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CAUSALITY AND HUME'S FOUNDATIONAL PROJECT

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The concept of causation is fundamental to all science and philosophy. Both our explanations of changing events and our conceptions of the nature of change itself are formulated in causal language. However, throughout history philosophers have found it rather difficult to agree on the nature of this concept. And this is why Hume writes:

> There is no question, which on account of its importance, as well as difficulty, has caus'd more disputes both among ancients and modern philosophers, than this concerning the efficacy of causes, or that quality which makes them be follow'd by their effects.

(T 1.3.14.3; SBN 156–157)

This passage appears in a section of his masterpiece, *A Treatise of Human Nature*, where Hume anticipates the revolutionary nature of his account of the idea of causation.

Some elements of Hume's theory of causation have been controversial ever since Hume put ink to paper. Hume proposes *two* definitions of the concept of 'cause,' insisting that they are essentially the same, although they appear to be fundamentally different. Hume also famously compares necessity to sounds and other sensible qualities, which we believe are mind-independent properties of objects but turn out to be instead projections of the mind onto the world. Unsurprisingly, there are disputes about the right interpretation of these issues. But for the last 30 years or so interpreters have engaged in contentious and exciting debates over fundamental, core elements of Hume's theory of causation. Indeed, what has been challenged is what seemed most unassailable, what is almost synonymous with the name "Hume," *the regularity theory*, the view that all that causation amounts to in mind-independent world is mere regularity, or what Hume refers to as "constant conjunction." Causation, on this view, reduces to the observable fact that some objects or events are constantly conjoined with other objects or events, without necessity or reason in nature for these constant conjunctions.[1]

The regularity theory can only be challenged, of course, by attacking fundamental structures of Hume's philosophy. Indeed, "New Hume" (Winkler 1991) defenders have questioned the primacy of Hume's theory of ideas, his semantic theory, and his metaphysics.[2] Hume approaches the subject of causation by examining the *idea* of cause, but is Hume's account of this idea an answer to the question of the *nature* of causation? Or is the idea of cause only an account of

what causation is *for us*, or what we can *know* of causation? If the latter, does Hume then leave open the metaphysical possibility that there is "real" or mind-independent causation? Hume claims that the meaning of the term 'necessity' is given by the idea associated with it, but what does Hume mean by 'meaning' anyway? And what meaning, if any, bridges over to metaphysics?

The "old–new Hume debate" has generated scores of answers to these and related questions concerning Hume's views on the external world. I believe that the controversy can benefit from a widening of the perspective in which we reflect, more systematically, on the role of ideas in Hume's philosophy, his position on meaning, and his metaphysical (or anti-metaphysical) views. In this chapter, I consider these fundamental questions against the background of what I take to be Hume's overarching philosophical intention, namely to establish his "science of man" as the foundation of the other sciences. This project has a method, with identifiable patterns of argumentation that I think are important to the old–new Hume debate.

Hume introduces his "foundational project" in his first philosophical work, the *Treatise*, and it is in this text that he articulates the project most fully and carries it out most deliberately. Thus, given my aim in this chapter to place Hume's account of our idea of causation against the background of his foundational project, I will appeal mostly to this text for my presentation of Hume's treatment of causation. I start by providing an outline of Hume's approach to the subject of causation, which begins with an examination of our idea of 'cause' and culminates in an account of the idea of necessary connection. I then sketch some of the central moves at the heart of the old–new Hume controversy. This is followed by a discussion of other cases in which Hume appeals to *ideas* to settle central debates within the sciences, which I relate to Hume's foundational project in the *Treatise*. At the end, I return to the old–new Hume debate and assess some of the contested claims against the background of Hume's project.

The idea of 'cause'

Hume's discussion of causation extends over a large part of Book I of the *Treatise*. In *Treatise* 1.3 (SBN 69), entitled "Of Knowledge and Probability," Hume begins by identifying the seven philosophical relations we employ when we reason in general.[3] The relation of causation is one of these relations, and although it does not generate knowledge, Hume recognizes it as exceptional and of utmost importance. The relation of causation, Hume explains, is the only relation "which produces such a connextion, as to give us assurance from the existence or action of one object, that 'twas follow'd or preceded by any other existence or action." Causation, he continues, is the only relation that "informs us of existences and objects, which we do not see or feel" (T 1.3.2.2; SBN 73). Hume's goal then is to "endeavour to explain fully" this relation.

Hume claims to "begin regularly" by considering "the idea of *causation*, and see from what origin it is deriv'd" (T 1.3.2.4; SBN 74–75). So, to understand the relation of causation, Hume begins by examining the *idea* of causation, and to do this, Hume turns to the objects in experience that we are confident are causally connected, in order to discover the relations or circumstances that unite the two causally related objects.[4] He learns that these objects are contiguous to each other and that the cause is prior to the effect. When he enlarges his observations across time, he determines that cause and effect are *constantly conjoined*.

