

Hume on Efficient Causation

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1. *Introduction*

Towards the end of his discussion of the idea of necessary connexion, Hume offers two definitions of 'cause'. Among the corollaries he draws from them is that there is

no foundation for that distinction, which we sometimes make betwixt efficient causes, and causes *sine qua non*; or betwixt efficient causes, and formal, and material, and exemplary, and final causes. ...[W]herever [constant conjunction] is observ'd, the cause is efficient, and where it is not, there can never be a cause of any kind. For the same reason, we must reject the distinction betwixt *cause* and *occasion*, when suppos'd to signify any thing essentially different from each other. If the constant conjunction be imply'd in what we call occasion, 'tis a real cause. If not, 'tis no relation at all, and cannot give rise to any argument or reasoning (T

1.3.14.32; SBN 171)¹

This seems to signal the end of the subtle and complex debate over the metaphysics of causation with which this volume is concerned. All causation is efficient causation, and efficacy is reduced to constant conjunction. Goodbye to *influxus*, final causation, trope transfer, agency and all other attempts to articulate the metaphysics of causation. Hello to the austere view that, metaphysically speaking, causation is regular succession.

This popular view of Hume as offering a reductive account of causation as regular succession is undoubtedly influential and important and is the standard point of departure

for contemporary discussions of causation.² But whether the view is Hume's own is a separate and controversial issue. For, besides the expected disputes over nitty-gritty details, there exists a deep dispute over what the very fundamentals of his view really might be. For many commentators, his two definitions of 'causes' circumscribe the nature of causation, so that, metaphysically speaking, causation just *is* regular succession and anything else we might think about it (or indeed, appear to think about it) is merely a projection of some inner response. For others, the two definitions express very severe restrictions on what we can *understand* of causation but are not intended to capture its metaphysics. We shall look, all too briefly, at this debate later, but whichever side one stands on it, it still remains in either case that Hume offers a very slimmed down conception of causation and that this conception represents a radical break from richer accounts previously offered of efficient causation. A key aim of this chapter is to foreground what is distinctive about Hume's *approach* to causation in order to illuminate this radical break. Hume is distinctive inasmuch as he arrives at his conception of 'cause' through investigating our inferential faculties rather than by articulating a self-standing metaphysics of causation. It is this approach that, by Hume's lights at any rate, warrants his slimmed down view.

This chapter has the following shape. In the next section I shall discuss the relation between the regularity theory and the two definitions. I then note what is distinctive about Hume approach and, in section three, look more closely at the details of the account he offers. Section four completes this discussion by narrowing the focus further to consider Hume's account of necessary connection. I then, in section five, return to the question of Hume's fundamental attitude to causation and identify what I shall call 'modesty' and

‘immodesty’ readings. Finally section six briefly discusses Thomas Reid’s celebrated reaction to Hume and Reid’s own positive conception of causation.

2. The Regularity Theory, the Two Definitions and Hume’s Naturalistic Approach

I shall take the regularity theory of causation to be a primarily metaphysical thesis rather a semantic or analytical view. A relation between tokens *a* and *b* is causal when these tokens instantiate a universal regularity or ‘constant conjunction’ holding between types A and B, and where causes differ from effects in being temporarily prior to effects, and where *a* and *b* are contiguous. This metaphysical view appears to be captured in the first of Hume’s definitions of ‘cause’, where a ‘cause’ is defined as an ‘object precedent and contiguous to another, and where all the objects resembling the former are placed in like relations of precedency and contiguity to those objects that resemble the latter’ (T 1.3.14.31; SBN 170). One way to understand the relation between the metaphysical thesis and the definition is that we arrive at the metaphysics of causation by an *analysis* of the concept of causation that renders explicit the necessary and sufficient conditions of its application.

However, as critics like Thomas Reid were quick to point out, there is a mismatch between this analysis of ‘cause’ and its commonsense extension. The relation of night following day appears to satisfy the definition but the relation is not one we take to be causal. This objection does not show that the metaphysical claim is incorrect, but it does show that it isn’t a transparent consequence of our ordinary concept of cause. So something more must be said in defence of the claim that the definition is the correct

analysis of the concept or that the metaphysical view is supported by some means other than an analysis of our ordinary concept.

The matter is further complicated by the fact that Hume offers another definition of 'cause'. Here the relations of contiguity and precedency are supplemented with the psychological effect that the observation of objects satisfying the first definition have on the observer. According to this definition, a 'CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the one to form the idea of the other, and the impression of one, to form a more lively idea of the other.' (T 1.3.14.31; SBN 170) The introduction of a second definition is evidently problematic because the two definitions appear not to be extensionally equivalent, let alone intensionally so. So how can they be definitions of the same thing?

This is an issue to which we shall return in section five. Nevertheless, the second definition can plausibly be thought to play two roles. The first is to acknowledge and accommodate as far as possible the deficiency noted above in the first definition. Reid's complaint can be read as saying that there is *more* than regular succession to our concept of causation. What is missing in the first definition is some more robust connection between cause and effect than mere regularity. The second definition is an attempt to respect this thought as much as possible. We understand ourselves as attributing to causes *powers* in virtue of which causes bring about their effects. Hume acknowledges this but holds that our idea of power has its origins in the psychological transition referred to in the second definition, and is not something detectable between causally related objects. It is true that the first definition does not accord with our naïve reflections on causation, but these

reactions reflect our tendency to project our psychological reactions onto the world rather than reveal anything deep about the metaphysics of causation.

