1.3.14.1.6, 1.4.5.33, 2.3.1.10, *E* 8.25 n. 19 etc.).

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A Significant Parallel in Hume’s Treatment of Virtue or Personal Merit

- In the second *Enquiry* of 1751, Hume gives two definitions of virtue or personal merit, one “objective” and one “subjective”:
 - “PERSONAL MERIT consists altogether in the possession of mental qualities, *useful or agreeable to the person himself or to others*. ... The preceding ... definition ...” (*M* 9.1, 9.12)
 - “[My] hypothesis ... defines virtue to be *whatever mental action or quality gives to a spectator the pleasing sentiment of approbation*; ...” (*M* Appendix 1.10)

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Correcting the Scope of the Idea of Virtue

"every quality, which is useful or agreeable to ourselves or others, is ... allowed to be a part of personal merit [and] no other will ever be received, where men judge of things by their natural, unprejudiced reason ... Celibacy, fasting, penance, mortification, self-denial, humility, silence, solitude, and the whole train of monkish virtues; ... are ... every where rejected by men of sense, ... because they serve to no manner of purpose; neither advance a man's fortune in the world [not useful to self], nor render him a more valuable member of society [nor others]; neither qualify him for the entertainment of company [not agreeable to others], nor increase his power of self-enjoyment [nor self]. We observe, on the contrary, that they cross all these desirable ends; stupify the understanding and harden the heart, obscure the fancy and sour the temper. We justly, therefore, transfer them to the opposite column, and place them in the catalogue of vices" (M 9.3)

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The Rules of *Treatise* 1.3.15

- These come immediately after the two definitions and their corollaries (T 1.3.14.31-36), and seem to be refinements of the first definition:

"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.

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. ...

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5. ... where several different objects produce the same effect, it must be by means of some quality, ... common amongst them ...

6. ... The difference in the effects of two resembling objects must proceed from that particular, in which they differ. ...

7. When any object increases or diminishes with the increase 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 ...

Here is all the LOGIC I think proper to employ in my reasoning; ... [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."

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(T 1.3.15.2-11)

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12. Quantitative Powers in the *Enquiry*

- In the *Enquiry*, Hume fully recognises applied mathematics (cf. T 2.3.3.2), and that it involves *forces*: theoretical entities that can be quantified, and which 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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Philosophical Options for Interpreting Hume's Theory

- A. *Reductionism*: Hume's analysis aims to uncover the *meaning* of causal "power" and "necessity". Causation *just is* regular relations of succession (or more complex functional relationships etc.).
- B. *Projectivism*: Ascriptions of causal relations involve "*projection*" of something mental.
- C. *The New Hume*: Hume's analysis concerns only *causation as it appears to us*. Real causation involves *absolute* (a prioristic) necessities in the objects, lying beyond our apprehension.

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(A) Reductionism and the Key Points

- The 12 Key Points all fit easily with a traditional reductionist account, which seems the most natural way of reading Hume's empiricist quest for the origin of the relevant idea (§§6-8).
- Such an account is also fully consistent with:
 - Causal objectivity (§1);
 - Definition in non-causal terms (§2 and §9);
 - *Necessary connexion* being essential to causation (§3), as long as it is defined in a parallel way (§10) and not conflated with *absolute* modality (§4);
 - Determinism, understood as conformity to laws (§5).

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Hume's Semantic Argument

- Hume's entire argument is structured around the Copy Principle quest for an impression.
- The Principle is a tool for deciding questions of *meaning* (T 1.1.6.1, A 7, E 2.9).
- He aims to find causal terms' *meaning* or *significance* (T 1.3.14.14 & 27, A 26, E 7.3, 26 & 28).
- When the *subjective* impression is identified, the apparently "paradox" is embraced (T 1.3.14.24-7).
- The discussion culminates with two *definitions* of "cause", and consequences are drawn which apparently treat these as *genuine* definitions ...

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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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Hume's Later Applications of his Two Definitions: T 1.4.5 and 2.3.1-2

- If we search for later paragraphs in the *Treatise* that mention definitions of "cause", "power" or "necessity", we find just three, at T 1.4.5.31 (on materialism), 2.3.1.18, and 2.3.2.4 (on liberty and necessity).
- If we search instead for "constant conjunction" or "constant union", we find mainly T 1.4.5.30-33, 2.3.1.416, and 2.3.2.4 (T 1.4.1.2 and 1.4.3.2 also mention "constant union" briefly).
- Similar searches in the *Enquiry* point very clearly to Section 8 (10.5, on miracles, is the only other).

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Causation and the Mind

- Hume 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, "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.*
 - We'll return to these key arguments later, when considering the New Hume.

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The Two Main Problems for a Reductionist Reading

1. The two definitions are not co-extensive, so they cannot apparently both be correct reductive definitions of the same thing.
 - *Reply*: We have seen from §11 and §12 that when the two definitions come apart, the first definition – in terms of "constant conjunction" and objective functional relationships – dominates the second.
2. Positive reductionism is inconsistent with Hume's notorious (and oft-repeated) insistence that necessity is only "in the mind" ...

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- "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);
- "this connexion, tie, or energy lies merely in ourselves, and is nothing but that determination of the mind ..." (T 1.4.7.5);
- "the necessity ... is nothing but a determination of the mind" (T 2.3.1.4);
- "the necessary connexion is merely a perception of the mind" (T 2.3.1.6).

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Rejection of Subjectivism in the *Enquiry*

- By contrast, the *Enquiry* only twice suggests that causal necessity is subjective:
 - a) "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" (E 8.22 n. 18)
 - b) "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 ..." (E 7.28)

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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."