As long as we consider only the *objects* that are causally related, we cannot discern any other relations beyond constant conjunction. But Hume maintains that there is another component of our idea of causation, which is "of much greater importance" than contiguity and priority, namely "NECESSARY CONNEXION" (T 1.3.2.11; SBN 77). Because the source of this idea is not found in objects, it is not something we detect out there, Hume proceeds "to beat about all the neighbouring fields" (T 1.3.2.13; SBN 77–78) in search of the source of the idea

of necessary connection. Many pages later, in *Treatise* 1.3.14, entitled "Of the idea of necessary connexion," Hume recaptures his main question, his commitments and his findings:

> *What is our idea of necessity, when we say that two objects are necessarily connected together?* Upon this head I repeat what I have often had occasion to observe, that 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 that we have really such an idea. . . . For after a frequent repetition, [or constant conjunction] 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.
>
> (T 1.3.14.1; SBN 155)

The idea of *necessary connection* has its origin in the mind, in the process of causal reasoning, and not in the world we experience. The idea traces back to an impression or determination that is the mind's response to the contribution of sense experience to the idea of causation: constant conjunctions or regularities.[5]

Toward the end of this crucial section, *Treatise* 1.3.14, Hume puts forward two definitions of 'cause.' The first defines 'cause' as "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, that resemble the latter" (T 1.3.14.31; SBN 169–170). The second defines 'cause' as

> 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; SBN 169–170)

Traditionally, these definitions have been interpreted as answering the question of the meaning of 'cause' by stating the necessary and sufficient conditions for causation. But there are substantial problems with this traditional reading of Hume's definitions. The core problem is this: how can both definitions be taken to specify the necessary and sufficient conditions for causation given that they are, or at least appear to be, very different? The first definition captures regularities in the world, the objects that are constantly conjoined. The second definition appeals to the determination or impression in the mind produced by observed regularities. Obviously, the definitions differ in their meaning or intension, but even more problematically, they also seem to differ in their extension: different objects seem to fall under the scope of each definition.[6] Any pair of objects that are constantly conjoined satisfy the first definition of 'cause.' But, someone can respond with a determination or impression of the mind to observed constant conjunctions that are not, in fact, universal. And there likely are many constantly conjoined objects that are never observed and thus satisfy the first but not the second definition. Did Hume really think that his two definitions were the same, that is, definitions of the same concept? It appears that he did, for in the (first) *Enquiry* Hume once again puts forward two definitions of 'cause,' and again insists that the two definitions are "at bottom the same" (EHU 8.27; SBN 97). But that is not how most interpreters have seen it. Some have argued that only the *first* definition is the true definition of 'cause' for Hume. It alone captures the metaphysics of causation: what causation is independently of the mind. On this view, the second "definition" merely describes what happens when observers witness regularities. Thus, causation just is regularity. Other interpreters, however, insist on the role of necessary connection in the concept of 'cause,' and thus in the

definition of 'cause.' Indeed, recall that Hume explicitly states that the element of necessary connection is "of greater importance" than contiguity and priority (T 1.3.2.11; SBN 77). Because in Hume's account of our idea of cause the element of necessary connection is identified with an impression or determination of the mind, the second definition seems to be the true definition of causation. Yet other commentators have maintained that neither definition is a true definition in the sense that neither states the necessary and sufficient conditions for causation.[7] Don Garrett, however, has offered an influential interpretation, which aims to render the two definitions extensionally equivalent by interpreting both as relative to an ideal observer. However, Garrett's reliance on an ideal observer has been challenged recently (Boehm 2014).[8]

Old Hume vs. New Hume

The traditional reading takes Hume's account of our idea of cause to yield the *metaphysical* conclusion that all that causation amounts to in a mind-independent world is constant conjunction or mere regularity. There are no necessary connections in mind-independent nature because Hume's account of our idea of necessary connection identifies a feeling in the mind as source of this idea. Although Hume suggests that the mind somehow projects or "spreads" this feeling onto the world, the fact remains that in mind-independent world all there is to causation is mere regularity.[9]

The step or inference from Hume's account of the idea of 'cause' to the metaphysical, regularity theory is supported by a certain theory of *meaning*. As we have seen, Hume's first definition of 'cause' identifies the "external" conditions for causation: constant conjunction. But there are additional remarks Hume makes about the meaning of "necessity" or its Humean cognates: "force," "energy," "power," and others, which are pivotal to old–new Hume debate. In the *Treatise*, Hume writes: "Necessity, then, is nothing but an internal impression of the mind. . . . Without considering it in this view, we can never arrive at the most distant notion of it, or be able to attribute it either to external or internal objects" (T 1.3.14.20; SBN 164–165). In the *Abstract*:

> The question is, what idea is annex'd to these terms [power or force or energy]. . . . Upon the whole . . . either we have no idea at all of force and energy, and these words are altogether insignificant, or they can mean nothing but that determination of the thought, acquir's by habit, to pass from the cause to its usual effect.
>
> (Ab.26; SBN 656–657)

In the *Enquiry*, Hume comments that

> no ideas, which occur in metaphysics, [are] more obscure and uncertain, than those of power, force, energy, or necessary connexion. . . . it is impossible for us to think of any thing, which we have not antecedently felt, either by our external or internal sense . . . 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.
>
> (EHU 3, 7.4, 7.28; SBN 62, 75–76)

Responding to these and other passages, which I shall refer to as "meaning passages," Peter Millican, a strong defender of the Old Hume reading, notes that "the ultimate aim of Hume's quest for the impression of necessary connexion is the clarification of meanings." And, Millican continues: "If this is the case, then the result of that quest would seem to imply a constraint on

what we can mean by 'necessary connexion,' thus giving rise to the Old Hume interpretation" (Millican 2011: 128).

But meaning passages do more than support the regularity theory; they seem to block the very possibility of *having the thought* of mind-independent necessary connections. If the meaning of "necessity" is a feeling in the mind, then when we ask whether there are necessary connections in nature, we are asking something that is not really intelligible. Of course, there is a sense in which we *can* seriously ask the question of whether the mind-independent world contains necessary connections, just as we *can* earnestly ask whether bachelors are married. Such questions, however, merely reveal a fundamental lack of understanding of the meaning of our words; they display only conceptual confusion.

But now consider the following striking, polemical passages. In the *Treatise*, Hume maintains that "we can never penetrate so far into the essence and construction of bodies, as to perceive the principle, on which their mutual influence depends" (T 2.3.1.4; SBN 400–401). In the *Enquiry*, Hume asserts that we are "ignorant . . . of the manner in which bodies operate on each other. Their force or energy is entirely incomprehensible" (EHU 7.1.25; SBN 72). Hume claims that the "ultimate springs and principles are totally shut up from human curiosity and enquiry. . . . The most perfect philosophy of the natural kind only staves off our ignorance a little longer" (EHU 4.1.12; SBN 30–31). Hume insists that "we are ignorant of those powers and forces, on which this regular course and succession of objects totally depends" (EHU 5.2.22; SBN 55). I shall refer to these as "ignorance passages." In these texts, Hume appears to allow, at least, for the possibility of mind-independent necessary connections. Is Hume deeply confused about the meaning of the term "necessity"? Or did we misinterpret the significance of meaning passages?

So here is the crucial puzzle at the heart of the old–new Hume debate: if "necessity" can mean nothing other than a determination or impression of the mind, because that is what the idea of necessity represents, then how *could* we be ignorant of the force or energy or ultimate springs between bodies? How could the force or energy or necessity of objects be hidden from us? This puzzle has prompted a thorough investigation into the status of Hume's theory of ideas, and in particular, Hume's position on meaning.[10]

Old Humeans privilege *meaning* passages and interpret *ignorance* passages as texts in which Hume is not strict in the use of his words. Hume himself, in an important *Enquiry* passage, claims to have used "the word, Power . . . in a loose and popular sense." He then adds that he will proceed to offer a "more accurate explanation of it," and this explanation makes reference to the impression or determination of the mind (EHU 4.2.16n; SBN 33n). This passage gives strong ammunition to Old Humeans who distinguish between genuine meaning, which only terms associated with *ideas* traceable to impressions have, and "loose and popular" meaning. Unlike genuine, empirical meaning, loose meaning is not metaphysically significant. Ken Winkler appeals to this *Enquiry* footnote (EHU 4.2.16n; SBN 33n) to argue for a "retrospective reinterpretation" of Hume's employment of 'necessity' and its cognates (Winkler 2000: 54–55). Anne Jaap Jacobson, in contrast, defends the Old Hume reading by arguing that claims of ignorance of x do not commit one to the belief that x exists. According to Jacobson, in ignorance passages, Hume is appealing only to the meaning that *others* give to their words, for dialectical purposes, without endorsing this meaning himself (Jacobson 2000: 163).[11]