The second role for the second definition is to bolster, albeit indirectly, the metaphysical thesis. The determination of the mind in the second definition shows that Hume recognises that there is more to our concept of cause than given in the first definition, but this extra content does not, and cannot, reflect some metaphysical difference between causal and non-causal regularities. Nevertheless, our propensity to project this subjective reaction encourages us to think that there is more to causation than regularity. But such a thought is no thought at all. For, on the standard reading, Hume's theory embodies an empiricism about representation, whereby all thoughts require ideas and all ideas are derived from, and represent, sensory impressions. So he tells us that we 'have establish'd it as a principle, that as all ideas are deriv'd from impressions, or some precedent *perceptions*, 'tis impossible we can have an idea of power and efficacy, unless some instances can be produc'd, wherein this power is *perceiv'd* to exert itself.' (THN 1.3.14.10; SBN 160) But we have no such impression, and so no idea. The regularity theory gains support, then, because we cannot conceive or form a thought of any appropriate connection between causes and effects over and above regular succession.

Summing up what we have so far said, the metaphysics of regularity is related to Hume's two definitions in the following way. The first definition exhausts all that can be thought of causation as a relation holding independently of minds, and so effectively limits what is conceivable of causation to regularity. This is an application of Hume's empiricist restrictions on thought and representation. The second definition attempts to respect our

propensity to think that causation is more than regularity by limiting causes to those objects that produce the determination of the mind.

We will go into further detail about both definitions and their consistency ramifications later, but there is a prior question of just how Hume arrives at them. Just *why* does Hume offer these two definitions? Understanding how he arrives at them will help us to understand why he thinks they are correct.

The first thing to be borne in mind is that Hume's interest in the idea of causation is not presented by him as a self-standing exercise in metaphysics, but emerges from an interest in our reasoning faculties and causation's crucial role in *inference*. Causation is the only relation that 'can be trac'd beyond our senses, and informs us of existences which we do not see or feel', and so to understand that inference we make from the observed to the unobserved we must 'endeavour to explain fully [the causal relation] before we leave the subject of the understanding.' (T 1.3.2.3; SBN 74) Essentially the same point is made in the *Enquiry*, where Hume tells us that all 'reasonings concerning matter of fact are found on the relation of *Cause and effect*' (EHU 4.4; SBN 26), and so in order to satisfy ourselves 'concerning the nature of that evidence, which assures us of matter of fact, we must enquire how we arrive at the knowledge of cause and effect' (EHU 4.5; SBN 27).³

The second thing to note is that Hume says that he arrives at his definitions by the 'seemingly preposterous' method of 'examining our inference from the relation before we had explain'd the relation itself' (T 1.3.14.31; SBN 169). Rather than beginning by defining causation and then seek to explain causal inference in light of such a definition, he seeks to understand causation in light of causal inference, stating that he adopts this

approach because the ‘nature of the [causal] relation depends so much on that of the inference.’ (T 1.3.14.31; SBN 169)

This last statement seems more preposterous than the methodology itself. How could the relation of causation *depend* on causal inference? What I shall suggest is that rather than making assumptions about what we represent in thought about causation and building a metaphysic on them, Hume focuses on our cognitive life and seeks to understand what is involved in the representation of causation by illuminating the role it plays in the explanation of human inferential faculties. Once we understand *how* causation figures in inference we then grasp better *what* we represent by the concept. It will turn out that what we understand by causation actually depends on the inferences we make. To see this, let us focus on the details of the account Hume offers in the *Treatise*.

3. *Inferences, Relations and Definitions*

The two definitions present ‘a different view of the same object...making us consider it either as a *philosophical* or *natural* relation’ (T 1.3.14.31; SBN 170). The first definition is a view of causation as a philosophical relation, the second as a natural one. Both kinds of relation are involved in causal inference. What are these two kinds of relation and how do they figure in his account of causation?

Philosophical relations comprise those relations that can be discovered by comparing objects, and such relations reduce to seven: identity, resemblance, degrees in any quality, relations in time and place, proportion in quantity and number, contrariety and cause and effect. A subset of these relations (proportion in quantity and number and

cause and effect) are the objects of reasoning, and '[a]ll kinds of reasoning', Hume says, 'consist in nothing but a *comparison*, and a discovery of those relations...which two or more objects bear to each other.' (T 1.3.2.1; SBN 73) At first pass, then, reasoning is an activity of comparison resulting in awareness of relations.

As noted, Hume's particular interest in causation lies in the fact that it is the only relation that 'can be trac'd beyond our senses, and informs us of existences which we do not see or feel' (T 1.3.2.3; SBN 74). So he then turns to the philosophical relation of causation as an object of reasoning, begins to unpack the idea, and makes three immediate observations. First, whatever objects are consider'd as causes and effects' are also *contiguous* (T 1.3.2.6; SBN 75). Second, causes are temporally prior to their effects. But contiguity and priority do not jointly constitute a 'compleat idea' of causation since 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' than priority and contiguity. (T 1.3.2.11; SBN 77) To these relations Hume adds, in T 1.3.6, the claim that our idea of causation involves that of constant conjunction.

