

GENERAL RULES AND THE NORMATIVITY OF CAUSAL INFERENCES IN THE FIRST BOOK OF HUME'S *TREATISE*

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Indiana Jones, famous scholar and archaeologist, is walking along a booby-trapped corridor in an ancient temple. When he happens to step on a triangular blue flagstone, a poisoned dart fires from the ceiling, barely missing him. He continues another few paces, and steps on a second triangular blue flagstone; another dart fires, missing his head by only inches. This pattern happens five or six times, until Indiana Jones forms the causal belief, "if I step on a triangular blue flagstone, a dart will fire at me." He avoids the next flagstone, grabs the golden idol, and return safely to America. Later that week, he happens to be walking down the corridor of the small college where he teaches. As he turns the corner, he realizes he is about to plant his foot on a small, triangular blue flagstone. Immediately, the thought occurs to him, "Uh oh, darts!" After a second thought, he steps down on the flagstone, survives, and heads off to his class.

Hume's notorious account of causal inferences, in which "all reasonings are nothing but the effect of custom," claims that we have no reason for making the causal inferences that we do. In this theory, Indiana Jones forms the inference "if I step on a triangular blue flagstone, a dart will fire at me" solely by force of custom: after observing the constant conjunction of flagstone-stepping and dart-firing, custom leads his imagination to associate the impression of the former with the idea of the latter. Once he has developed a sufficient custom, Indiana Jones' imagination automatically jumps to the idea of dart-firing whenever it has the impression of flagstone-stepping.

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This example raises a serious problem for Hume's theory of causal inferences. We do not simply endorse every causal inference that occurs to us. When walking down the college corridor, Indiana Jones is reasoning on something *other* than the custom he has acquired in the Temple of Doom — he chooses not to endorse the inference "if I step on this flagstone, a dart will fire at me." Can Hume still claim that all our reasonings are nothing more than the effect of custom? If all causal inferences are unreasonable, why does Indiana Jones not endorse the belief he formed in the Temple of Doom?

In Section XIII of Part III of the *Treatise*, Hume argues for a naturalistic theory that allows us to make normative judgments about causal inferences. This theory relies on an account of general rules, causal beliefs that generalize over many different experiences of inference-making. While Hume intends for general rules to distinguish between "good" and "bad" causal inferences, his argument often seems confusing and contradictory: general rules figure as both "rash" and "unphilosophical probabilities", as well as guides by which to distinguish our causal judgments from the activity of the imagination. If we approach general rules from an external/objective stance, in which we judge the goodness of causal inferences by some standard external to the agent, we face great difficulty in resolving this contradiction. It is only if we adopt an internal/subjective stance, in which we judge the goodness of causal inferences by the beliefs an agent already has, that we can understand Hume's intended role for general rules. In this interpretation, general rules can both subvert and reinforce the customs which form our beliefs — through an equilibrium process in which we seek consistency among our beliefs/customs, we can distinguish between those inferences which we ought to hold and those we ought not.

The potential problem with his naturalistic account of causality is not lost on Hume. In Section XIII, he describes the possible implications of his naturalistic account of belief, and the role that custom plays in forming belief:

It may, therefore, be concluded, that our judgment and imagination can never be contrary, and that custom cannot operate on the latter faculty after such a manner, as to render it opposite to the former. This difficulty we can remove after no other manner, than by supposing the influence of general rules. (Hume 149)

Though Hume never explicitly provides a definitional distinction between judgment and the imagination, we might ascribe the following view to him: the imagination is the faculty that forms beliefs, and the judgment is the faculty that gives its approval to them. But even if we are to make the distinction along these normative lines, we have to acknowledge that we cannot judge causality by a different *standard* than imagination, since they are both “judgments” and the conclusions of the “imagination” are formed by custom. Hume’s answer to this ostensible paradox lies in the roles that “general rules” play in causal inferences.