New Humeans, in contrast, prioritize *ignorance passages*; they take Hume's language in these texts to be significant, and thus their strategy is to reinterpret the scope of *meaning passages*. Peter Kail points out that despite Hume's account of our *idea* of cause, Hume never argues *directly* against the view that there is more to mind-independent causation than regularity. Kail singles out this *minimal fact*, that Hume never explicitly makes what Kail calls the "anti-realist" argument, as the common thesis that unites all New Humeans (Kail 2000: 254–255). Kail maintains

that Hume's account of the idea of cause is an account of *what we can understand or know* about causation, not an account of what causation *is*. Commenting on Hume's two definitions of 'cause,' Kail writes: "the two definitions circumscribe very severely what we can understand by causation, and capture what causation is *for us*. Hume then (at least) allows that what causation *consists* in metaphysically speaking may outrun what we can understand of it" (Kail 2014: 246–247; Kail 2007). Of course, to leave this metaphysical possibility open, we must be able to *think* the possibility; we must be able to form some meaningful thought about this possibility. New Humeans identify a number of alternative cognitive tools, different from *ideas*, which they argue are also genuinely meaningful and metaphysically significant. Some of these "idea-alternates," as I shall refer to them, are *suppositions*, *assumptions*, *relative ideas*, and *bare thoughts* (Wright 1983; Wright 2000; Strawson 2000; Kail 2007; Beebee 2006).[12] Kail, in particular, argues that Hume has the resources for constructing a "bare thought" that allows us to think beyond the regularities. I shall discuss this bare thought later (Kail 2007: 83–90).

Despite the differences, Old Humeans and New Humeans share fundamental assumptions. Both conceive of metaphysics as the ultimate prize. Their fight is ultimately over the metaphysics of causation: either causation is mere regularity, or it accommodates mind-independent necessary connections. And both identify meaning as the bridge to Hume's metaphysical views. Old Humeans insist that only *ideas* are genuine bearers of meaning and thus metaphysically significant. New Humeans maintain that ideas only tell us what we can *know* about causation, and idea-alternates are genuinely meaningful and reach beyond the content of ideas to metaphysical possibilities.

In what follows, I do some beating about "the neighbouring fields" myself and consider the role *ideas* play in Hume's discussion of other topics; my aim is to see whether there is a general pattern that we can identify and apply to the particular case of the idea of cause and thus shed light on its implications. As we shall see, Hume appeals to ideas strategically, to adjudicate on discussions concerning the nature of a number of subjects. I connect Hume's discussion and his strategy to the project to establish a foundation for the sciences, which he announces in the introduction to the *Treatise*. Because we are interested in the consequences of Hume's denial of the idea of mind-independent necessary connections, I focus on the implications of Hume's denial of other ideas. I argue that meaning does not appear to be central to Hume's concern, and I raise another possibility for understanding the implications of Hume's denial of ideas.

The nature of ideas before the nature of things; the foundational project

When Hume first approaches the question of the nature of the relation of causation he proceeds, as we saw earlier, to "begin regularly . . . [and] consider the idea of *causation*, and see from what origin it is deriv'd" (T 1.3.2.4; SBN 74). To understand the nature of the relation of causation, we must first understand the nature of the *idea* of causation. This has been indeed Hume's "regular beginning," as he makes explicit in a number of texts before *Treatise* 1.3. Consider the following passage concerning the nature of mathematical points:

> Here, therefore, I must ask, *What is our idea of a simple and indivisible point?* No wonder if my answer appear somewhat new, since the question itself has scarce ever yet been thought of. We are wont to dispute concerning the nature of mathematical points, but seldom concerning the nature of their ideas.
>
> (T 1.2.3.14; SBN 38)

Here Hume argues that prior to the question of the nature of mathematical points is the question of the nature of our *idea* of the mathematical point. Hume also enters the dispute in natural philosophy concerning the Newtonian posit of a vacuum by examining whether we have an idea of a vacuum. Thus he begins *Treatise* 1.2.5:

> If the second part of my system be true, *that the idea of space or extension is nothing but the idea of visible or tangible points distributed in a certain order*, it follows, that we can form no idea of a vacuum, or space, where there is nothing visible or tangible.
>
> (T 1.2.5.1; SBN 53)

Toward the end of *Treatise* 1.2.5, Hume explicitly extends his results about *ideas* to the domain of metaphysics and mechanics: "After this chain of reasoning and explication of my principles, I am now prepar'd to answer all the objections that have been offer'd, whether deriv'd from *metaphysics* or *mechanics*" (T 1.2.5.22; SBN 62). And a few lines later, he explicitly draws an important implication. Hume writes:

> If the *Newtonian* philosophy be rightly understood, it will be found to mean no more. A vacuum is asserted: That is, bodies are said to be plac'd after such a manner, as to receive bodies betwixt them, without impulsion or penetration.
>
> (T 1.2.5n12; SBN 639)

Hume's denial of the idea of a vacuum has implications for the Newtonian philosophy; in particular, it restricts what we can justifiably say about bodies and vacuums in nature (Boehm 2012).

