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# Why We Believe in Induction: Standards of Taste and Hume's Two Definitions of Causation

*Bennett W. Helm*

A major puzzle in the literature on Hume's *Treatise of Human Nature* is that of why he gives two definitions of causation and what the relation between the two is. Given the amount of secondary literature on the subject, it is somewhat striking that two interrelated elements of Hume's account have received so little attention. The first is the distinction of causation into the natural and the philosophical relations: although many have tried to give accounts of why Hume presents two definitions of causation, it is often not clear in these accounts that the one definition is of causation as a natural relation and the other is of causation as a philosophical relation.<sup>1</sup> Where the distinction is taken into consideration, it is usually misunderstood or taken as "an obfuscatory complication" that is better left out.<sup>2</sup> The second element is that in making causal inferences "we must follow our taste and sentiment,"<sup>3</sup> where the appeal to taste here, as in morality and aesthetics, does *not* imply that each person's taste is as good as everyone else's. Rather, Hume makes it clear both in book 3 of the *Treatise* and in his essay, "Of the Standard of Taste," that there are *standards* to which one's judgements of taste (in morality, aesthetics, or causation) must conform.

My purpose in this paper is to attempt to provide an interpretation of Hume's account of causation that brings these two elements explicitly into the foreground. This interpretation is, to a greater extent than usual, a *reconstruction* of Hume's account of causal inference, drawing, as I have indicated, from a range of texts not normally associated with his discussion of causation. As such, it should be considered as exploratory in nature, perhaps focusing too single-mindedly on these two elements in an attempt to make out as strong a case as possible for their relevance in understanding Hume's account of causal inference.

To begin, recall Hume's two definitions of the relation of causation:

1. We may define a CAUSE to be 'An object precedent and contiguous to another, and where all the objects resembling the former are plac'd in like relations of

precedency and contiguity to those objects, that resemble the latter’.

2. ‘A CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other’. (T 170)

How do these two definitions fit together? Are they two parts of one definition, or are they two distinct definitions that are to be used for distinct purposes? From the immediate context, it really is not clear how we are to take them, and different things Hume says seem to provide evidence for different interpretations. Thus, on the one hand, Hume says that the two definitions “are only different, by their presenting a different view of the same object” (T 170), which seems to indicate that the two are interconnected aspects of a single definition and so cannot be understood independently. That the idea of necessity, which Hume clearly takes to be crucial to an understanding of causation (T 77), seems to be entirely missing from the first definition might be taken as support for this reading. But, on the other hand, Hume also seems to offer each definition as one that can stand alone, though with defects that may cause it to be “rejected” and the other “substituted” for it. Thus, Hume says immediately following the first definition, “If this definition be esteem’d defective, because drawn from objects foreign to the cause, we may substitute this other definition in its place,” and proceeds to give the second definition (which is, however, similarly defective). This suggests that, although neither definition is perfect, they are the closest we can come to an adequate formulation of the relation of causation, and each definition has its own domain of application within which it is most appropriate.

Although these two interpretations seem to be in conflict, it should be clear that fully understanding Hume’s account of causation requires understanding both definitions and how they are related. One obvious way to make some sense of how to sort this out is to note that the first definition is intended as a “*philosophical*” relation, whereas the second is intended as a “*natural* relation” (T 170, Hume’s emphasis). Consequently, we might make headway on understanding how the two definitions fit together if we could understand the intended distinction between these two kinds of relations.

Hume distinguishes the two kinds of relations as follows:

The word RELATION is commonly used in two senses considerably different from each other. Either [as in the natural relation] for that quality, by which two ideas are

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connected together in the imagination, and the one naturally introduces the other ...; or [as in the philosophical relation] for that particular circumstance, in which, even upon the arbitrary union of two ideas in the fancy, we may think proper to compare them. (T 13)

At first sight, it may seem as if the difference between the two is just that natural relations are connections between ideas that occur "naturally," without us having to do anything special to perceive them, whereas philosophical relations are connections that individual thinkers must make an effort to discern. This is, for example, the way Terrence Penelhum understands the distinction:

Hume clearly supposes that philosophical relations are relations we speak of because we find them to be present on *special examination*, whereas plain men do not mention them because they do not notice them.<sup>4</sup>

Thus, for Penelhum, natural relations are those relations that we are apt to notice, whereas philosophical relations are just the opposite and hence can only be discovered if we look closely. The example Hume gives to illustrate this distinction does seem to support this interpretation: distance is a relation philosophers acknowledge, but "plain men" would deny that distant objects are related, for in ordinary speech to say that things are distant is to say that they are unrelated (T 14). Other commentators do not differ much in their understanding of this distinction. Thus, J. A. Robinson thinks that *all* relations are philosophical, and so "to say that a relation R is 'philosophical' is to make a factually empty statement,"<sup>5</sup> while to say that a relation is natural is to make an empirical claim concerning the kind of effect that relation would have on one's mind. And Barry Stroud essentially agrees with Robinson's assessment of philosophical relations, though he thinks that the natural relations are that sub-class of the philosophical relations that are obvious.<sup>6</sup>

Although this much (though vaguely stated) may be correct, I do not think it is sufficient to capture the "considerable difference" Hume finds between the two kinds of relations (T 13). Rather, I think the distinction depends on two different ways one might answer the question, Why do you believe that? One answer, that afforded by the natural relations, is to say why one *in fact* has that belief by describing the causal chain leading up to the formation of that belief; and another answer, that afforded by the philosophical relations, is to say why one *ought* to have that belief by providing a justification of it. That this is the distinction Hume intends between natural and philosophical

relations, though not obvious from the passage quoted above, is, I think, borne out by the rest of the *Treatise* and several of Hume's essays.<sup>7</sup>