Let us postpone discussion of necessary connection, and concentrate on what figures in the first definition. Contiguity, constant conjunction and priority jointly constitute Hume's first definition of 'cause'. We have yet to explain how this figures in causal inference, but on what grounds does Hume include these three components? One might read Hume as simply claiming that they are analytic constituents of the concept of cause, but we noted that, as Reid pointed out, this is not so obvious. However, Hume

seems to view such claims as empirically based,⁴ arrived at by examining with ‘the utmost accuracy those objects, which are commonly denominated causes and effects.’ (T 1.3.14.31; SBN 170) Thus, in arguing for contiguity, he says that although ‘distant objects may sometimes seem productive of each other, they are commonly found to be link’d by a chain of causes, which are contiguous among themselves.’ (T 1.3.2.6; SBN 75) So while he says contiguity is ‘essential’⁵ to causation, his interest in explaining our causal inferences means that he can happily say ‘atleast [we] may suppose it such, according to the general opinion, till we can find a more proper occasion to clear up this matter’ (T 1.3.2.6; SBN 75). Spatio-temporal contiguity is again something generally associated with causation, and hence typical of the idea as it typically enters our reasoning processes, but in the special case of causation among non-spatial perceptions it does not hold (T 1.4.5).⁶

In the case of temporal priority Hume again offers empirical support but also an *a priori* argument. He argues that simultaneity of cause and effect would imply ‘the utter annihilation of time’ because it would render all objects co-existent and remove the succession that is necessary for time (T 1.3.2.7; SBN 76).⁷ But though Hume does offer an argument for the priority claim, he is relatively indifferent to whether the argument succeeds. He writes that if ‘this argument appear satisfactory, ’tis well. If not, I beg the reader to allow me the same liberty, which I have us’d in the preceding case [i.e. contiguity], of supposing as such. For he shall find, that the affair is of no great importance.’ (T 1.3.2.8; SBN 76) Such insouciance makes sense in the context of his approach to causation *via* our inferential faculties. The success or otherwise of the argument makes no difference to the

empirical account of causal inference, since ‘experience in most instances seems to contradict’ the non-priority of causes (T 1.3.2.8; SBN 76).

The inclusion of constant conjunction exhibits Hume’s method of approaching the causal relation *via* examining our inferential faculties. He writes that the ‘idea of cause and effect is deriv’d from *experience*, which informs us, that such particular objects, in all past instances, have been constantly conjoin’d with each other’ (T 1.3.6.7; SBN 89-90). This claim is made in the context of his discussion of how we ‘infer the existence of one object from that of another’ (T 1.3.6.1; SBN 87) by experience, noting that the inference is requires not merely assumptions about contiguity and priority but that we ‘likewise call to mind their constant conjunction’. ‘Contiguity and succession are not sufficient to make us pronounce any two objects to be cause and effect, unless we perceive, that these two relations are preserv’d in several instances.’ (T 1.3.6.3; SBN 87) It is in virtue of the fact that memory of constant conjunction is required to facilitate causal inference that constant conjunction is then added to the definition of ‘cause’. Hence we have ‘insensibly discover’d’ the relation of constant conjunction while discussing ‘another subject.’ (T 1.3.6.2; SBN 87)⁸

How Hume’s empirical approach bears on the status of the first definition is discussed in section 5. But causation as a philosophical relation is not the end of Hume’s account of our causal inferences and not the end of his account of causation. For although causation as a philosophical relation presents a view of causation as an object of reasoning or comparison, it is not sufficient to explain how we draw causal *inferences*. What is further required is an understanding of causation as a *natural* relation. Natural relations are

associative relations that connect ideas in the mind, and comprise contiguity, resemblance and cause and effect (T 1.1.4). In virtue of these general principles of the imagination, ideas have a natural tendency to cluster together in the mind independently of any reasoning or conscious activity. If we experience relations of contiguity among objects A and B, we acquire the disposition to token the idea A upon having the idea B and *vice versa*. With respect to causation, repeated experience of *a* and *b* standing in the causal relation described in the first definition yields in the mind of the observer an unreflective mental disposition to have the idea of *b* when one has the idea of *a*, without any awareness *that* they stand in the relation of causation *qua* philosophical relation.

How does causation as a natural relation enter into the explanation of causal inference? The key text is T 1.3.6, 'Of the inference from the impression to the idea'. The question at hand in this section is whether 'we are determin'd by reason to make the transition, or by a certain association of ideas and relation of perceptions?' (T 1.3.6.4; SBN 88) Hume famously argues that the inference cannot be caused by reason. Now, his argument here is the subject of exegetical controversy, notably regarding whether it is intended to establish a *sceptical* conclusion, sceptical in the sense of offering a negative evaluation of the epistemic standing of these inferences. But for our purposes, the relevant point is simply the *causal* one. Our inferences from causes to effects are not determined by reason, including the activity of comparing ideas standing in the philosophical relation of cause and effect. Instead, the experience of objects satisfying the philosophical relation of causation causes us to associate the relevant ideas in the mind and hence draw the inference unreflectively. Hence Hume writes that 'tho' causation be a *philosophical* relation,

as implying contiguity, succession and constant conjunction, yet 'tis only so far as it is a *natural* relation, and produces an union among our ideas, that we are able to reason upon it, or draw any inference from it.' (T 1.3.6.16; SBN 94) The second definition emerges then because causal inferences involve the associational transition marked by causation as a natural relation, and corresponds to how causation as a philosophical relation affects the mind of the causal reasoner.

4. *Necessary Connection*

We have seen how the definitions emerge from Hume's interest in causal reasoning. The two definitions reflect the *input* to the causal reasoning process – causation as a philosophical relation – and the inferential *process* itself, namely causation as a natural relation. But we have yet to discuss the idea of necessary connection. It is Hume's account of this idea that embodies to the greatest extent his 'seemingly preposterous' method.