Now consider the beginning of Hume's discussion "Of the idea of necessary connexion" in *Treatise* 1.3.14. Hume starts this section by identifying the debate to which he aims to contribute. He writes:

> There are some, who maintain, that bodies operate by their substantial form; others, by their accidents or qualities; several, by their matter and form . . . the supposition of an efficacy in any of the known qualities of matter is entirely without foundation.
>
> (T 1.3.14.7; SBN 158)

He continues:

> at last [. . .] philosophers [have been obliged] to conclude, that the ultimate force and efficacy of nature is perfectly unknown to us, and that 'tis in vain we search for it in all the known qualities of matter. . . . For some of them, as the *Cartesians* in particular, having establish'd it as a principle, that we are perfectly acquainted with the nature of matter, have very naturally inferr'd, that it is endow'd with no efficacy, and that it is impossible for it of itself to communicate motion, or produce any of those effects, which we ascribe to it.
>
> (T 1.3.14.8; SBN 159)

Hume is here rehearsing a debate about matter, about the efficacy of causes in nature. These are *not* claims about *ideas*. They are claims made within natural philosophy. But now, here is how Hume aims to contribute to these debates within natural philosophy:

> But before they enter'd upon these disputes, methinks it woul'd not have been improper to have examin'd what idea we have of the efficacy, which is the subject of

> the controversy. This is what I find principally wanting in their reasonings, and what I shall here endeavour to supply.
>
> (T 1.3.14.3; SBN 156)

Hume makes the same argument about necessity and the idea of necessity in Book 2 of the *Treatise* in "Of liberty and necessity":

> 'Tis universally acknowledg'd, that the operations of external bodies are necessary, and that in the communication of their motion, in their attraction, and mutual cohesion, there are not the least traces of indifference or liberty [. . .] The actions, therefore, of matter are to be regarded as instances of necessary actions; and whatever is in this respect on the same footing with matter, must be acknowledg'd to be necessary. That we may know whether this be the case with the actions of the mind, we shall begin with examining matter, and considering on what the idea of a necessity in its operations is founded, and why we conclude one body or action to be the infallible cause of another.
>
> (T 2.3.1.3; SBN 399–400; see also EHU 8.4; SBN 82)

The question of the *idea* of efficacy is prior to the question of the efficacy of matter and mind.

These passages reveal a common aim and method.[13] The *examination of ideas* is supposed to adjudicate on contested questions within other domains, such as mathematics and natural philosophy. Hume is arguing that the question of the nature of our ideas is *prior* to the question of the nature of mathematical points, the existence of vacuum, and the efficacy of matter. But what is Hume's argument for this *priority*? Hume presents this argument in the introduction to the *Treatise* where he announces his intentions or project for the *Treatise*.

Hume opens the *Treatise* by vividly describing the appalling condition of philosophical systems, identifying the core problem with their "weak foundation" (T Intro. 2; SBN xiii–xiv). Hume quickly announces his intention for the *Treatise*; he aims "to establish a compleat system of the sciences, built on a foundation almost entirely new, and the only one upon which they can stand with any security" (T Intro. 6; SBN xvi). His "science of man" will be foundational to *all* sciences: "there is no question of importance whose decision is not compriz'd in the science of man; and there is none which can be decided with any certainty, before we become acquainted with that science" (T Intro. 6; SBN xvi). The science of man, Hume declares, is "the only solid foundation for the other sciences" (T Intro. 7; SBN xvi). This project is confirmed after the writing of the *Treatise*. In the preface to the *Abstract*, Hume claims that if we take the philosophy of the *Treatise* seriously then "*we must alter from the foundation the greatest part of the sciences*" (Pref. 2; SBN 643). In the *Abstract* itself, he concludes: "This Treatise therefore of human nature seems intended for a system of the sciences" (Ab. 3; SBN 646).

In the introduction to the *Treatise*, Hume puts forward the chief argument that establishes the relation between his science of man and some of the other sciences.

> Even *Mathematics, Natural Philosophy, and Natural Religion*, are in some measure dependent on the science of Man; since they lie under the cognizance of men, and are judged of by their powers and faculties.'Tis impossible to tell what changes and improvements we might make in these sciences were we thoroughly acquainted with the extent and force of human understanding, and cou'd explain the nature of the ideas we employ, and of the operations we perform in our reasoning.
>
> (T Intro. 4; SBN xv)[14]

The key premise in Hume's *dependence argument* is the phrase: "since they lie under the cognizance of men, and are judged of by their powers and faculties." Natural philosophers (and mathematicians, etc.) employ their cognitive faculties when they engage in natural philosophy: to do natural philosophy, natural philosophers must *think* and *reason*. Natural philosophy is dependent on Hume's science of man because it "explain[s] the nature of the ideas we employ, and of the operations we perform in our reasoning" (T Intro. 4; SBN xv).