Consider first the natural relations. One of Hume's major themes is that the mind is a part, though a special part, of the natural world, and he thus repeatedly tries to give causal accounts of the origins of our sense impressions and of the transitions we make from one idea (or impression)<sup>8</sup> to the next. To some extent, then, the transitions that occur in our minds can be explained and understood in much the same way as transitions that occur in the rest of nature, though this is not to deny that such mental transitions also stand in need of justification, which cannot be understood as just another part of nature. Rather, Hume's claim is that for certain explanatory purposes we can set aside the rationality of mental transitions and understand the mind as a causally determined part of nature. This general conception of the mind as a part of the natural order of things even leads Hume to speculate that,

'T'wou'd have been easy to have made an imaginary dissection of the brain, and have shewn, why upon our conception of any idea, the animal spirits run into all the contiguous traces, and rouze up the other ideas, that are related to it. (T 60)

In most cases (though not all; cf. T 92), these transitions among ideas occur as the result of an association or union among these ideas, and such a connection is the foundation of natural relations. What makes such transitions different from other transitions in nature, and so what makes them a special part of the natural world, is that they involve a transfer of vivacity from the one idea to the other. *Vivacity* is the property of ideas that Hume uses to account for the difference between our merely having the idea and our believing it:

[T]he *belief* or *assent*, which always attends the memory and senses, is nothing but the vivacity of those perceptions they present; and ... this alone distinguishes them from the imagination. (T 86)

Thus, transitions involving the transfer of vivacity from one idea to another include thought moves in which we come to believe one idea as the result of believing another, and this kind of transition Hume calls an "inference."<sup>9</sup> Again, it is clear that such transitions are part of the natural order of things:

I wou'd willingly establish it as a general maxim in the science of human nature, *that when any impression becomes present*

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*to us, it not only transports the mind to such ideas as are related to it, but likewise communicates to them a share of its force and vivacity.* (T 98, Hume's emphasis)<sup>10</sup>

For Hume, then, two ideas are related by a natural relation just in case, when one believes the one idea, the mind will naturally make the inference from that idea to the other with a transfer of sufficient vivacity to determine belief of the second idea, and it is by virtue of such a natural relation that the two ideas are said to be *associated* or *united*.

Natural relations among ideas, therefore, are relations that hold independently of any reasons we might have for attributing them, so that these relations cannot serve to justify the inferences we make because of them. Thus, Hume says, referring to natural relations:<sup>11</sup>

We have already taken notice of certain relations, which make us pass from one object to another, even tho' there be no reason to determine us to that transition; and this we may establish for a general rule, that wherever the mind constantly and uniformly makes a transition *without any reason*, it is influenc'd by these relations. ... When the mind, therefore, passes from the idea or impression of one object to the idea or belief of another, it is not determin'd by reason, but by certain principles, which associate together the ideas of these objects, and unite them in the imagination. (T 92, emphasis added)

This thought gets elaborated later (in reference to the natural relation of causation, though the same point holds for the other natural relations) in terms of *causal* transitions:

When any object is presented to us, it immediately conveys to the mind a lively idea of that object, which is usually found to attend it. ... But when we change the point of view, from the objects to the perceptions; in that case the impression is to be considered as the cause, and the lively idea as the effect. ... The uniting principle among our internal perceptions is as unintelligible as that among external objects, and is not known to us any other way than by experience. (T 169)

The point is that the inferences we make as a result of the natural relations between ideas are causal transitions in nature just like other causal transitions that we observe out in the world, where instead of transferring momentum, for example, it is vivacity that gets transferred. Natural relations, then, are the basis of a natural mechanism for making us believe one idea as the effect of believing

another, where such a causal transfer of belief is independent of any questions of justification that may arise. The only reason that can be given for such an inference is that the mind is naturally structured in such a way that it makes such transitions of vivacity, and this is why the relations that effect these transitions are called "natural."

Whereas a natural relation is that "by which two ideas are connected together in the imagination, and the one naturally introduces the other," a philosophical relation is that on the basis of which we "think proper to compare" two ideas (T 13). For Hume, to compare in this way is to reason:

All kinds of reasoning consist in nothing but a *comparison*, and a discovery of those relations, either constant or inconstant, which two or more objects bear to each other. (T 73, Hume's emphasis)

To "think proper to compare" two ideas in terms of a relation, then, is to take such a comparison (that is, reasoning with that relation) to be "proper" or justified. Understood in this way, philosophical relations provide the needed evaluative element to the notion of belief and inference (which necessarily is something that can be true or false, correct or incorrect) that was missing from the naturalistic understanding derived from natural relations.

One might object that this interpretation of Hume's definition of philosophical relations illegitimately stretches the use of the phrase, "think proper to compare," which might just as well mean something like "think it might be useful to compare," and it thus may seem that my interpretation rests on too weak a foundation. Furthermore, the objection continues, the example Hume uses to illustrate the distinction (T 14) does not seem to bear this interpretation out, for it makes no reference to justification at all. But, first, initial support for my reading of what Hume means by "think proper" comes from another passage in which that phrase is used: in section 15 of part 3, after having described the eight "general rules, by which we *ought to regulate* our judgment concerning causes and effects" (T 149, emphasis added), Hume says, "Here is all the LOGIC I think *proper* to employ in my reasoning" (T 175, emphasis added), and it is clear that in this context, at least, Hume means by "proper" something along the lines of "justified." Given that the notion of a natural relation is one that does not allow for the evaluative element essential to belief, we ought to expect Hume to provide an account of what *justifies* our inferences, and the notion of a philosophical relation is an obvious place to look for such an account. Second, Hume's example at T 14, I think, ought not to be taken as an attempt to explicate the distinction, as the above criticism

requires, but rather as an explanation of his terminology, of why he calls the one relation "philosophical" and the other "natural": *philosophers* speak of distance as a relation because "we acquire an idea of it by the comparing of objects" (T 14), but it is not "*natural*" for us to call distance a relation because there is no "connecting principle" between two distant objects as such. Of course, neither these criticisms nor my responses are convincing by themselves; as always, we ought to judge an interpretation of a passage not merely on what is said in the passage itself but also on how much sense that interpretation enables us to make of the work as a whole, and so I turn now to other parts of the *Treatise* for support.

