Hume, Causal Realism, and Causal Science

Kames and a Footnote
- Kames (1751) quoted Hume's references to powers in the *Enquiry* (at 4.16) against him, as evidence of inconsistency; they knew each other well and swapped manuscripts prior to publication.
- In 1750 Hume added a footnote to E 4.16: **“The word, Power, is here used in a loose and popular sense. The more accurate explication of it would give additional evidence to this argument. See Sect. 7.”**

Semantics or Epistemology?
- “New Humeans” claim that Hume’s statements about “meaning”, “definition” etc. should not be interpreted semantically but epistemologically.
- Thus Peter Kail insists that we should “view Hume’s talk about ‘meaning’ as meaning ‘acquaintance with’, as opposed to ‘thinkable content’” (2001, p. 39).
- Even if possible, this gives no positive evidence for the New Hume. The texts of T 1.3.14 and E 7 remain prima facie strongly anti-Réalist.

In the *Enquiry*, Hume repeatedly argues that perception of an object or an internal feeling cannot yield an impression of necessary connexion, because if it could, this would enable us to infer the effect a priori, which we cannot do.
- On this basis, New Humeans claim that “genuine” Humean necessity must, quite generally, licence a priori inference.
- However Hume only applies the a priori constraint in Part 1, when considering single-instance impressions.
- He does not apply it at all in Part 2, to the impression (arising from repeated instances) which he explicitly identifies as the genuine impression of necessity.
- This makes sense if he is assuming that any single-instance connexion must be a priori, an assumption that is manifest anyway in his discussion of induction.

Defective Definitions?
- One of the most commonly cited passages in support of the New Hume: “so imperfect are the ideas which we form … that it is impossible to give any just definition of cause, except what is drawn from something extraneous and foreign to it. … we cannot remedy this inconvenience, or attain any more perfect definition, which may point out that circumstance in the cause, which gives it a connexion with its effect.” (E 7.29)

Imperfect Ideas, not Definitions
- Hume describes our ideas as “imperfect”, but the definitions as “just”.
- He’s discussing his definitions of cause, not of necessary connexion (which he clearly distinguishes, e.g. in the *Enquiry*).
- “that circumstance in the cause, which gives it a connexion with its effect” is very unlikely to mean the necessary connexion, especially given the footnote to this paragraph.

“That Circumstance in the Cause”
- A “circumstance” is a factor that is variable between situations, to which eliminative methods can be applied to identify the true causal factor (e.g. T 1.3.13.11, E 7.30).
- The footnote to E 7.29 makes clear that the relevant “circumstance” is identifiable only by experiment, and even then can be hard to isolate (e.g. it could be the velocity, or the square of the velocity).

Quantitative Forces
- In the *Enquiry*, Hume is clear that mechanics involves forces: theoretical entities that can be quantified and enter into equations describing objects’ behaviour. (e.g. E 4.12-13)
- “Force” is in the same family as “power” etc.
- This, rather than Causal Realism, explains the *Enquiry’s* prominent “power” language.
- E 7.25n and E 7.29n both suggest an attitude to such forces corresponding exactly to the anti-Réalist spirit of *Enquiry* 7. Forces are to be treated instrumentally (cf. Newton and Berkeley).

Other “New Humean” Arguments
- A. “The anti-realist interpretation is a twentieth-century positivist invention”
  - Clearly false. Kames (1751), Leisand (1757), Reid (1785) all see Hume as anti-realist.
- B. “Causal anti-realism is too outrageous to have been contemplated by Hume”
  - “of all the paradoxes, which I have had, or shall hereafter have occasion to advance in the course of this treatise, the present one is the most violent…” (T 1.3.14.24).

Hume’s “Strict Scepticism”
- C. Strawson dubs Hume a “strict sceptic” who “does not make positive claims about what … knowably … does not exist” (p. 34).
- But Hume’s anti-realist about causation is a limit on our ideas and what we can mean by “power” etc., not a limitation on reality.
- Anyway the claim that he is a “strict sceptic” begs the question. Where are the tests?
- Hume does deny the existence of some things, e.g. substantial forms, occult qualities.

Is the *Enquiry* Realist?
- D. “All the main support for the view that Hume was an outright regularity theorist derives from the *Treatise*, and vanishes in the *Enquiry*” (Strawson 2000, p. 32). But this is not true:
  - “When we say, therefore, that one object is connected with another, we mean only, that they have acquired a connexion in our thought …” (E 7.28)
  - “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” (E 8.22).

The “AP” Property
- E. In *Enquiry* 7 Part 1, Hume repeatedly argues that perception of an object or an internal feeling cannot yield an impression of necessary connexion, because if it could, this would enable us to infer the effect a priori, which we cannot do.
- On this basis, New Humeans claim that “genuine” Humean necessity must, quite generally, licence a priori inference.
- Moreover an “AP” understanding of causal necessity conflicts with Hume’s Conceivability Principle, by conflating causal with “absolute” or “metaphysical” modality.
- If Hume were prepared to countenance a “hidden” objective necessity – of a genuine metaphysical kind – connecting A with B, then the fact that we can conceive A’s not being followed by B could not imply that this is a genuine metaphysical possibility. But “whatever we conceive is possible, at least in a metaphysicial sense” (A 11).
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Inconsistent Definitions?

G. The argument of T 1.3.14 and E 7 ends, notoriously, with two definitions of cause:
- 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.
  - Beebee (2007: 430) and Kail (2007: 266) claim that the two definitions – being inconsistent – cannot be intended as semantic.
  - But this presumes that the only way a definition can be semantic is by specifying necessary and sufficient conditions.
  - Hume's conception of meaning, associated with his Copy Principle, suggests a different view. The meaning of causal necessity can only be understood through the impression from which its idea is derived: reflexive awareness of our own inferential behaviour in response to observed constant conjunctions.
  - The second definition, accordingly, specifies a paradigm case in which we experience this impression and thus can acquire the idea.