In the *Abstract* to the first two books of the *Treatise*, Hume indicates that the project of founding the sciences has already "finished what regards to logic" and has already "laid the foundation of the other parts in [the] account of the passions" (Ab. 3; SBN 646). Logic and the passions are the two most general branches of the science of man; of logic Hume writes: "The sole end of logic is to explain the principles and operations of our reasoning faculty, and the nature of our ideas" (T Intro. 5, Ab. 3; SBN xv, 646). We can now see most clearly that Hume's dependence argument establishes the dependence of natural philosophy on logic, the logic that Hume claims to have "finished" in Book 1 of the *Treatise*.[15] Logic is *prior* to the other sciences because to do science one must employ ideas and reasoning. Thus the examination of our ideas and the explanation of the operations of our reasoning faculty is prior, or more fundamental, than any other question in the sciences concerning the nature of things.

Here we are concerned with Hume's examination of the nature of ideas and, in particular, with the idea of necessary connection. Hume clarifies the nature or content of ideas by tracing them back to their original impressions. In the case of the idea of necessary connection, we have seen that its original impression is a feeling in the mind. We do not have an idea of necessary connection that traces back or represents a sense impression or anything detected in sense experience. And now the question we must ask, from the standpoint of Hume's project, is this: what follows *in general*, when Hume's logic reveals that some putative idea does not trace back to impressions of sensation?

Old, new, and foundational Hume

We know that Hume answers the *particular* question of the implications of our lack of the idea of mind-independent necessary connection explicitly in a number of places. For instance, terms like 'necessity' and 'power' and 'energy' are "altogether insignificant" (Ab. 7; SBN 649). But, as we have seen, these *meaning passages* appear to be in tension with *ignorance passages*. The conflict arises because Hume seems to mean what he says in both sets of passages, and yet his claims are at odds with each other. Old Humeans privilege meaning passages and relieve the tension by interpreting the Hume of ignorance passages as giving his words meaning that he ultimately does not endorse. But we have seen now that Hume's argumentative strategy in his discussion of necessity mimics his argumentative strategy in his discussion of other topics; the general argument is that the nature of ideas is prior to the nature of objects. From this larger context, part of the justification, at least, for privileging meaning passages would have to be that they instantiate, i.e. that they are an instance of a general theory of meaning, a theory according to which only terms associated with ideas traceable to impressions have meaning. The problem is that there appears to be no such general theory. Hume's claims about the meaninglessness of "necessity" simply do not generalize to other cases in which we fail to have an idea. For instance, Hume considers the claims that space and time are both infinitely divisible simply to be false, not meaningless. Hume denies that we have an idea of a vacuum, as the idea of space without something visible or tangible, but he never says that "vacuum" is insignificant. Hume argues that we fail to have an idea of changeless duration, but he does not maintain that claims about enduring unchanging objects are meaningless or incomprehensible. Hume denies that we have an idea of

a mathematical point as defined within classical geometry, but he never claims that the expression 'mathematical point' is meaningless. When Hume assesses the ideas of geometry, including the idea of a straight line and the standard of equality, his position is not that the terms central to geometry are meaningless; instead he says: "the ideas which are most essential to geometry . . . are far from being exact and determinate" (T 1.2.4.29; SBN 50–51).[16] And Hume denies that we have an idea of gravity as a distinct thing, but he does not conclude that 'gravity' is meaningless. If there is a "criterion of meaninglessness," or if there is a criterion according to which only terms associated with ideas have (genuine) meaning, then Hume does not apply it consistently. This is a serious methodological problem, because if the empirical meaning of terms was even part of Hume's project of reforming the sciences, then we would expect him to condemn terms like "gravity," "mathematical point," "vacuum," and "equality" as meaningless. These terms are at the heart of scientific/mathematic theory, but Hume fails to stigmatize them as meaningless or as insignificant.[17]

Hume's "inconsistency" above is also a problem for New Humeans, not just Old Humeans. For the passages above suggest that meaning does not occupy a central place in Hume's project as a whole, and this suggests that, at least from the wider perspective of Hume's foundational project, the old–new Hume fight over meaning might be misguided. However, meaning in this debate is, as I remarked earlier, a means to an end; the end is the metaphysics of causation. Old Humeans insists that only terms associated with ideas are meaningful and thus, given Hume's account of the idea of necessary connection, there *couldn't possibly* be mind-independent necessary connections. New Humeans insist that we can think of mind-independent necessary connections via idea-alternates, which are also meaningful, and thus that the *metaphysical possibility* of mind-independent necessary connections is left open.

There is a direct answer to the question I asked regarding the general implications of our lack of ideas in Hume's system, and it has nothing to do with metaphysics. Hume answers this general question, interestingly, at the end of his discussion of the idea of "necessary connexion," where he draws a number of corollaries. The one that concerns us here is one that Hume considers "so evident," so basic or fundamental to his whole philosophy, that he wonders whether he needs to state it explicitly: "we can never have reason to believe that any object exists, of which we cannot form an idea" (T 1.3.14.36; SBN 172).[18] If we cannot form an idea of x, then *we can have no reason* to believe that x exists. Our inability to form ideas does not affect the nature of things or the possible existence of things, but our *attitude* toward such questions; it restricts which beliefs we can justifiably maintain.