Consider first *Treatise* 1.3.1, where Hume explicitly addresses philosophical relations to the exclusion of natural relations. In this section, Hume is concerned to distinguish the objects of knowledge from those of probability. Four of the seven philosophical relations (namely resemblance, contrariety, degrees in quality, and proportions in quantity or number) are relations "such as depend entirely on the ideas, which we compare together" (T 69) and so "can be the objects of knowledge and certainty" (T 70). This is because, given that whether the relation holds between two ideas depends solely on the ideas themselves, "'tis easy to decide" whether or not the relation holds, and "this decision we always pronounce at first sight, without any enquiry or reasoning" (T 70). Of course, Hume is not denying that there can be borderline cases in which it is difficult to decide, say, whether the object of one idea has a quality to a greater degree than the object of another idea, but this is merely an epistemological problem, and it is always in principle possible to decide, for the relations themselves provide us with "a precise standard ... and according as [our ideas] correspond or not to that standard, we determine their relations, without any possibility of error" (T 71). It is in light of such standards provided by these philosophical relations that we can justify our reasoning.

The other three philosophical relations (namely identity, relations of time and place, and causation), however, are relations that "may be chang'd without any change in the ideas" (T 69) and so can at best be the objects of probability rather than knowledge. The reason for this is that, unlike the other four philosophical relations, what we need to know in order to determine whether or not one of these relations holds includes information other than what is contained in the ideas themselves and so requires "the help of our memory and experience" (T 70). Hume illustrates this in the following example (for the relation of place):

Our ideas seem to give a perfect assurance, that no two right lines can have a common segment; but if we consider these



ideas, we shall find, that they always suppose a sensible inclination of the two lines, and that where the angle they form is extremely small, we have no standard of a right line so precise as to assure us of the truth of this proposition. (T 71)

In other words, we cannot with complete certainty make the inference from the idea that two lines are “right lines” to the idea that they share no common segment given that the standards for the application of the relation of place that holds between these ideas depend on experience. The point is not that there are no standards at all for justifying this claim; rather it is that the standards we have, because they depend on experience, are not as precise as would be needed to make the inference completely certain, and so the inference is only “probable.” We must be able to speak of standards here, for without them it would not be appropriate to speak even of probability. Thus, it is clear that *all* the philosophical relations are relations for which there is some standard or other of their application, some justificatory reason we can give for why we are certain (to the extent that we are) that the relation holds. It is only because probable (and demonstrative) reasoning makes use of philosophical relations and their inherent standards that Hume can say that such reasoning is “allow’d to be [a] reasonable foundation of belief and opinion” (T 143).

So far I have made two claims: first, a natural relation between two ideas is that in virtue of which one’s mind is *disposed* to transfer vivacity from the first idea to the second and so to believe the second *because* one believes the first, where we are to understand this “because” not as giving a justification but as indicating part of the causal chain leading up to the second belief. Second, a philosophical relation is that in virtue of which we think we are *justified* in believing one idea on the basis of our belief in another, where this implies that there are standards for making the inferences, standards that are simply missing from the point of view of the natural relation. That this is the right way to understand the distinction can be further confirmed by looking at what Hume has to say about the connection between the two kinds of relation, to which I now turn.

Hume broaches this topic in the context of a problem that arises, given the distinction he has made between the two kinds of philosophical relations, for those that are the objects of probability: why would one make the inference from the one idea to the other? In the case of demonstrative reasoning, Hume seems to think the answer is obvious: because such reasoning requires us to consider only the ideas themselves, it is impossible, given a clear understanding of the ideas in question, to conceive things being otherwise (cf. T 87). However, this kind of answer is not available for probable reasoning given that it must

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depend on memory and experience, as Hume makes clear in *Treatise* 1.3.6.

In that section, Hume considers “the inference from the impression [of some present object] to the idea [of an object not present],” an inference which he thinks must involve the relation of causation (cf. T 73-74, 89). He argues that because probable inferences from cause to effect (and one might take this to be a point about probable inferences generally) are merely probable, what makes them be correct inferences (or “just inferences” [T 89]) cannot depend entirely on demonstrative reasoning (that is, reasoning which would lead to knowledge and certainty): the philosophical relation of causation is “founded” on memory and experience rather than just the ideas themselves, and so the standards of reasoning with this relation cannot depend simply on the ideas themselves as they do for demonstrative reasoning (T 89; cf. T 70). Hence,

Were there no mixture of any impression in our probable reasonings, the conclusion wou'd be entirely chimerical [that is, without justification]: And were there no mixture of ideas, the action of the mind, in observing the relation, wou'd, properly speaking, be sensation, not reasoning [cf. T 73]. 'Tis therefore necessary, that in all probable reasonings there be something present to the mind, either seen or remember'd; and that from this we infer something connected with it, which is not seen nor remember'd. (T 89)

Just as in his initial discussion of knowledge and probability in section 1, Hume is denying that the standards for probable reasoning are the same as the standards for demonstrative reasoning, for the former must involve impressions or empirical evidence (otherwise the conclusion would be “chimerical”), whereas the latter do not. Again, this is not to say that there are no such standards, for to say that a conclusion is chimerical is to criticize the inference to that conclusion, where such criticism implies that there is a standard in terms of which such an inference is to be evaluated, and I have claimed that Hume thinks these standards are essential to the notion of philosophical relations generally.