When he first mentions the idea of necessity as a component in causal reasoning (T 1.3.2) he states that since power is not observable he will 'beat about the neighbouring fields' in his search for its origin, rather than directly examine the 'nature of that necessary connexion' (T 1.3.2.13; SBN 78). Instead he poses a pair of questions about the causal determinants of our judgments. He asks why 'we pronounce it *necessary* that everything whose existence has a beginning, shou'd also have a cause', and, second, why we conclude that 'such particular causes must *necessarily* have such particular effects' (T 1.3.2.15; SBN 78). In other words, he bypasses *what* necessity or power *is* and examines why we *think in terms of necessity*. I shall leave aside the question of the 'causal maxim', namely, every event

has a cause,⁹ and concentrate on the second question, namely, why we think that causes necessitate their effects. The model that he rejects is that we detect in experience necessitation relations, and so come to think in terms of necessity in virtue of experiencing such relations. Instead, Hume hints at what he takes to be the correct view as early as T 1.3.6, namely that “will appear in the end, that the necessary connexion will depend on the inference, instead of the inference’s depending on the necessary connexion” (T 1.3.6.3; SBN 88). We don’t think that causes necessitate effects because we grasp necessitation relations; we come to think in terms of necessitation because of the inferences we come to draw.

To understand this, let us consider the position that Hume rejects, namely that the inference depends on the necessary connexion. What does this mean? For Hume, an experience of genuine necessary connection would enable us to infer, prior to the experience of any of its manifestations, just what effect such and such a cause must have, and render it inconceivable that the effect fail to follow its cause. For example, he writes

...were the power or energy of any cause discoverable by the mind, we could foresee the effect, even without experience and might infer, at first, pronounce with certainty concerning it, by the mere dint of thought and reasoning. (EHU 7.7; SBN 63)

In the *Treatise*, he writes that that the ‘true manner’ of conceiving the ‘real force or energy, by which a particular effect necessarily results’ involves one being ‘able to pronounce from a simple view of the one that it must be follow’d or preceded by the other’ (T 1.3.14.13; SBN 161).

A causal inference would depend on the necessary connection in the sense that a grasp of necessity would allow one simply to read off what effect the cause must have.¹⁰

Such a grasp of necessitation relations would also entail that one couldn't conceive of such and such a cause without its necessitated effect. It is this that provides Hume with his argument that we cannot have an impression of genuine power, and why the inference cannot depend on the necessary connection. The ideas involved in causal inference are 'distinct'. Ideas that are distinct are separable, which means that it is *always* possible to conceive any putative cause without its effect, and we *cannot* infer effect from cause by a 'simple view' of the cause.¹¹ The inference therefore cannot depend on the necessary connection.

This feature of his negative claim helps us to understand his *positive* claim, namely that the necessary connection depends on the inference. We noted that causal inference is a matter of association. But repeated experience of *b* following *a* does more than simply cause one to think of *b* when *a* occurs. The effect of repeated experience of *b* following *a* *mimics* what a genuine impression would yield, namely the capacity to 'read off' effect from cause and the inconceivability of cause without effect. Subjects acquire by long habit 'such a turn of mind, that, upon the appearance of the cause, they *immediately* expect with assurance its usual attendant, and *hardly conceive it possible that any other event could result from it.*' (EHU 7.21; SBN 69, my emphasis) Because 'custom has render'd it difficult to separate the ideas, [people are commonly] apt to fancy such a separation to be in itself impossible and absurd'. (T 1.4.3.9; SBN 223) The immediacy of the inference mimics the

‘reading off’ of an effect from cause, and the psychological difficulty of thinking of the effect without a cause mimics the genuine inconceivability or inseparability, both of which a true grasp of necessity would entail. This determination of the mind is then spread or projected on the objects comprising the philosophical relation of causation, so that the ‘generality of mankind...suppose that...they perceive the very force of energy of the cause, by which it is connected to its effect’ (EHU 7.21; SBN 69).

The determination of the mind then is intelligible as an impression of *necessity*, though not one that is a reflection of a genuine power in the object. It is this idea that figures in Hume’s second definition of ‘cause’.¹² This also allows us to understand the claim that the ‘nature of the [causal] relation depends so much on that of the inference.’ (T 1.3.14.31; SBN 169) Necessity is held to be part of the nature of causation, but when we really understand the nature of causal inference we learn that the necessity component of our causal concept reflects not a perception of a necessitation relation between causal *relata* but instead reflects a change on the modal attitude of our inferences, a change from thinking that *b will follow a* to thinking *b must follow a*.

5. *Definitions, Metaphysics, Modesty and Immodesty*

We have seen how Hume’s two definitions emerge from his investigation of causal inference. Rather than beginning with a definition of causation and explaining causal inference in its light, Hume extracts the concept from our inferences. Causation is understood in terms of its role in our inference rather than in terms of an articulation of its metaphysics.

We also know why there are *two* definitions. One is a view of causation considered as an input to inference and the other is a view of causation as a kind of inference. The status as ‘definitions’ is troubling since they are neither extensionally nor intensionally equivalent. Two recent discussions of this issue note that Hume’s discussion is bound up with his discussion of inference.