Hume's "no reason to believe" principle answers the question of how Hume's logic is *prior* to the other sciences. Prior to the question of the nature of vacuum, or the efficacy of causes, we must ask what idea we have of these things. The consequence of our inability to have an idea of mind-independent necessary connection is *not* that there are no such necessary connections in nature. The consequence Hume draws from our inability to form an idea of mind-independent necessary connection is that we cannot justify the belief in such necessary connections. The "no reason to believe" principle is not metaphysical, but I think Hume intends it as a non-metaphysical answer to a metaphysical question. Once we understand that we have no reason to believe in the existence or possible existence of mind-independent necessary connections, the metaphysical question is closed. We can only *judge* mind-independent necessary connections to be possible when we can form an idea of them. And, throughout his writings, Hume is absolutely clear about this: we cannot form an *idea* of mind-independent necessary connection.

New Humeans insist that idea-alternates allow us to think that which cannot be thought with ideas. Galen Strawson argues that we can think of real, "thick" metaphysical connections via a *relative idea*.[19] Kail maintains that we can form the *bare thought* of mind-independent

necessary connections. Against the old, traditional reading of Hume, Kail argues that Hume's account of the *idea* of cause does not provide an answer to the metaphysical nature of causation, and Hume never, as Kail insists, makes the anti-realist argument that there are no mind-independent necessary connections. Hume's account of the nature of our idea of causation is meant to answer the question of what we can know of causation. The bare thought, in contrast, represents the possibility of mind-independent necessary connections.

I shall focus on a few general problems with these claims. If ideas cannot deliver metaphysical theses, why would idea-alternates be able or qualified to do so? One answer is that ideas are empirically constrained; they are limited by the straightjacket of experience. But what liberates idea-alternates? Why would idea-alternates enjoy this lack of restraint? Additionally, one danger with liberating idea-alternates in this way is the possible proliferation of thoughts, the possibility of which Hume seems bent on denying. In his characterization of the bare thought of causal power, Kail claims that

> we can specify uniquely that which we cannot understand (causal power) by saying that it is that feature that, were we acquainted with it, would yield *a priori* inference and render it inconceivable that the cause not be followed by its effect.
>
> (Kail 2007: 84)

But might we not similarly form, for instance, the *bare thought* of infinity? We could form the bare thought of the infinite via the thought of the finite and then add a denial. Or, we could form the bare thought of infinity by stating what it would be like to count to infinity: we would count forever, never reaching an end. Could this bare thought of the infinite be then used to counter Hume's own argument against the infinite divisibility of extension?

There is also, as we discussed above, Hume's "no reason to believe principle," which is a principle about *ideas*, not idea-alternates. If we do not have an *idea* of mind-independent necessary connection, as it is the case, we *can have no reason* to believe in the existence or possible existence of these necessary connections. This principle privileges ideas and identifies the ability to form an *idea* as the *necessary* (but not sufficient) condition for having reason to believe in the existence of something.[20]

Kail finds significance in the fact that Hume's denial of the idea is not accompanied by the anti-realist claim that there are no mind-independent necessary connections. This minimal fact, Kail suggests, unites all New Humeans. But Hume also denies the existence of the idea of vacuum, the idea of time without change, and others, and these denials are also not accompanied by anti-realist claims. One can construe this as evidence that Hume allows for the existence of vacuum and time without change. But we could also, and much more plausibly, interpret the absence of these explicit denials to follow from the fact that Hume considers the "no reason to believe" principle to be, indeed, absolutely *evident*. We simply have no reason to believe in the existence of vacuum or time without change or mind-independent necessary connections. And once we understand that, there remain no metaphysical questions about these objects to be answered.

Against the background of Hume's foundational project, New Humeans are right that Hume's examination of ideas is not meant to provide metaphysical accounts of the nature of reality. And if the regularity theory is a metaphysical theory, Hume is not a regularity theorist. But New Humeans are wrong and misguided in their attempt to reinsert metaphysics (or metaphysical possibilities) into Hume's system with idea-alternates. Old Humeans are right that ideas are king, but they are wrong about the nature of their power.