The problem with this appeal to experience, of course, is that it does not seem to provide adequate justification for causal inference, for we cannot know that the future will be like the past:

Your appeal to past experience decides nothing in the present case; ... [and so] I wou'd renew my question, *why from this experience we form any conclusion beyond those past instances,*

*of which we have had experience.* If you answer this question in the same manner as the preceding, your answer gives still occasion to a new question of the same kind, even *in infinitum*; which clearly proves, that the foregoing reasoning had no just foundation. (T 91)

The question Hume raises here is that of what justifies our (merely probable) causal inferences, and his aim is to provide *general* criteria for answering that question: in general, when will an inference based on the probable philosophical relation of causality be justified? On the face of it, it seems that the only way to answer this question is to make such reasoning into an instance of demonstrative reasoning using the premise that the future will be like the past. But this, Hume argues, will not provide general conditions for *good* causal inferences given that we have no good reason to believe the truth of this premise: demonstrative reasoning cannot provide such a reason because we can imagine things being otherwise. But probable reasoning cannot do so either because such reasoning must itself depend on causal reasoning and would therefore be viciously circular. Hence, it becomes puzzling from the perspective of the philosophical relation why we would make such an inference in a particular case, for if we cannot specify general conditions for such inferences to be sound, then, seemingly, we have no reason to make them.

To solve this puzzle, Hume turns in a passage already quoted (T 92; p. 121, above) to the natural relations: we make the inference from the one idea to the other because of a fact about the natural constitution of our minds. Our minds are constituted in such a way that, upon repeated experience of a transition from a certain kind of impression (all of which resemble each other) to another kind of impression (all of which resemble each other), we become *accustomed* to make this transition from the one idea to the next, and this transition is one that occurs “without any reason”: “The inference, therefore, depends solely on the union of ideas” (T 92), whose “principles,” Hume goes on to tell us, just are the natural relations. Repeated experience of resembling transitions *by nature* results in a “custom” or “habit” or “disposition” (as Hume also calls it in “The Sceptic”)<sup>12</sup> to make this transition, transferring vivacity in the process.

Thus 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 94)

In providing this answer, of course, Hume has in effect changed the question. In asking why we make the inference from the one idea to the other, Hume initially seemed to be asking for a justificatory reason for making the inference, though the answer he has just given us is one that explains why we *in fact* make the inference. For demonstrative reasoning, it was not necessary to make a distinction between these two readings of the question because the answer to each is the same: we make the inference to the second idea because, given that we believe the first idea, we could not do otherwise. But with probable reasoning, it is crucial that these two readings be clearly separated, for what *justifies* the inference will not also provide a reason for why one *in fact* makes it, and an explanation of why one *in fact* makes the inference will not also *justify* it. To understand why we in fact make the inference from cause to effect, we must set aside the sense in which we are justified in making the inference and consider it only as a *natural* transition from one idea to another. To say this, however, is not to deny that there can be a *philosophical* relation of causation in light of which the inference is justified; rather, it is to say that what justifies the inference (thus providing a reason why one *ought* to make it) cannot also provide a reason for why a particular person does *in fact* make the inference. The point here is that the philosophical relation of causation depends on the natural relation of causation to “unite” the related ideas in the sense that the mind will naturally move from the one idea to the other with a transfer of vivacity; without such a union, we would be unable in fact to believe the idea of the effect on the basis of believing the idea of the cause and so could not “draw any inference from it.” It is only once we are able to make such inferences that it makes sense to ask, from the point of view of the philosophical relation, whether they are justified or not. What is needed at this point is an account of the source of justification for the philosophical relation of causality, for without such an account it is hard to understand how there could be such a relation, or even how there could be probable philosophical relations generally. Such an account will involve delving further into the connection between the philosophical and the natural relations of causality.

In *Treatise* 1.3.13, “Of unphilosophical probability,” Hume is concerned with cases in which we come to believe something (as a result of the natural relation) that we have reasons to think we shouldn’t believe (as a result of the philosophical relation). He discusses four kinds of unphilosophical probability, though for my purposes I will discuss only the fourth, which is “that deriv’d from *general rules*” (T 146).<sup>13</sup> The “general rules” he initially has in mind are those that would describe the natural disposition we have to make the inference from one kind of idea to another, though this is not to say that we must

be able to make such general rules explicit. Hume here reiterates his claim (cf. T 94) that (for probable reasoning, at least) it is only on the basis of *natural* relations that we can transfer vivacity from one idea to another and that we acquire such natural relations as the result of being habituated or accustomed to making such a transition:

Our judgments concerning cause and effect are deriv'd from habit and experience; and when we have been accusom'd to see one object united to another, our imagination passes from the first to the second, by a natural transition, which precedes reflection, and which cannot be prevented by it. (T 147)

The problem with such a natural transition is that it sometimes results in an inference that is contrary to the standards of reasoning we endorse. Thus, after having pulled several black balls out of a box, we become accustomed to making the transition from the idea of a ball being pulled out of the box to its being black, and so infer that the next ball to be pulled out will be black (cf. T 146-47). However, on reflection, we find that such an inference is contrary to our reasoned judgement, that such a general rule is not one that we “feel good” about:

[T]ho' custom be the foundation of all our judgments, yet sometimes it has an effect on the imagination in opposition to the judgment, and produces a contrariety in our sentiments concerning the same object. (T 147-48)

How is it that “on reflection” we come to have “contrary” judgements concerning the same objects given that, “According to my system, all reasonings are nothing but the effects of custom” (T 149)?