Although Hume is vague about the content of general rules, he indicates several ways in which they are used. Hume cites prejudice as a prime example of an “unphilosophical species of probability... derived from *general rules*, which we rashly form to ourselves” (Hume 146). Several pages later, he characterizes them as “rules form’d on the nature of our understanding, and on our experience of its operations in the judgments we form concerning objects” (Hume 149). Hume also provides a functional definition of general rules: in two passages, the first following the previous quotation and the second in Section XV, he claims that they allow us to distinguish between causes and accidental circumstances.

When Hume says that general rules are “form’d on the nature of our understanding, and our experience of its operations,” he implies that general rules are a way of categorizing our experience of inference-making. This idea of generality first appears in Section VIII, where Hume accounts for how we form causal beliefs upon only a single instance of conjunction. Although he does not refer to general rules in this

context, there is a strong similarity between his explanation in Section VIII and his later development of general rules. Hume acknowledges that we often seem to arrive at causal beliefs without the aid of custom, by only observing a single instance of conjunction of two events. Take the example of a baker who has never made a soufflé before, and accidentally leaves it in the oven overnight. In the morning, he returns to find it inedibly burned. Right away, the baker *believes* his soufflé will be ruined if he leaves it overnight again. This poses a challenge for Hume's account of how we form causal beliefs: it is hard to say that custom is responsible for the baker's belief, since this is the first time he has been faced with this particular incident.

Hume replies to this objection by expanding our definition of custom. While we have had only one experience of soufflé-burning and overcooking, "we have many millions [of experiences] to convince us of this principle; *that like objects, plac'd in like circumstances, will always produce like effects*" (Hume 105). Hume does not mean to claim that we have a rational justification for believing that the future will resemble the past. Rather, in keeping with his theory, he argues we come to form a broad habit of expecting the future to resemble the past. We could picture the imagination, in Hume's theory, as a short-order cook in a diner (the customers representing impressions, and the entrées ideas). If Bob asks for a ham-and-swiss sandwich twenty times in a row, the cook will immediately go and make the sandwich the next time she sees him, without waiting for him to ask. After meeting enough students like Bob who routinely ask for the same dish, the cook develops a peculiar manner of dealing with her customers: if Jill only asks once for a hamburger, the next time the cook spots Jill she will immediately run off to make a hamburger. Thus, she has developed through custom the principle that "customers will always want the same dish they've requested in the past," which is analogous to the imagination's principle of "like objects, plac'd in like circumstances, will produce like effects."

Through this example, we can better understand what it might mean to have a general custom. In his account of how we form general rules, Hume relies on "the nature of custom not only to operate with its full force, when objects are presented, that are exactly with those to which we have been accustomed; but also to operate in an inferior degree, when we discover such as are similar" (Hume 147). This suggests that general rules are a kind of broad custom, akin to the one formed by the short-order cook, in which we habitually believe that certain patterns of experience will repeat themselves. Prejudice, therefore, is a general rule — custom leads us to generalize our experience under one broad banner, regardless of what particular experiences might indicate. For example, let us say we have observed that Bob, Fred, and Joe (who all happen to be Cretan) are compulsive liars. Instead of just forming the particular rule that Bob, Fred, and Joe will continue to be liars, our imagination is often makes general rule that all Cretans are liars.

So far, general rules have allowed Hume to explain how we could make the inference, "If I leave a soufflé in the oven, it will get ruined," even if we have only baked cakes — looking back on our experience, we form the general rule that all dough products behave similarly. Still, we have not yet gotten general rules to explain why we consider some inferences good and others bad. To make matters more confusing, Hume's normative stance towards general rules often seems contradictory. He deems prejudice a "rash" form of "unphilosophical speculation," yet argues that general rules aid us in separating causes from accidental circumstances. If all causal inferences are unreasonable, one wants to ask, why does Hume consider prejudice unphilosophical? How are we supposed to simultaneously employ and steer clear of general rules?