Don Garrett approaches matters by way of Hume’s account of abstract ideas. For Hume, a particular idea serves as an abstract idea by coming to be associated with other instances of the same, so that the mind is disposed to call up those ideas and those ideas that act as counter-examples (its ‘revival set’, as Garret puts it). Garrett then suggests in the case of causation there are two ways in which such a revival can be effected, corresponding broadly to whether it is considered a philosophical or natural relation. The first definition specifies *objects* as standing in resembling pairs of objects. This revival set involves not merely the objects in the first definition, but also the determination of the mind that figures in the second definition. The second definition works the other way round, whereby the determination of the mind will revive not merely the associated ideas but their objects. Although there can be a mismatch between the input into the mind and our determination to infer might be mismatched in an *individual* mind, the patterns of inference in an ‘ideal’ mind - someone who is not hasty or misinformed regarding whether the relevant objects satisfy the first definition - would mirror those objects satisfying the first definition.¹³

More recently, Helen Beebe¹⁴ has suggested that the two definitions should not be considered as providing an *analysis* of the representational content of cause, but instead

two descriptions of the circumstances governing causal *judgments*. Again, their co-extensiveness is achieved by matching the objects satisfying the first definition with the inferences of an ideal mind. Each of these views is supported by subtle readings of the text and often involves a good deal of reconstruction, thus making it difficult to decide the extent to which the view is Hume's or the commentator's.¹⁵ Rather than pursue the issue of the co-extensiveness (or otherwise) of the two definitions, let us turn to consider what the intended consequences of the definitions is supposed to be.

One reading, which I shall call the *modesty* view, is that 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 outrun¹⁶ what we can understand of it. The *immodesty* view is that the definitions capture entirely not merely what we can understand of causation, but what causation *itself* must be. Hume is claiming that the *metaphysics* of causation is one of regularities, some of which are deemed causal by dint of the modal change in attitude that the impression of necessity provides. The modest Hume does not move from what we can and cannot conceive to what there is and is not; the immodest Hume does.

There are nests of complex reasons in favour of either reading. I noted one reason in favour of the immodesty view in section two, namely that since we have no impression of powers 'in the objects', we have no idea, and so putative references to such powers are meaningless. Second, the immodesty reading draws strength from the fact that Hume frequently says that the two definitions constitute the 'essence' of cause and effect.¹⁷ The

modesty view, by contrast, draws support from passages¹⁸ where Hume seems to express ignorance of powers and forces that lie beyond our comprehension. For example, he writes

We are ignorant, it is true, of the manner in which bodies operate on each other. Their force or energy is entirely incomprehensible. (EHU 7.1.25; SBN 72)

These ultimate springs and principles are totally shut up from human curiosity and enquiry....The most perfect philosophy of the natural kind only starves off our ignorance a little longer. (EHU 4.1.12; SBN 30-31)

Such avowals, and in tandem with general readings of Hume's overall project and purposes, motivate the modesty reading. The outcome of Hume's investigation is not a reduction to regularity but an awareness that our understanding of it is severely limited. What we understand of it consists only in what is given in the two definitions.

It might seem that the dispute over modesty and immodesty turns centrally on whether there is anything *more* to causation than regularity, and that the first definition of 'cause' is unproblematic for both parties. The only question is whether Hume thinks there are powers underlying these regularities. We shall return to the question of whether Hume thinks that there may be powers that outstrip regularities. However, matters are not straightforward with respect to the first definition. We noted that the relations that enter into the first definition are derived empirically from instances that we typically deem causal, and their rationale for their inclusion is that such relations enter into the causation of causal judgments. However, it seems difficult to see what would justify extrapolating

from this to the conclusion that causation *consists* in these relations (cf. Beebee (2006)). If, however, the intention in giving the first definition is to capture what we can *know* of causation, the extrapolation is justified. What the grounds for such judgments are turns out to be contiguity, constant conjunction and temporal priority. The sense in which the first definition captures the ‘essence’ of causation is akin to a Lockean ‘nominal essence’, the definition that captures how something shows itself to us as opposed to its real constitution.¹⁹ So, for example, in discussing the relation between matter and thought Hume writes that since 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, *so far as we have any notion of that relation.*’ (T 1.4.5.33; SBN 250, my emphasis)

Such a reading is on all fours with Hume’s general approach of restricting the extent of his claims to what we might call, in a vaguely Kantian way, the phenomenal world. This approach is exemplified in his discussion of space and time, where among the issues at hand is that of the vacuum. He claims that the ‘idea of space or extension is nothing but the idea of visible or tangible points’ and from this he draws the conclusion that we can have no idea of vacuum (T 1.2.5.1; SBN 53). He considers a number of objections to this account, and one of his replies is particularly telling. ‘Twill probably be said, that my reasoning makes nothing to the matter in hand, and that I explain only the manner in which objects affect the senses, without endeavouring to account for their real nature and operations’ (T 1.2.5.25; SBN 63). To this charge he pleads guilty. Hume thinks we should be content with ‘knowing perfectly the manner in which objects affect [the] senses, and their connexions with each other, as far as experience informs [us] of them.

This suffices for the conduct of life; and this also suffices *for my philosophy, which pretends only to explain the nature and causes of our perceptions, or impressions and ideas.*' (T 1.2.5.25; SBN 63, my emphasis) His intention 'never was to penetrate into the nature of bodies', since, beside the fact that it 'belongs not to [Hume's] present purpose', it is an 'enterprize [that] is beyond the reach of human understanding' (T 1.2.5.26; SBN 64). We do not go wrong if 'we confine our speculations to the *appearances* of objects to our senses, without entering into disquisitions concerning their real nature and operations' (T 1.2.7.26n; SBN 638).