The answer is that the conflict is a conflict between two general rules—the general rule that is implicit in the natural disposition or “custom” of the mind to infer one idea from another (call this a “natural general rule”), and a general rule “by which we ought to regulate our judgment” (T 149), a general rule that we *endorse* (call this a “philosophical general rule”).<sup>14</sup> We can come to recognize this conflict by reflecting on the match between our natural and philosophical general rules, between the inferences we are inclined to make (or have made) and the inferences we think we ought to make on the basis of a wider range of experience. Such a reflection, Hume thinks, can truly be said to *correct* the initial judgement in favour of the philosophical general rule:

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We may correct this propensity [that is, the natural custom] by a reflection on the nature of those circumstances [that give rise to the natural custom]. (T 148)

By them [the philosophical general rules] we learn to distinguish the accidental circumstances from the efficacious causes; and when we find that an effect can be produc'd without the concurrence of any particular circumstance, we conclude that that circumstance makes not a part of the efficacious cause, however frequently conjoin'd with it. (T 149)

Yet Hume thinks that the *philosophical* general rule itself is a custom for regulating our reasonings, though it is a special sort of custom in that it is endorsed. Thus, he says in "The Sceptic":

Here then is the chief triumph of art and philosophy: it insensibly refines the temper, and it points out to us those dispositions which we should endeavour to attain, by a constant *bent* of mind, and by repeated *habit*. (*Essays*, 171; Hume's emphasis)

We can get our natural dispositions for making inferences to line up with the inferences we think we *ought* to make only by practice, and by such practice the natural dispositions to make inferences we endorse will come to replace those natural dispositions to make inferences we do not endorse.

At this point, Hume raises a sceptical objection: if the inferences we make in accordance with general rules are able to lead us astray in the first case, how is it that we can correct these inferences by yet other general rules and be more certain that the conclusions we reach are justified?

[T]he sceptics may here have the pleasure of observing a new and signal contradiction in our reason, and of seeing all philosophy ready to be subverted by a principle of human nature [that is, general rules], and again sav'd by a new direction of the very same principle. The following of general rules is a very unphilosophical species of probability; and yet 'tis only by following them that we can correct this, and all other unphilosophical probabilities. (T 150)

The problem the sceptics raise is one concerning the essential difference between the two kinds of general rules: how can there be such a difference between *endorsed* general rules, which *justify* the

inferences based on them, and natural general rules for which there can be no question of justification given that they are merely transitions that occur in nature? Hume does not explicitly address this question here, and in fact seems to give up on the question in book 1 of the *Treatise*. It is this apparent concession to the sceptics, I suspect, that has led many to think that Hume's contribution to our understanding of causation is ultimately only a negative one. However, as I have suggested in the introduction, to interpret Hume this way would be to ignore one element of his account that, although it does not receive much attention in book 1, gets developed later in book 3 and in "Of the Standard of Taste."

The further element I have in mind is this: according to Hume, our probable reasoning is a matter of *taste*, in the sense that which inferences (or which general rules) we are willing to endorse depends on our appreciative sense of how good the inference is. Thus, Hume says of probable reasoning generally (of which causal reasoning is a part):

'Tis not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy. When I am convinc'd of any principle, 'tis only an idea, which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence. (T 103)

This thought gets echoed in book 3, where Hume says (in the context of a discussion of the reasons we have for fixing property rights):

No questions in philosophy are more difficult, than when a number of causes present themselves for the same phaenomenon, to determine which is the principal and predominant. There seldom is any very precise argument to fix our choice, and men must be contented to be guided by a kind of taste or fancy, arising from analogy, and a comparison of similar instances. (T 504n)

To say that the endorsement of general rules is a matter of taste is not, however, to say that what the individual thinks is right will *ipso facto* be right (even just for her). Rather, although we recognize a "great variety of Taste" (*Essays*, 226), we think that there are such things as good taste and bad taste, and that there are *standards* for deciding whether one person's taste is better than another's. Hence:

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It is natural for us to seek a *Standard of Taste*; a rule, by which the various sentiments of men may be reconciled; at least a decision afforded, confirming one sentiment, and condemning another. (*Essays*, 229)

Indeed, Hume thinks that at least in our *moral* judgements (and also, presumably, in aesthetics and probable reasonings), it would be a “*contradiction*” (Hume’s emphasis) to suppose that there is no way to adjudicate among differing moral appraisals of the same action or character:

’tis impossible we cou’d ever converse together on any reasonable terms, were each of us to consider characters and persons, only as they appear from his peculiar point of view. (T 581)

If our probable reasonings did not allow us to “converse together on reasonable terms,” they would not deserve the title “probable,” for that implies at least a moderate degree of certainty in our conclusions, a certainty which would vanish without “reconciling” various people’s sentiments by such reasonable conversations.

It may seem, however, that this has merely reformulated the problem: the question (raised by the sceptics) of how there can be such things as endorsed (that is, philosophical) general rules just is the question of how there can be such things as standards of taste, for to have such a standard is to have a general rule that is endorsed. But this would be to miss part of the insight in reformulating the problem of how to evaluate one’s judgements in terms of taste. Up to this point, Hume has been searching for sufficient conditions for justifying causal inferences generally. But, seemingly, no type or quantity of empirical evidence, no matter how constant, can be *sufficient* for justifying our causal reasoning unless we have reason to believe that the future will be like the past, and, because we cannot know this unless we are already justified in making causal inferences, the project seems doomed to failure. But once the move to taste is made, Hume relieves himself of the need to specify sufficient conditions for making good causal inferences generally: if the goodness of such inferences is a matter of taste then, just as we cannot and do not expect there to be specifiable sufficient conditions for things in general to be beautiful, we should not expect there to be specifiable sufficient conditions for something to be a good causal inference. The lack of such conditions does not prevent our being able to provide reasons for our aesthetic judgements, to criticize the judgements of others, or to resolve conflicting judgements so as to arrive at a consensus concerning the



aesthetic value of a given work of art; likewise, the appeal to taste and the lack of specifiable sufficient conditions for good causal inferences need not prevent the kind of discussion and criticism essential to doing science. What is required for such discussion and criticism is that we can determine *in each case* what is relevant for evaluating our judgements, and not that we can determine this *in general*, for all cases simultaneously.