First, let us consider why Hume might think general rules are unphilosophical. Intuitively, we think that the general rule "all Cretans are liars" is rash when we have met only three liars who happen to be Cretan. On this view, the unphilosophicality of a general rule is a function of how

much experience we have had. We tend to approach general rules from an external standpoint — we think that the inference, “all Cretans are liars,” fails to meet an objective standard of what constitutes causality. Given more experience, we believe, we should eventually feel secure in our inference. Hume takes a completely different view: our causal inferences, no matter how much experience we have had, are never reasonable. Even if we had met the entire population of Crete except for one person, and discovered them all to be liars, we would still have no reason to expect the last person to be a liar. Therefore, it would be difficult to ascribe an external standard of causality to Hume — we cannot endorse our general rules on the basis of their past empirical evidence.

Before we consider what Hume’s normative stance might be, it is important to examine how we use general rules to modify our beliefs. After accounting for the natural mechanics of how we form general rules, Hume tries to explain how we use general rules to “regulate our judgment.” Returning to the Indiana Jones example, we can see the particular rule of cause and effect that he formed by habit in the Temple of Doom: “If I step on a triangular blue flagstone, a dart will fire at me.” When Indiana Jones is about to step on the flagstone in the corridor, he believes for a moment that a dart will fire at him. But, he has also had countless encounters with triangular blue flagstones in the past, not to mention similar flagstones of different shape and color. From repeated experiences of stepping on flagstones with no ill effect, Indiana Jones has formed the general rule that “In *general*, if I step of a flagstone, nothing bad is going to happen to me.”

Why does Indiana Jones end up acting on the general rule and not the first causal inference? Hume addresses this conflict between a general rule and another causal principle in Section XIII:

But as this frequent conjunction [e.g. of triangular blue flagstones and darts] necessarily makes it have some effect upon the imagination, in spite of the opposite conclusion from general rules, the opposition of these two principles produces a contrariety in

our thoughts, and causes us to ascribe the one inference to our judgment, and the other to our imagination. The general rule is attributed to our judgment; as being more extensive and constant. The exception to the imagination; as being more capricious and uncertain. (Hume 149)

According to Hume, we endorse the general rule on account of its "extensive and constant nature," as opposed to the "capricious and uncertain" qualities of the other causal inference. Therefore, we judge according to the general rule and dismiss the other inference as misleading. It is difficult to develop a consistent reading of these claims — as we saw in the Cretan example, from an external/objective standard, the consistency of our experiences does nothing to change the unreasonableness of our inferences. What can Hume mean, then? If Hume is talking about extensiveness, constancy, capriciousness and uncertainty, he must not be referring to how general rules categorize our past experience.

Before we give up on the external/objective stance on causality, it is worth considering what Hume says to suggest it. When referring to the ways in which general rules modify other beliefs, he claims if we "take a review of this act of mind" when we make inferences, we can "correct this propensity [towards particular rules] by a reflection on the nature of those circumstances," and "learn to distinguish the accidental circumstances from the efficacious causes" (Hume 150, 148, 149). Taking a review, correcting, learning, and reflection all imply an active frame of mind, a process of self-conscious reasoning. It almost suggests that we have reasons for the conclusions we make after reflecting back on past experience through general rules.

Despite this evidence, the external/objective stance seems untenable. A major aspect of Hume's methodology has been to show that what we, as first person observers, take to be reasons, a "scientist of human nature" could account for as simply the work of custom. If we accept his theory of causal inferences, it becomes clear that we can never justify any particular causal inference on an external/objective ground

– it is unreasonable to believe it, but it is our nature to believe it anyway. We might as well replace our usage of “causal belief” with “custom.”

But perhaps we can take a different stance from the external/objective, and regard ourselves from the internal/subjective perspective of minds that already have customs. Given a set of customs which we hold, some recent and others long-standing, when is a new custom good or bad? From this perspective, we can make better sense of Hume’s emphasis on consistency and constancy in making normative judgments. Let us say that we have a set of customs A,B,C...,Y, and suddenly we develop custom Z. Should we endorse it? According to this interpretation of Hume’s passage on p. 149, Z would be a good custom if it does not conflict with customs A through Y. What happens if custom Y conflicts with custom Z? We already know, on the basis of having a set of customs, that custom Y is consistent with customs A through Z. Therefore, based on its consistency and constancy, we should accept custom Y. Custom Z is capricious and uncertain with respect to our other customs; therefore, we attribute it to the mechanical workings of our imagination.