It might be thought that at least Hume is committed to a claim about the *relata* of causation inasmuch as he refers to 'objects' in the definitions (and occasionally 'events' in the first *Enquiry*). It is these objects onto which the impression of necessity is projected. But the notion of an 'object' in Hume's thought is again far from straightforward. Marjorie Greene²⁰ helpfully distinguishes three senses of 'object' that occur in the *Treatise*. The first sense is the intensional object of an idea, which is the object of conscious attention and knowledge. The second sense of 'object' is that of *impression*, and it is these that are the intentional objects of ideas. The intentional object of an idea is an impression (or possible impression). The third sense of 'object' is that of 'external object', and Hume holds that our grasp of such things is extremely limited as we just saw. The relations that we *discover* are relations among these objects, and what's more cannot be known to apply to 'external objects'. For we suppose differences between impressions and objects that, though inconceivable, mean that 'any conclusion we form concerning the connexion and repugnance of impressions, will not be known certainly to apply to objects' (T 1.4.5.20;

SBN 241). It is easy to forget this limitation since it is radical and Hume tends to refer to things in a way that we naturally read as reference to a mind-independent world. For example, talk of spatial contiguity makes us immediately think of physical objects. But Hume tells us that the ‘table, which just now appears to me, is only a perception, and all its qualities are qualities of a perception’ (T 1.4.5.15; SBN 239), and that ‘impressions and ideas [are] really extended’ (T 1.4.5.16; SBN 240). The context of these claims is significant as well. When Hume mentions the mind’s ‘great propensity to spread itself on external objects’ in connection with the necessary connection projected onto them, he tells us that it is an instance of an ‘imaginary conjunction’ between extended items and objects that exist ‘no where’ (T 1.3.14.35; SBN 167). He then refers us to ‘Of the immateriality of the soul’, where the conjunction involved concerns non-extended perceptions and extended *perceptions* of the kind just mentioned.

A second source of the immodesty reading concerns the idea of necessary connection. Our idea of power or necessity is derived from the ‘customary transition’. Since meaning is tied to ideas, and ideas to impressions, the term ‘power’ either means this internal impression or nothing at all. Hence in T 1.4.7, ‘Conclusion of this book’, Hume writes

We would not willingly stop before we are acquainted with that energy in the cause...that tie, which connects them together....And how must we be disappointed, when we learn, that this connexion, tie or energy lies merely in ourselves...Such a discovery not only cuts off all hope of ever attaining satisfaction, but even prevents our very wishes, since it appears, that when we say we desire to know the ultimate

and operative principle, as something, which resides in the external object, we either contradict ourselves, or talk without a meaning. (T 1.4.7.5; SBN 266-7)

This looks straightforward. By ‘power’ we can either mean our subjective reaction to perceived regularities or we ‘talk without a meaning’. There are no powers in the objects. The next sentence, however, appears a good deal more liberal. He writes that this ‘deficiency in our ideas is not, indeed, perceiv’d in common life, nor are we sensible, that in the most usual conjunctions of cause and effect, we are as ignorant of the ultimate principle, which binds them together, as in the most unusual and extraordinary’ (T 1.4.7.6; SBN 227). Of course, if the talk of ignorance here, especially in this comparative formulation, were a merely isolated reference it would do little to disturb the immodesty reading. But as we noted, both the *Treatise* and, more extensively, the first *Enquiry* contain a significant number of references to secret or hidden powers, and associated talk of ignorance.

Hume’s talk of ‘meaninglessness’ on the one hand and his references to hidden powers on the other hand create what Galen Strawson has called Hume’s ‘meaning tension’. One way to approach this tension is to take the scope and force of ‘meaninglessness’ to be so severe that not even the remotest thought that would allow for reference to such hidden powers is possible. The putative references to hidden powers and Hume’s talk of such powers being ‘incomprehensible’ are then read in ways that deflate their apparent referential force. Thus such avowals could be references to micro-regularities, expressive of an instrumentalist approach or perhaps simply ironic. The alternative modest approach takes such avowals as *prima facie* evidence that such the

strictures of Hume's theory of ideas are not as severe as many have assumed them to be. On this view, Hume holds that powers are unintelligible in the sense of being unintelligible to *us*, and what we can understand of causation, and what we can mean by it, is restricted to what is given in the two definitions. Obviously, it is not possible here to comb the relevant texts and consider the arguments for and against modesty or immodesty. Nevertheless, two remarks can be made. First, since no aspect of any text is self-interpreting, what Hume means by 'meaning' needs to be explored in light of what the text as a whole says, and that requires considering the force of such avowals. It may be that Hume's claims about meaning have the implications that some take them to have, but that they do so cannot be assumed at the outset.²¹ Second, the attempted deflationary strategies do not really address either the reasons Hume adduces for our ignorance of power or the depth of the ignorance.²² For example, though he does say that there are 'some springs and principles, which are hid, by reason of their minuteness or remoteness' (EHU 9.13; SBN 87), his principal reason adduced for our ignorance is the one rehearsed in the previous section, namely the one turning on our incapacity to infer *a priori* the causal effects of any object and our capacity to conceive a cause being followed from something different from its customary effect. Our ignorance of causation is not down to merely not having powerful enough microscopes.

The modesty and immodesty readings inflect how one understands Hume's subsequent uses of the definitions in 'Of the immateriality of the soul' (T 1.4.5) and his treatment of the issue of liberty and necessity (T 2.3.1-2 and EHU 8). In both cases, something crucial in these thorny issues hangs on causation, and Hume approaches them

with his new definitions of cause. On the immodesty reading, Hume has determined the metaphysic of causation, and so settles the debates in the light of this fact. On the modesty reading, Hume has settled the limits of what we can understand of causation, and forecloses on these disputes in light of this fact.