Nonetheless, the question still remains as to how there can be such a standard of taste. Hume's answer is that it is only in light of "*steady and general points of view*" (T 581-82) that we can make sense of such a standard of taste and so of the reasonable degree of certainty that the conclusions of our probable reasonings have, for to judge an object properly, that object

must be surveyed in a certain point of view, and cannot be fully relished by persons, whose situation, real or imaginary, is not conformable to that which is required. (*Essays*, 239)

But what is the right point of view, and what makes such a point of view "steady" and "general"?

Consider first the following example Hume uses in book 3 of the *Treatise* of the right sort of point of view to adopt when making or correcting "judgments concerning external bodies":

All objects seem to diminish by their distance: But tho' the appearance of objects to our senses be the original standard, by which we judge of them, yet we do not say, that they actually diminish by the distance; but correcting the appearance by reflexion, arrive at a more constant and establish'd judgment concerning them. (T 603)

Part of the point of this passage is this: when we are trying to judge the relative sizes of objects, it may initially appear to us that a distant object is smaller than a close object; but we sometimes need to correct this appearance because we know by experience that objects do not change their sizes simply because of where they are. Hence, the relevant question to ask in assessing our initial judgement is whether, if the two objects were placed side by side, they would appear to be the same size or not. Not to bring this to bear in reflecting on our initial judgement would be to risk contradicting other judgements we might make later given that, "Our situation, with regard both to persons and things, is in continual fluctuation" (T 581): if we judged now that the closer object is bigger, we would risk contradicting that judgement in that we might later see the same two objects side by side or from a

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perspective in which the other object is closer. The problem, however, is how to determine (as things now stand)<sup>15</sup> how the two objects would appear if they were side by side. Various environmental cues will help us in our decision, such as binocular vision, parallax of motion, and a comparison with other objects of known size in our field of view; but sometimes these cues conflict, and we have to arrive at a judgement weighing the conflicting evidence. What factors must be taken into consideration and how all these factors are to be weighed against each other will vary from case to case, and there is no clear-cut method of arriving at a considered judgement.

The case is analogous to moral and aesthetic cases. One of the things we find to be true of most virtuous characters, Hume claims, is that they "have this tendency to the good of society" (T 578): to say of a character that it in general tends to the good of society is, *ceteris paribus*, to say that it is virtuous, and so the relevant point of view for evaluating such judgements is one from which

we consider the tendency of any passion to the advantage or harm of those, who have any immediate connexion or intercourse with the person possess'd of it. (T 602-3)

Again, not to take this into account in making a judgement of a person's character is to risk contradicting that judgement given the constantly changing relations between oneself and others. For example, although a person from a distant country may initially appear not so virtuous as a "familiar friend" (because one will naturally sympathize more fully with a friend than a foreigner), it may be that the foreigner comes to be a "familiar acquaintance" so that one's judgement of his virtue changes because of one's increased sympathy, without any change in his character or one's (non-evaluative) knowledge of it (T 581). The problem for making a considered judgement in this case lies in determining what characters do or do not tend to the good of society, and it should be clear that there are no set rules for making this determination. A given character may have things to be said both for and against it, and one must weigh this conflicting evidence to arrive at an all-things-considered judgement. As in the previous example, what factors one must take into consideration and how these various factors are to be weighed against each other will vary from case to case. It is a judgement call, and how one makes it in a particular case is, we might say without too much strain, a matter of taste.

Aesthetic cases are similar. In judging the beauty of a work of art, there are various factors—such as the balance and contrast of colours, the symmetry and proportion of figures both in the foreground and background, and the way one's eye is drawn from place to place—one

must take into consideration factors which may vary from case to case. This evidence may conflict, and the way one weighs the pluses and minuses will vary from case to case: quite simply, arriving at such a considered judgement of the quality of the work of art is a matter of exercising one's taste. (I will consider below how this applies to the case of causality.)

Of course, how one arrives at a decision in any of these cases must not be a matter of whim, for otherwise we could not say that such reflection on one's judgements ever results in a *correction* of one's initial judgement rather than simply a *change* in one's judgement. (So far we are not able to talk of the difference between good taste and bad taste.) For this reason, Hume requires that one's considered judgement must be "steady" or "constant" in the sense that later, looking back at the evidence again in light of one's experience with similar cases since, one would arrive at the same judgement for the same reason. But such self-consistency is not enough, for there must also be the possibility of agreement or disagreement with the judgements of others: if people could not reconcile their conflicting judgements, at least in principle, if people were not able to "converse together on any reasonable terms" (T 581), then everyone's certainty in his or her own judgements would erode because, in such a case, we could not make sense of there being any standards for evaluating anyone's judgements, and one belief would be just as good as another.

Hume's claim here is that, in addition to the steadiness of one's own judgements, part of what gives one confidence in the goodness of one's judgements is the "durable admiration" they receive when "examined by posterity or by foreigners" (*Essays*, 233; see also *Essays*, 242-43). As Hume puts it in the *Treatise*, to avoid being influenced by superstition and chimerical systems of thought, we must regulate our judgements in light of principles that "stand the test of the most critical examination" (T 272) and so "bear the examination of the latest posterity" (T 273). Hence,

The best way of ascertaining [the relevant criteria for evaluating a particular case] is to appeal to those models and principles, which have been established by the uniform consent of nations and ages. (*Essays*, 237)

Judgements made for reasons that others, past, present, and future, would acknowledge are for that reason more likely to be correct than those that do not. Of course, the acknowledgment of some people is worth more than that of others, for people vary in their "delicacy of taste," and what is especially relevant is the approval of acknowledged experts. Thus, to reflect in ways that have been established in the past

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and present by the experience of others, especially that of experts, and that will continue to be used by future experts is to adopt a *general* point of view.

