

## Some Mysteries of Necessity

### 1. The Humean Examination

- (a) Hume is investigating the nature of causal relations. He argues that causation requires a *necessary connection* between cause and effect:

**(HUME’S DICTUM)** if an event  $C$  causes an event  $E$ , then it is impossible that  $C$  occur and  $E$  not occur.

- (b) **Some Text:** Hume then encounters a problem with such alleged necessary connections:

[W]e must now return upon our footsteps to examine that question, which first occur’d to us, and which we dropt in our way, *viz.* *What is our idea of necessity when we say that two objects are necessarily connected together.* [...] In order to this I consider, in what objects necessity is commonly suppos’d to lie; and finding that it is always ascrib’d to causes and effects, I turn my eye to two objects suppos’d to be plac’d in that relation; and examine them in all the situations, of which they are susceptible. 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 instance can I go any farther, nor is it possible for me to discover any third relation betwixt these objects. (Hume, *Treatise*, I.III.14, “Of the idea of necessary connexion” p. 155)

Suppose two objects to be presented to us, of which the one is the cause and the other the effect; ’tis plain, that from the simple consideration of one, or both these objects we never shall perceive the tie, by which they are united. (Hume, *Treatise*, I.III.14, “Of the idea of necessary connexion” pp. 162-3)

2. **Hume’s Datum:** What is Hume’s problem with necessary connections here? Well, the problem seems to center around a datum regarding the results of an examination of the

**(HUME’S DATUM)** A Humean Examination of the things and the relations between them does not reveal any feature that requires that they be necessarily connected.

3. **The Problem(s):** What problem does Hume's datum pose? Without pretending to historical accuracy, let me state two problems.
  - (a) **Epistemological:** Our observations of the things and the relations between them do not seem to provide any evidence that they are necessarily connected.
  - (b) **Metaphysical:** There do not seem to be any features of the objects or the relations between them which explain why they are connected as a matter of necessity.
4. **Remember "the simple answer":** Recall that Hume has posed two difficulties for any claim that there is a necessary connection between a cause and its effect, an epistemological difficulty, and a metaphysical difficulty.

Whenever someone poses a question that sounds like it's deep and hairy, always remember "the simple answer". Let's assume that Hume is correct about causation involving necessary connection. Then we can answer both the epistemological and metaphysical questions posed by the Humean examination:

- (a) **Epistemological:** the evidence that one thing causes another is *that we have observed it*. We observe the ball causing the window to break, for instance. It is just a mistake to insist that the evidence for a causal connection be given in terms of our having observed *something else*.  
[Analogy: "How do you know that this book is red?" "I observe that it is red."]
- (b) **Metaphysical:** No feature of *C* or *E* *explains* why they are necessarily connected. The connection is *basic*.

**General Moral:** Look out for *galloping reductionism*: demanding an explanation for (or evidence for) something which is explanatorily basic (or is data).

5. **From Causation to Necessary Connections Generally:**
  - (a) **What's the big deal?** So far we've been talking about a particular puzzle of Hume's about the relation of cause-and-effect. Who cares about that? Hume had some pretty idiosyncratic views about causation. In particular (at least

to my mind) HUME’S DICTUM seems completely implausible. So what’s the big deal? Can’t we just wriggle out of the problem by sensibly rejecting HUME’S DICTUM?

- (b) But **NOTICE**: the problem that Hume has identified is not really particular to causal relations: it is a problem any time you assert some necessary connection.
- (c) **FOR INSTANCE**: Many have suggested that the relation of *production* is necessary for the product. Take a chicken that has actually been produced (*i.e.* grown) from an egg. Many have asserted (including Kripke) that it is impossible that that very chicken have come from anything else. The chicken is produced from the egg. This connection to the egg is necessary to the chicken, according to the doctrine under discussion. (Notice it is natural to suggest that the chicken was *produced from* the egg; it’s not obviously correct, however, to suggest that the chicken was *caused by* the egg.)

Hume says, whatever goes for causation also goes for production:

’Twere easy for me to shew the weakness of this reasoning, were I willing to make use of those observations, I have already made, that the idea of *production* is the same with that of *causation*, and that no existence certainly and demonstratively implies a power in any other object; or were it proper to anticipate what I shall have occasion to remark afterwards concerning the idea we form of *power* and *efficacy*. (Hume, *Treatise*, I.III.3, “Of the inference from the impression to the idea” p. 90)

- (d) **THE UPSHOT**: Hume’s difficulty is not with *causal* relations *per se*, but with any kind of necessary connection.