Embedded in Hume's discussion of whether the soul is immaterial is the question of whether matter can be the cause of thought. Those who deny that it can maintain that none of the different 'shocks, and variations and mixtures' ever 'affords us the idea of thought of perception' (T 1.4.5.30; SBN 256-257). There is no manifestly intelligible connection between them, and so no causal relation. Hume first points out that it certainly *seems* that changes in bodies cause thought, and indeed the relation between matter and thought satisfies the first definition of 'cause', and he concludes that matter is the cause of thought. He offers those who deny this a dilemma. Either we '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 conjoined, are upon that account to be regarded as cause and effects' (T1.4.5.31; SBN 248). The first horn of the dilemma leads to the conclusion that there are no causes or effects, since no such connection is perceivable. The anti-materialist is therefore impaled on the other horn. Since '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; SBN 250). The modesty reading will emphasize the epistemic qualifiers such as 'as far as we have any notion' and 'may be regarded'. The claim that matter is the cause of thought is supported by the fact that 'tis only by our experience

of constant conjunction, we can arrive at any knowledge of this relation' (T 1.4.5.30; SBN 247). The immodesty reading, by contrast, will emphasize the claim that matter is the cause of thought to be dogmatic unless it were backed up by a claim that causation is constant conjunction.²³

Hume's most sustained application of his definitions lies in his treatment of liberty and necessity. Briefly, Hume seeks to reconcile the necessitarian, who holds that the causes of motives and actions are of a same kind as those operative in matter, and the libertarian who holds that the causation of motives is not of the same kind in matter. Hume argues that both kinds of relation are satisfied by the first definition, and both satisfy the second definition that involves necessity. But the necessity involved is only that of the customary transition of the mind, and not the invidious kind of necessitation that is supposedly operative in material objects. Again, there are modest and immodest readings. The immodest reading sees this as following from the fact that the two definitions jointly constitute in what causation consists, whereas the modest reading sees foreclosure on the dispute given that all we can understand of causation is captured in these definitions.²⁴

The debate between modesty and immodesty cannot be settled here. But whichever view one takes of the metaphysical import of Hume's discussion, it is undeniable that it means that at *best* what we can grasp of causation is a matter of perceived regularity, and that any conceptual difference between causation and regularity depends on the determination of the mind changing the modal character of our attitudes to those regularities.

6. Thomas Reid

Thomas Reid, one of Hume's most trenchant critics, mounted a number of objections to what he perceived to be Hume's account and offered a different view of causation. Here I shall offer a brief sketch of both Reid's criticisms and his own positive view.

Reid's Hume holds that causation consists in mere regularity. He credits Hume with the view that 'what we call a cause is only something antecedent to, and always conjoined with the effect' and then offers his now famous counterexample, namely that from this 'we may learn from it that night is the cause of day, and day the cause of night.' (*Essays on the Intellectual Powers of Man* 503).²⁵ Such an objection is, as I noted in §2, based on the idea that the regularity theory fails to capture the intuitive extension of 'cause'. As we also said, this is hardly a knockdown objection, and what is more, fails to take into account any role for Hume's idea of necessity.

However, the celebrated counterexample is really not much more than a symptom of a more fundamental difference between the two Scots. Reid repudiates Hume's empiricism, arguing that key principles that govern human thinking cannot be derived from experience. Instead these are 'first principles or intuitive judgements', which he also calls 'principles of common sense' 'common notions' and 'self-evident truths' (EIP 452). These judgments insure us against the scepticism generated by Hume's empiricism, and the insurance extends to the fact that all 'that begins to exist, must have a cause which produced it' (EIP 497). He takes this claim to be an *a priori* principle whose presence best explains 'the universal belief of mankind' in its veracity, (EIP 501) adding that 'Mr. HUME might answer upon his own principles that since many things may happen without a cause,

this error and delusion of men may be universal without any cause.' (EIP 501) This last claim is rather unfair to Hume. Hume flatly denied that he asserted 'so absurd a proposition that anything might arise without a Cause: I only maintain'd, that our Certainty of the Falsehood proceeded neither from Intuition nor Demonstration, but from another Source'.²⁶ Reid further claims that the principle is supported on the grounds that 'the practices of life is grounded upon it...and it is impossible to act without common prudence if we set it aside.' (EIP 501)

Reid sees another error in Hume, namely the equation of power with necessity. For him, the paradigm instance of power is the exercise of the will, which cannot be conceived in terms of necessitation. This brings us to Reid's positive view. Causation is not 'an object of sense', and our only experience of it is 'in the consciousness we have of exerting some power in ordering our thoughts and actions.' (EIP 499) This last thought is developed more systematically in an essay 'Of power' written late in his life (1792) but only recently published.²⁷ Our wills are efficacious, and our conception of power emerges from our gradual awareness of our voluntary control over action. In 'finding by experience that such exertions are followed by such events, we learn to make the exertion voluntarily...[and] we have the conception of power in ourselves to produce that event' (OP 3). Our conception of power and causation emerges from our agency. This notion of power allows us to conceive of powers underpinning natural events even though we 'see enumerable changes or events, some constantly conjoined with a certain effect which succeeds; but we see no real connexion between them.' (OP 7) The manifest regularities are said to be causes in the sense that they are laws of nature, but these are underwritten by an 'agent that puts the law

into execution.’ (OP 7) This leads him to the view that of ‘proper and efficient causes there are none in the universe but the Deity.’ (OP 10) This seems in the end to lead to a version of occasionalism.