In order, therefore, to ... arrive at a more *stable* judgment of things, we fix on some *steady* and *general* points of view; and always, in our thoughts, place ourselves in them, whatever may be our present situation. (T 581-82)

It is only because our judgements of taste are *considered* judgements, judgements that have withstood reflection in light of such a steady and general point of view, that they will be reasonably certain and backed up by good reasons. Such reasons can, of course, never provide absolute certainty, but we should not expect this of moral, aesthetic, or causal judgements.

To recap, my claim so far has been that natural relations are the circumstances in virtue of which two ideas are associated or united in the sense that the mind is naturally disposed to make the transition from the one idea to the other, transferring vivacity in the process; such relations, then, are relations that stand outside of any justificatory relations. Philosophical relations, on the other hand, are the circumstances in virtue of which we can *correctly* make probable inferences from one idea to another. Consequently, there must be (communal) standards for the application of such relations, which *justify* our inferences, and I have sketched what I take to be Hume's understanding of the source of such standards. Hence, it is the natural relation that enables us to make the inference in the first place, and it is the philosophical relation that enables us to justify it.

How, then, does this relate to the two definitions of the relation of causation with which I began? In each case, the relation will be that in virtue of which we make the inference from believing the idea of the cause to believing the idea of the effect, though the natural relation will consider the inference in light of the natural mechanism, and the philosophical relation will consider it in light of what justifies it. Consider first the definition of causation as a natural relation:

'A CAUSE is an object precedent and contiguous to another, and so united with it, that the idea of the one determines the mind to form the idea of the other, and the impression of the one to form a more lively idea of the other'. (T 170)

What is important for this definition is that the mind is so structured that having the idea of the cause will make it have the idea of the effect

and transfer vivacity from the one to the other. The mind is “determined” by habit to make the inference from the cause to the effect, and so when it has the idea of the cause it simply *will* make the inference; this is what Hume means in saying that the two ideas are “united” together by this natural relation. Hume requires that the mind is “determined” rather than merely “disposed” to make this inference because it is the “feeling” of this determination that accounts for the idea of necessity that Hume thinks is essential to the notion of causation, for the idea of necessity is what enables us to speak of the *power* with which the cause produces the effect: “’Tis impossible it could have this effect, if it was not endow’d with a power of production” (T 90; cf. T 77, 87). Hence, something is a cause in the sense of the natural relation just in case the mind is determined in this way, and, from this perspective, no justification of the mind being so determined is necessary or possible.<sup>16</sup>

Consider now causation as a philosophical relation:

We may define a CAUSE to be ‘An object precedent and contiguous to another, and where all the objects resembling the former are plac’d in like relations of precedency and contiguity to those objects, that resemble the latter’. (T 170)

This definition specifies the normative standard for the application of the philosophical relation of causation to two objects: *all* objects, past, present, and future, that resemble the cause must occur in the world prior and contiguous to an object that resembles the effect in order for it to be *correct* to call the one object “cause” and the other “effect.”<sup>17</sup> If this is true, then the inference from belief in the existence of the first object to belief in the existence of the second object will be *justified*. But, of course, we cannot know this to be true or not because our experience cannot extend indefinitely into the past and future, and so this standard is impossible to use in practice, and causal inferences are therefore not demonstrative.

The problem for assessing whether two objects should be called “cause” and “effect,” then, is that of determining as best we can whether they meet the terms of this definition. In the ideal case, we will find one type of object invariably followed by another type of object; but, of course, this is only an ideal, and in the real world there will always be multiple and varying causal influences. The problem is that:

There is no phaenomenon in nature, but what is compounded and modify’d by so many different circumstances, that in order to arrive at the decisive point, we must carefully separate whatever is superfluous, and enquire by new experiments, if

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every particular circumstance of the first experiment was essential to it. These new experiments are liable to a discussion of the same kind; so that the utmost constancy is requir'd to make us persevere in our enquiry, and the utmost sagacity to choose the right way among so many that present themselves. (T 175)

As in the moral and aesthetic cases discussed above, there are many factors that must be taken into consideration, factors that vary from case to case, and just how we weigh and interpret the relevant facts may also vary from case to case. Consequently, we must use what standards we can—the philosophical general rules cited in *Treatise* 1.3.15—to reflect on and justify claims concerning the philosophical relation of causation and so become reasonably certain of the correctness of our (merely probable) causal inferences. As I argued above, Hume makes it clear that he understands such reflection to be a matter of exercising one's taste (cf. T 504n).

The two definitions are different, then, “by their presenting a different view of the same object” (T 170): on the one hand, if we understand this relation as a natural one, then we are viewing it from the perspective of “the influence of this constant conjunction ... upon the mind” (T 170), for it is only because the mind is structured in such a way that it is determined to make the inference from one idea to another as a direct result of its experience of a constant conjunction, that we can account for the notion of necessity and so call the one idea the “cause” and the other the “effect.” From this perspective, there can be no reason for why there is such a causal relation beyond citing the disposition of the mind, and such a reason is not a justificatory one. On the other hand, the philosophical relation presents it from the perspective of an “enlarged view” that encompasses “several instances” of the relation (T 170), for it is only by taking such an enlarged point of view that justificatory reasons can be given for the inference. This difference in perspectives just is the difference between the natural and philosophical relations, as explained above. Nonetheless, the philosophical relation essentially depends on the natural relation, for it is only the natural relation that explains how the mind can in fact make the inference from the cause to the effect (cf. T 90ff.).