I begin with observing that the terms of *efficacy*, *agency*, *power*, *force*, *energy*, *necessity*, *connexion*, and *productive quality*, are all nearly synonymous. (Hume, *Treatise*, I.III.14, “Of the idea of necessary connexion” pp. 157)

**(THE HUMEAN CLAIM)** There are no necessary connections between any two individuals.

6. **Against “the simple answer”:** Now that we see that the target of Hume’s skepticism isn’t just causal relations, but necessary connections generally, we can see why “the simple answers” won’t **ALWAYS** work.
- (a) **Claims of necessary connections involve invidious distinctions:** [‘Invidious’ means *discriminatory*]. According to Hume (and in accord with common sense) there are many connections between individuals which are not necessary: though they obtain, they might not have. For instance, I am, as a matter of fact, inside this shirt. But I might have been inside another shirt, or no shirt at all. So: there is some distinction between connections which are *optional* for me, and connection which are *not optional* for me. [DRAW THE CONNECTION CARTOON.]
  - (b) **Epistemological:** Don’t we need some reason to classify any connection as necessary rather than contingent? It seems implausible to suggest that we always know that things are necessarily connected by **direct observation**.
  - (c) **Metaphysical:** Is this a distinction that has no further explanation? If it does, it seems a little random. Surely at least *sometimes* we can explain what grounds the distinction between necessary and contingent connections!
7. **From Necessary Connections to Necessary Properties:** Notice that nothing about Hume’s examination really is limited to connections between **two** things. It will also apply to necessary properties of a **single** thing. This is so for two reasons:
- (a) **Humean examination of Obama:** Look at him from all sides. You’ll observe his non-turnip-hood, and his hairiness (at the top of his head), but you won’t see anything which indicates that non-turnip-hood is a property he had to have, while hairiness is a property he might have lacked.
  - (b) **Having a property just is a connection:** It is plausible to think of the claim that Obama is necessarily a non-turnip as involving a necessary connection between Obama and *non-turnip-hood*. [DRAW THE CONNECTION CARTOON.]

Both the epistemological and metaphysical questions come up.

8. **From Necessity to Possibility:** The invidious distinction between necessary features and contingent features cuts both ways.

- (a) **Epistemological:** Our observation of Obama and his hairiness does not seem to provide any evidence that that hairiness is contingent.
- (b) **Metaphysical:** There do not seem to be any features of Obama or the property of *hairiness* which explain why Obama is not hairy as a matter of necessity.

Generally, necessity and possibility are two sides of the same coin:

- Whenever you make a necessity claim you rule out a possibility claim; and
- Whenever you make a possibility claim you rule out a necessity claim.

Making this claim...	...rules out this one
Obama is necessarily a non-turnip	Obama might have been a turnip
Obama might have lost	Obama had to have won

It also works in reverse!

Making this claim...	...rules out this one
Obama might have been a turnip	Obama is necessarily a non-turnip
Obama had to have won	Obama might have lost

**NEC-POSS EQUIVALENCE:**

- necessity of  $P = \mathbf{IM}$ possibility of  $\neg P$ ;
- possibility of  $P = \mathbf{NON}$ -necessity of  $\neg P$

9. **CONCLUSION:** There are two mysteries here, stemming from a generalization of Hume's Datum:

**(HUME'S DATUM GENERALIZED)** The Humean Examination of a thing, *e.g.*, Obama, reveals only those features that he does, as a matter of fact, have. It does not reveal that he had to have any of those features, and it does not reveal features that he lacks in fact, but might have had.

- (a) **The Epistemological Mystery:** The features revealed by the Humean Examination do not seem to provide any evidence about features he had to have, or features he might have had but lacks. So how do we know that he had to have certain features, but might have lacked certain others?
- (b) **The Metaphysical Mystery:** The Humean Examination does not reveal any features of Obama which explain either why he had to have some of them, or why he might have had certain others that he in fact lacks. So what about him explains why he had to have some features, and might have lacked others?

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1. **The Humean Examination:** In the course of analyzing the relation of cause-and-effect, Hume commits himself to

(**HUME’S DICTUM**) if an event  $C$  causes an event  $E$ , then it is impossible that  $C$  occur and  $E$  not occur.

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5. **Expansion #1: From Causation to Necessary Connections Generally**

Hume says, whatever goes for causation also goes for production:

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- (b) **Epistemological:** It seems implausible to suggest that we always know that things are necessarily connected by **direct observation**.
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7. **Expansion #2: From Necessary Connections to Necessary Properties**

- (a) **Humean examination of Obama**
- (b) **Having a property just is a connection**

8. **Expansion #3: From Necessity to Possibility** Generally, necessity and possibility are two sides of the same coin:

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It also works in reverse!

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## 9. MYSTERIES ACHIEVED

**(HUME’S DATUM GENERALIZED)** The Humean Examination of a thing, *e.g.*, Obama, reveals only those features that he does, as a matter of fact, have. It does not reveal that he had to have any of those features, and it does not reveal features that he lacks in fact, but might have had.

- (a) **The Epistemological Mystery:** How do we know that an object, *e.g.* Obama, had to have certain features, but might have lacked certain others?
- (b) **The Metaphysical Mystery:** What about an object, *e.g.* Obama, explains why he had to have some features, and might have lacked others?