Hume appears to say something to this effect in his description of the conflict between general rules. General rules can allow us to “compare [a new belief/custom] with the more general and authentic operations of the understanding, [and] find it to be of an irregular nature, and destructive of the most established principles of reasonings; which is the cause of our rejecting it” (Hume 150). By the “most established principles of reasonings” we could interpret Hume to mean our most established customs, since as he has argued before, all causal reasonings are the work of custom.

On one level, this might be considered circular reasoning. Why should we have any faith in customs A through Z to begin with? This kind of objection forces us to change stances – in order to hold the internalist/subjective stance, we have to assume that “the curtain rises” with our mind holding certain customs. This does not necessarily imply that we are born with innate customs, only that we must refer our *norma-*

tive judgments about new customs to our old ones. Another objection might be that judging on the basis of prior customs is not normative. Saying that we ought to do something suggests that there is a good reason for doing it: how can a custom provide a reason? This objection can be best answered by example. Let us say that after having spent a semester studying in England, I developed the custom of driving on the left side of the road. As soon as I return to America, my newly-formed custom draws me towards driving on the left. Should I endorse this custom? The answer is no, since it conflicts with my much deeper-held custom of driving on the right in America. This is a normative judgment about what I should do, even though it rests on achieving a consistency of customs.

What happens, one might ask, when a new belief supplants an old one? Why ought we to endorse a new custom over an old established custom? According to the internal/subjective interpretation, we can only replace an old custom if the new one provides greater consistency among the other customs. When the physicist Paul Dirac discovered that one of his equations presupposed the existence of the positron, a sub-atomic particle which had not been experimentally confirmed, he chose to believe his equation over the experimental evidence. Why? For the reason that his custom of trusting mathematical equations was deeper entrenched than his custom of trusting experiments — the positron, if it existed, would provide a much greater consistency among all his other mathematical beliefs than any other accepted theory.

The implication of this view is that even the most unsettling experience cannot upset all your beliefs, since you need some deeply held belief to endorse this new experience. One could argue that even Descartes the rationalist was aware of this, when he refused to commence his descent into skepticism without a few provisional principles. Our reading of Hume's paradoxical idea — that a general belief can only be subverted through recourse to another general principle — can help to explain a particularly cryptic passage from Chapter XIII:

Mean while the 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, 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. (Hume 150)

We can understand this passage in the following way. From what we can gather from Hume's examples, it seems that most of the causal inferences we make in day-to-day experience are general rules, not "pure" causal inferences. For instance, Indiana Jones' inference that triangular blue flagstones in the Temple of Doom were deadly was also a general rule, since we can be fairly sure that those flagstones were not completely identical. Likewise, his inference that most flagstones are safe was a general rule, as was shown earlier. Indiana Jones arrives at his judgment through an equilibrium process, weighing all his beliefs/customs in order to attain maximum consistency. Any new general rule will have some inconsistencies with his other beliefs/customs — in this regard, it is an unphilosophical probability, in that by its general nature it is bound to contradict some very refined customs. But it is also philosophical, in that it provides us with opportunity (as Dirac's equation did) to achieve an even greater level of consistency. The push-and-pull of conflicting general rules leads us from our gross customs towards increasingly refined ones.

Thus, by adopting an internal/subjective standard towards general rules, we can better understand why Hume believes general rules can lead to normative positions. But in what way is it a consequence or boon to skepticism? The above-cited passage shares a similar tone with the final passages of Book I, in which Hume arrives at his "happy-face skepticism." Surprisingly, skepticism provides a solid foundation for normative judgments about causality — this conclusion parallels in opposite direction the one on page 269, where Hume realizes that "in yield[ing] to the current of

nature, in submitting to my sense and understanding... I shew most perfectly my sceptical disposition and principles." This question, whether a skeptical project can create a "science of human nature," rises beyond causality and frames the interpretation of the entire *Treatise*.

WORKS CITED

- Hume, David. *A Treatise of Human Nature*, Ed. L.A. Selby-Bigge, revised by P.H. Nidditch. Oxford: Clarendon Press, 1978.