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- 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. (E 7.29)

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(B) Projectivism

- "'Tis a common observation, that the mind has a great propensity to spread itself on external objects, and to conjoin with them any internal impressions, which they occasion, ... the same propensity is the reason, why we suppose necessity and power to lie in the objects ..., not in our mind, ..." (T 1.3.14.25)
- "Thus the distinct boundaries and offices of *reason* and of *taste* are easily ascertained. ... The one discovers objects as they really stand in nature, without addition or diminution: The other has a productive faculty, and gilding or staining all natural objects with the colours, borrowed from internal sentiment, raises, in a manner, a new creation." (M App 1.21)

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- So first, Hume thinks of causal projectivism as an *error* that explains why we are naturally biased *against* his [correct] theory.
- Secondly, he distinguishes *reason* from *taste*:
 - *reason* presents objects "without addition or diminution", is "cool and disengaged", and is the domain of truth and falsehood (M App 1.21);
 - *taste* "gilds or stains" with "colours, borrowed from internal sentiment", and "as it gives pleasure or pain, ... becomes a motive to action" (M App 1.21).
- Crucially, causal judgements are on the side of *reason*; "gilding or staining" *distinguishes* judgements of taste from causal judgements.

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Empiricism and Projectivism

- Hume's Copy Principle obliges him to seek an "impression of reflection" to ground any idea that is not straightforwardly sensory:
 - Necessary connexion is grounded in (something like) the awareness of inductive inference;
 - Moral notions are grounded in generalised approbation and disapprobation;
 - Beauty is grounded in "a peculiar delight and satisfaction"; deformity in a corresponding pain.
- Thus the ascription of these ideas *inevitably* involves *some* element of "projection".

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(C) The "New Hume"

- Some scholars (most influentially John Wright, Galen Strawson, and Edward Craig) argue that Hume believes we have a deeper conception of causal necessity, going beyond what is yielded by the impression-copied idea and the two definitions.
 - Strawson calls this supposed deeper notion "Causation" (with a capital "C").
 - Blackburn calls it "thick" causal connexion.
- But what can this supposed deeper conception be, when it cannot involve a bona fide *idea* (as there is no impression that such an idea could copy)?

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The Alleged AP Conception

- As interpreted in the "New" way, Hume thinks that *genuine* causation in things must involve an absolute necessity *which, if only we knew it, would license a priori inference of the effect, with complete certainty*. Strawson calls this the "AP" (a priori) Property.
 - One obvious objection is that this conflicts with Hume's oft-repeated Conceivability Principle that "whatever we *conceive* is possible, at least in a metaphysical sense" (A 11), because if there were a "hidden" absolute necessity connecting *A* with *B*, then the fact that we can conceive of *A* not being followed by *B* could not imply that this is a genuine metaphysical possibility. (Strawson, strangely, ignores this problem!)

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The Most Serious Objection to the "New Hume"

- On the "New" reading, Hume understands genuine causation, and causal necessity, to involve *more* than satisfaction of his paired definitions.
- But if we look at how Hume himself *applies* his paired definitions later in the *Treatise* and *Enquiry* – in the corollaries of T 1.3.14, at the end of T 1.4.5, and especially the discussions of "liberty and necessity" (T 2.3.1-2; E 8), he is clearly relying on the claim that *the two definitions do in fact capture what genuine causation, and causal necessity, are*.

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Of the Immateriality of the Soul

- The standard anti-materialist argument insists that material changes cannot cause thought, because the two are so different. Yet ...
 - "to refute it ... We need only reflect on what has been prov'd ..., 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, and as no real objects are contrary; ... to consider the matter a priori, any thing may produce any thing, ... however little the resemblance may be betwixt them." (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)
 - "all objects, which are found to be constantly conjoin'd, are upon that account only to be regarded as causes and effects" (T 1.4.5.32)
 - "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)

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Of Liberty and Necessity

- Hume's argument that exactly the same necessity is applicable to the moral and physical realms (evident also in the corollaries to his two definitions at *T* 1.3.14.32-33) depends on taking our understanding of necessary connexion to be completely exhausted by the two factors of constant conjunction and customary inference.
- These two factors can be shown to apply in the moral realm, and he insists that we cannot even *ascribe* any further necessity to matter:

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"the ... advocates for free-will [of a sort Hume opposes] must allow this 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, cf. *T* 2.3.1.3-18, *T* 2.3.2.4, *E* 8.4-22, *E* 8.27)

- Hume is arguing here *against* a (capital "C") Causal Realist, who denies that satisfaction of his paired definitions "makes the whole of necessity", and who accordingly believes that we are able to consider that there is "something else [to necessity] in the actions of matter".

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"A New Definition of Necessity"

- Even more explicitly than in "Of the Immateriality of the Soul", Hume portrays his argument about "liberty and necessity" as turning crucially on his new understanding 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)
- 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).

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Humean Objective Powers?

- Hume does believe in real causes, and – since he thinks that causation essentially involves causal power or necessity – it seems to follow that, *on his own interpretation of the relevant terms*, ...
- Hume also believes in real causal powers and real causal necessity.
- But does he (or should he, on his own principles) believe in powers in objects? This is less clear.

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"Powers" as Marks/Measures of an Effect

"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)

"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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Objective Powers, without Powers in Objects?

- But in many cases, the outcome of some causal interaction will depend, perhaps in some complex manner, on *many* quantitative factors rather than just one (e.g. momentum or kinetic energy).
- In such cases, it seems inappropriate to refer to the "power" of an object as that single factor "by which the degree or quantity of its effect is fixed and determined".
- But apparently the Humean *can* nevertheless continue to speak of "objective powers".

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