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¹ References by book, part, section, and paragraph number to Hume (2007), and by page number to Hume (1978) (SBN). All italics original unless otherwise noted.

² See, for example, the introduction to Sosa and Tooley (eds.) (1993) and Psillos (2002), chapter one.

³ References by section and paragraph number to Hume (2006) and page numbers to Hume (1975) (SBN).

⁴ For a good discussion and defence, see Beebe (2006), pp.132ff

⁵ I discuss the term ‘essential’ in section four.

⁶ Contiguity is dropped entirely in the *Enquiry* account of causation.

⁷ The premise of this argument is the ‘establish’d maxim’ that

an object, which exists for any time in its full perfection without producing another, is not its sole cause; but is assisted by some other principle, which pushes it from its state of inactivity, and makes it exert that energy, of which it was secretly possest. (T 1.3.2.7; SBN 76)

So some other causal condition is required to determine the manifestation of an effect at some particular time. But if that were simultaneous with the cause, there would be no succession. For discussion, see Beauchamp and Rosenberg (1981), 192-195.

⁸ Again, as emphasized by Beebe, Hume’s references to constant conjunctions are almost all explicitly or implicitly references to *observed* constant conjunctions from which the idea of causation as involving constant conjunction is derived.

⁹ However this is not to say that the causal maxim isn't of the first importance for Hume in his campaign against rational religion. On this see Russell (2008), chapter 10.

¹⁰ Millican tries to deflate this connection by suggesting that it is simply an artifact of Hume's theory of *a priori* knowledge, and so the emphasis is on *connection* discoverable *a priori* rather than *necessity a priori* (Millican 2009; 647). We could infer an effect from a simple view of a cause not because this is a detection of *necessity*, but because the inference is *a priori*. This doesn't explain (and ignores) Hume's remark about an inference depending on the necessary connection. And more importantly it does not at all explain why Hume talks of connections as *necessary* in the first place. Authors like Malebranche connect necessary connections with an epistemology that involves the claim that the cognition of necessary connection would render it inconceivable that the effect fail to follow cause, and there is no reason to see Hume as doing anything other than participating in this tradition.

¹¹ 'Distinctness' here is best read as a phenomenal notion, one that grounds the distinctness of concepts. On this see my (2007a) §4.3.6.

¹² Beebe (2006: 103) claims that Hume the idea of necessary connection figures in neither definition. However, the phrase 'determines the mind' is in the second definition and Hume earlier states that the 'mind is determ'd...[and it this] determination, which affords me the idea of necessity' (T 1.3.14.1; SBN 156) Cf. Beauchamp and Rosenberg (1981: 12).

¹³ See e.g. Garrett (1993).

¹⁴ Beebe (2006), chapter four

¹⁵ This is not meant as disguised criticism of Garrett and Beebe. All accounts must involve a good deal of reconstruction given that we have little to go on directly, as it were.

¹⁶ Instances of the modesty reading are variously called ‘sceptical realism’, ‘causal realism’ or the ‘New Hume’. Though I have defended the modesty view in the past under the label of ‘realism’, I now think that ‘realism’ is an unhelpful term since it tends to be read as having implications far stronger than a modesty reading needs to be committed to. I take, for reasons having to do with the slippery term ‘realism’, agnosticism to be a form of realism (see my 2007b), but for many the term ‘realism’ is incompatible with agnosticism. The interest in the realist readings lies not Hume’s assumption of the *existence* of more to causation than what is given in the two definitions, but the more modest claim that he does not move from limitations of thought to a metaphysical position. Hence I think the term ‘modesty’ is the better one.

¹⁷ Millican (2009) makes a good deal of this fact.

¹⁸ These are catalogued in Strawson (1989)

¹⁹ I owe this point to Stephen Buckle who offers a sustained argument for it in an unpublished paper.

²⁰ Greene (1994)

²¹ Nevertheless some make that assumption. See e.g. Clatterbaugh (1999, p.204), who writes that ‘even to think of such sentences as meaningful...would be to set aside the entire framework of his philosophy’. But that is to assume an interpretation of meaning and meaningless at the outset. Peter Millican recently reminds us that Hume talks about meaning by marshalling relevant quotations, but then states if we take the “core texts at face value...then we have no option but to interpret his conclusion as denying any understanding whatever of causal terms beyond [the two definitions]...[so that] we are not

even able to think or refer to [causal powers]' (2009, p.657). There is no option *on this interpretation* of what Hume means by 'meaning' and its implications, but the realist passages invite us to reconsider precisely this interpretation. *Pace* Millican, the realist interpretation of what is meant by 'meaning' is not 'defensive' (2009, p.659) but part of an overall interpretative picture that tries to take both aspects of the text in tandem. Millican adduces further trenchant objections to realist readings, but I cannot address them here for reasons for space.

²² See my (2007a), §5.4.2 for a longer discussion of the inadequacies of the deflationary strategies.

²³ Millican (2009), p.692.

²⁴ This issue has been the topic of a recent exchange in the literature. I defend the compatibility of Hume's discussion in 'Of liberty and necessity' with the modesty interpretation in my (2007b), whereas Millican (2007) argues that it supports immodesty. Beebe responds directly to Millican in her (2007) Millican (2010) argues against modesty readings.

²⁵ Page references to Reid (2002), EIP.

²⁶ Letter to John Stewart, 1754 (in Greig (ed.) *The Letters of David Hume*, vol. I, p.187, Oxford: Oxford University Press, 1932

²⁷ References to Reid (2001) (OP)