- There is a parallel case in Hume's treatment of virtue or personal merit in the Moral Enquiry. Here again he gives two definitions:
  - "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)
- Again we have a characteristic idea, whose application is then to be systematised.

- Nothing in Hume's theory requires that, having once acquired the idea, we must restrict its application to those paradigm cases that characteristically generate it.
- Indeed his advocacy of "rules by which to judge of causes and effects" etc. implies that he must think we can go beyond these cases by systematising our application of the idea.
- Accordingly the two definitions can be seen as complementary rather than conflicting. The second identifies the relevant idea; the first specifies the criterion for applying it.

- This understanding of the paired definitions tells strongly in an anti-Realist direction. For it suggests that the system of causes, like the system of virtues, is essentially being read into the world rather than being read off it.
- We thus have a process of systematisation in which our natural judgement, refined and applied more systematically in accordance with the relevant rules, "raises, in a manner, a new creation", by "gilding or staining natural objects with the colours, borrowed from internal sentiment" (M Appendix 1.21).

Moving Onto the Offensive

- The arguments in favour of the New Hume are all rather weak – none of those we've considered seems sufficient to dent the onus of proof generated by the context, structure and content of Hume's argument.
- But there are far stronger arguments to be added to the other side of the debate, because the "New Hume" literature – very strikingly and surprisingly – almost entirely ignores the point of Hume's two definitions.

Hume's Use of his Two Definitions

- If we search for subsequent paragraphs in the Treatise that mention the definition of "cause", "power" or "necessity", we find just three, at T 1.4.5.31, 2.3.1.18, and 2.3.2.4.
- 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 is the only other).

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 arguments crucially turn on the claim that there is nothing to causal necessity beyond the two definitions ...

Of the Immateriality of the Soul

- The standard anti-materialist argument insists that material changes cannot cause thought, because the two are so different. ... and yet nothing in the world is more easy than to refute it. We need only to reflect on what has been proved at large: that to consider the matter, any thing may produce any thing, and that we should 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).

- 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)

The 1.4.5 Dilemma

- Hume starts paragraph 1.4.5.31 with a dilemma, before arguing for its second horn in the remainder of the paragraph:
  - "There seems only this dilemma left us ... either to assert, that nothing can be the cause of another, but where the mind can perceive the connexion in its idea of the objects: Or to maintain, that all objects, which we find constantly conjoint, are upon that account to be regarded as causes or effects." (T 1.4.5.31)

- The word "perceive" here might seem to open the door to a New Humean response: Hume's interest is epistemological rather than semantic.
- However on this view, Hume is essentially in agreement with his opponents on what causation involves; his difference with them lies only in his dogmatic claim that either we should demand complete transparency to human reason before admitting a causal link, or else we should accept it on the basis of mere constant conjunction.
- This would make his argument very misleading: why has he portrayed the disagreement as one concerned with the understanding of causation?

Appendix 1.10

- Beebee (2007: 430) and Kail (2007: 266) mention the definition of "cause", which is notoriously, with two definitions...

- Nothing in Hume's theory requires that, having once acquired the idea, we must restrict its application to those paradigm cases that characteristically generate it.
- Indeed his advocacy of "rules by which to judge of causes and effects" etc. implies that he must think we can go beyond these cases by systematising our application of the idea.
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**Liberty and Necessity**

- Hume’s argument that the same necessity is applicable to the moral and physical realms 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 can’t even ascribe any further necessity to matter.

- “the ... advocates for [libertarian] free-will 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)
- Here the New Humean position is very clearly that of Hume’s opponent, who thinks that “we have an idea of something else ...”

**“A New Definition of Necessity”**

- Even more explicitly than with “Of the Immateriality of the Soul”, Hume portrays his argument here as turning 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)
- Again, the New Humean interpretation fails to make any sense of this portrayal.

**Kail’s Defence (a)**

- Such objections “crucially miss the fact that Hume refuges the dispute at the level of common life rather than an issue in the metaphysics of causation”. (2007: 264)
- But this, based on E 8.1 alone, looks extremely tenuous; moreover E 8.16, 8.23 and 8.27 all seem to tell strongly against it.
- Besides, the corresponding discussions in the Treatise and Abstract give the same argument, but no passage corresponding to E 8.1...

**Kail’s Defence (b)**

- “Even in the midst of the discussion … Hume’s language, when treating of powers, sounds more naturally epistemic and sceptical than semantically restrictive and reductive: … our faculties can never carry us farther in our knowledge of this relation than [constant conjunction] … But though this conclusion concerning human ignorance … we know nothing farther of causation of any kind.” (2007: 266)

**Kail’s Defence (c)**

- “In the midst of the discussion Hume is prepared to grant, for the sake of argument, power in matter, but that it makes no difference to the reconciliation. But if the reconciliation turned on the claim that no further thought is possible with regard to causation, even this small concession would violate this alleged central move. … Here is an opportunity for him to reassert his alleged conclusion that no such thought is possible … But he does not take this opportunity.” (2007: 266)

**Anti-Realism supporting realism**

- All objects, which are found to be constantly conjoint, 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, my emphasis]
- Two particulars are essential to necessity, viz. the constant conjunction and the inference of the mind … wherever we discover these we must acknowledge a necessity. (T 2.3.1.4)

**Conclusion**

- The New Hume has little to recommend it.
- A la carte selection of texts and principles can be used to support any number of Humean readings, but only those that can make sense of the detailed flow of his arguments – and the systematic relations between them – are worth taking seriously.
- On causation, Hume’s arguments seem to be quite unambiguously anti-Realist.