Both perspectives are “drawn from objects foreign to the cause”—the foreign object, in the case of the natural relation, being the mind, and, in the case of the philosophical relation, being the resembling objects—and this may provide a sceptic with reasons for “rejecting” the one definition and “substituting” the other in its place. However, such a rejection and substitution will substantially alter our understanding of causation to the extent that something essential to it

becomes incomprehensible given both the difference in the perspectives and the dependence of the philosophical relation on the natural relation. Thus, to reject the natural relation in favour of the philosophical relation (because, say, one thinks causation should be a relation independent of the mind), would for Hume make it mysterious both how we are able to make the inference from cause to effect in the first place given that such reasoning depends on the natural relation and how it is we get the idea of necessity essential to the notion of causation. But to reject the philosophical relation in favour of the natural relation (because, say, one thinks the power in virtue of which the cause produces the effect has nothing to do with other cases of causes producing their effects), would make it impossible to understand what justifies our confidence in the conclusion of the inference.

For Hume, then, a complete understanding of causal *inference* requires being able to specify both why it is we *in fact* make the inference and why it is we *ought* to make it—that is, we must be able to understand it from the perspective of both the natural and the philosophical relation of causality. These two perspectives on causal inference, I have claimed, are essentially interrelated because we cannot make sense of the transitions we make as the result of the natural relation as an inference from one belief to another without being able to evaluate the goodness of that inference or the correctness of the beliefs it involves in terms of the philosophical relation, and because we could not understand, from the perspective of the philosophical relation, why we in fact make the inference unless we understand that inference to be the product of the natural relation. But because, Hume thinks, an understanding of causation itself depends on an understanding of the causal inferences we make, we must give two definitions of causation, one from each perspective on the inference. Neither definition is by itself complete because the two perspectives are essentially interrelated, and so to understand fully the relation of causation requires understanding both definitions in their differences and in their interconnections.

More interesting for us today, however, is Hume's attempt to make out how there can be this difference between the natural and philosophical relations of causation in terms of the notion of taste: Hume tries to model the way we justify our inductive inferences not on deduction but on our aesthetic and moral reasoning, in which we must delicately balance conflicting evidence to arrive at a considered judgement whose truth we can be confident in as it withstands the test and scrutiny of time. Hume does not, then, simply reject inductive inference because it cannot, as he rightly argues, be modelled on deduction, but he has instead provided us with the beginnings of a

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fruitful account of the kind of justification we can expect for our causal inferences.

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1. Robert Fogelin, for example, seems to ignore this distinction completely and focuses almost entirely on the definition Hume gives of causation as a philosophical relation. See Robert J. Fogelin, *Hume's Skepticism in the Treatise of Human Nature* (London, 1985), esp. chap. 4.
2. Terrence Penelhum, *Hume* (New York, 1975), 54.
3. David Hume, *A Treatise of Human Nature*, ed. L. A. Selby-Bigge, 2d ed., rev., ed. P. H. Nidditch (Oxford, 1978), 103 (hereafter cited as "T").
4. Penelhum (above, n. 2), 54, emphasis added.
5. J. A. Robinson, "Hume's Two Definitions of 'Cause'," in *Hume*, ed. V. C. Chappell, *Modern Studies in Philosophy* (Garden City, New York, 1966), 138.
6. Barry Stroud, *Hume* (London, 1977), 89.
7. Hume is not always as clear as one might wish concerning whether he is talking about natural relations or about philosophical relations, and unless one is careful it can seem somewhat of a surprise that he brings this distinction clearly into view in giving his two definitions of causation. Nonetheless, although Hume often does not explicitly say which relation of causation he is talking about at any given point in book 1, part 3, it is usually sufficiently clear from the surrounding context which he has in mind.
8. For the purposes of this paper, it is not necessary to make a clear distinction between ideas and impressions, and I will frequently blur it by simply talking about ideas.
9. This is not, of course, to deny that there are thought moves in which there is a transfer of vivacity, though not enough vivacity to determine belief; my claim is only that such cases will not be cases of *inference*.
10. The mentioned relations among ideas are the *natural* relations, as is clear from Hume's subsequent discussion of resemblance (T 99), contiguity (T 100), and causation (T 101), which were identified in part 1, section 4 as the three natural relations.
11. That he is referring to the natural relations here is clear from the very next paragraph, in which Hume says that he has "reduc'd" these relations "to three general ones," and goes on to name resemblance, contiguity, and causation (T 92-93).



12. David Hume, *Essays, Moral, Political, and Literary*, rev. ed., ed. Eugene F. Miller (Indianapolis, 1985), 171 (hereafter cited as *Essays*).
13. The first three kinds of unphilosophical probability all make essentially the same point (which I think gets made most clearly in the fourth kind), namely that sometimes, given the way our minds are structured and the sorts of transitions they are naturally disposed to make among ideas, there will be cases in which we believe or disbelieve something that, on philosophical reflection, we think we ought not.
14. Just what this endorsement amounts to will be addressed later.
15. Of course, one could simply move the objects or measure them, but because there is no analogue of this in moral, aesthetic, or causal cases, I will ignore it.
16. The precedency and contiguity are included in the definition to make explicit Hume's conviction that the mind can become determined to make this inference only in the course of experiencing (and so becoming accustomed to) many similar sequences of an effect following a contiguous cause.
17. Note, incidentally, that the relation of resemblance here is the *philosophical* relation and not the natural relation: in discussing philosophical relations in *Treatise* 1.1.5, Hume says, "The first is *resemblance*: And this is a relation, without which no philosophical relation can exist" (T 14). As such, what is at issue is whether the objects resemble each other *in the relevant respects*, where there will be standards for determining such relevancy.