The idea of causation is not just fundamental to all science and philosophy; it also plays an essential role within Hume's own system. Hume's examination of this idea leads him to articulate what is perhaps the most famous argument in philosophy: the problem of induction. Hume shows that our beliefs in unobserved events, such as those that take place in the future, cannot be justified either by demonstrative or probabilistic reasoning. Hume's groundbreaking account of the self crucially relies on his treatment of causation. Hume's influential discussion of freedom of the will, of "liberty and necessity," is founded on his account of causation. Hume's account of causation is fundamental to his whole philosophy, and it is for his treatment of causation that he is most famous. Although Hume anticipates the revolutionary character of his account of the idea of causation, he might still have been surprised by the enormous impact his views have had on the entire field of philosophy.[21]

Notes

1 For a good general discussion of Hume's account of causation, see Garrett, D. (2009) "Hume," in Beebee, H., Hitchcock, C., Menzies, P., *The Oxford Handbook of Causation,* Oxford: Oxford University Press, pp. 73–91.
2 The phrase "New Hume" was coined by Kenneth Winkler in his 1991 landmark paper. For another paper that is critical of what was then referred to as the "skeptical realist" position, see Blackburn (1990).
3 Hume introduces these philosophical relations earlier in the text in *Treatise* 1.1.5.
4 This might be the beginning, at least, of a response to Thomas Reid's famous objection involving the constant conjunction of day and night (Reid 2002). We are not confident, indeed we do not at all believe, that day and night are causally related. Instead of using this example to criticize Hume's account of causation, Reid might have investigated the *reasons* we do not consider day and night to be causally connected. There might be many. It is hard to determine which one is the cause and which is the effect. Would each be both the effect *and* the cause of the other? Are day and night two different *things,* or two presentations of the same thing? If they are not two distinct things, can they be constantly conjoined? Why don't we consider the red tomato to be the effect of the same but previously green tomato? These and other related questions might reveal our reasons for not considering day and night to be causally connected.
5 I ignore the difficult question of Hume's apparent identification of a *determination* of the mind with an *impression* of reflexion.
6 J.A. Robinson seems to be the first interpreter to point to this problem of extension of Hume's definitions of 'cause' (Robinson 1966).
7 For a helpful discussion of all of these different positions, and their problems, see Garrett (1997), pp. 96–117. For a discussion that places the question of Hume's view of causation against the larger background of philosophical realism and anti-realism, see Coventry, A. (2006).
8 Garrett distinguishes between a subjective and an absolute reading of the definitions but ascribes to Hume the absolute reading (Garrett 1997). I have argued against the absolute reading on both textual and philosophical grounds and have proposed instead an expert-relative reading (Boehm 2014).
9 Hume writes that "the mind has a great propensity to spread itself on external objects. . . . Thus as certain sounds and smells are always found to attend certain visible objects, we naturally imagine a conjunction, even in place, betwixt the objects and qualities, tho' the qualities be of such a nature as to admit of not such conjunction, and really exist no where . . . the same propensity is the reason, why we suppose necessity and power to lie in the objects we consider, no in our mind, that considers them" (T 1.3.14.25; SBN 167).
10 Galen Strawon aptly refers to this tension as "the meaning tension" (Strawson 1989).
11 For a good discussion of these interpretative strategies, see Beebee (2006: 180–192).
12 Beebee and Kail offer extensive discussion of these strategies and some of their problems (Beebee 2006: 173–225; Kail 2007: 56–102).
13 I discuss more contexts in which Hume is employing this argumentative method in Boehm 2016: 55–77.
14 Although the dependence here is qualified with "in some measure," in the paragraph that follows Hume writes: "If therefore the sciences of Mathematics, Natural philosophy and Natural religion, have

such a dependence on the knowledge of man" (my emphasis) (T Intro. 5). This suggests that Hume does not regard the dependence in question of little significance.

15 The passions, the subject of Book 2, provide the foundations for morality.

16 Hume does claim that the *fiction*, not the term 'equality,' by which we arrive at the notion of equality is "useless as well as incomprehensible" (T 1.2.4.24; SBN 48).

17 Alexander Rosenberg notes that Hume employs the criterion of meaning "mainly to condemn a wide variety of concepts of traditional philosophical thought,", concepts such as "*substance, substantial form, mode, essence*." But Hume could hardly be said to reform the sciences simply by pointing out that *such* terms were meaningless. As Rosenberg acknowledges, Hume stigmatizes "many of the terms of Aristotelian metaphysics, terms that few empiricists would identify as practically or scientifically useful" (Rosenberg 1993: 70).

18 I discuss this principle and how it applies to cases in which Hume denies ideas in Boehm (2016).

19 Flage mounts a convincing argument against the relative idea of cause in Flage (2000: 153).

20 I can obviously think about the golden mountain, but my ability to form this idea does not give me reason to believe in its existence. The ability to form a given idea then gives me necessary but not sufficient reason for believing in the existence of something.

21 I want to thank audiences for their valuable questions and comments at a number of places where I have presented the material included in this chapter in 2016: the Central APA Hume Meeting in Chicago, the workshop in Early Modern Philosophy at the University of Helsinki, the University of Jyväskylä in Finland, and the Research Institute in Budapest, Hungary. I also want to thank the editors of this volume for very helpful and friendly comments. Finally, I am grateful to Peter Millican and Don Garrett for discussion that improved this chapter.

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