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## General Rules and the Justification of Probable Belief in Hume's *Treatise*

JACK C. LYONS

By the conclusion of Book I of the *Treatise*, Hume faces something of a dilemma. Because of the skeptical arguments of part 4, he is "ready to reject all belief and reasoning, and can look upon no opinion even as more probable or likely than another" (T 268-9).<sup>1</sup> Yet on the other hand, he clearly does think that some methods of belief-formation are better than others. Five paragraphs after the passage just cited, he proclaims, "I make bold to recommend philosophy, and shall not scruple to give it the preference to superstition of every kind and denomination" (T 271). Although it is difficult to take much of what Hume says in part 4 (and especially section 7) at face value, it is clear that Hume is sincere in his endorsement of philosophy here. Book I, after all, is only the first of the three books of the *Treatise*, and the other two books begin just four (Selby-Bigge) pages after this endorsement. The skeptical arguments examined throughout the *Treatise* seem to indicate that we cannot show that many, if any, of our beliefs have a high probability of being true, and yet Hume wants to maintain a distinction between better and worse methods of belief-formation. On what could such a distinction be founded?

Notoriously, there are several different themes in the *Treatise* that look like they might play some role; at various points in the *Treatise*, Hume mentions the involuntariness of belief, the pleasure derived from philosophy, the love of truth, the distinction between the more and less universal workings of the mind, and so forth. Not surprisingly, there is a good deal of debate among Hume's commentators as to which of these themes is actually at work

in Hume's epistemology.<sup>2</sup> I think that there is a way to resolve many of these disputes by distinguishing among various components of epistemic theories, or stages of epistemological theorizing. I will try to use these distinctions to find a place for several of these different themes in Hume.

Space prohibits a treatment of all of Hume's epistemology. Intuition and demonstration, for example, receive relatively little attention in the *Treatise*, and I will completely ignore them here. Nor will I address Hume's later epistemological views. My concerns here will be restricted to the epistemic principles involved in Hume's theory of probable belief as defended in the *Treatise*.

## I. The Epistemological Framework

It will be helpful to begin by laying out the general framework with which I hope to explicate Hume's view. An "epistemic norm," as I will use the term, is simply a principle licensing a certain method of belief formation or revision.<sup>3</sup> Examples of some epistemic norms might be: "If you (justifiably) believe that *p* and that *p* implies *q*, then, *ceteris paribus*, it is permissible to believe that *q*" and "If your psychic says that *p*, then it is permissible to believe that *p*." Presumably, in this case, the former is a correct norm and the latter is not. Yet this raises an important question: what are the criteria for epistemic norm correctness? That is, what is it that distinguishes the correct from the incorrect norms? Some possible answers to this question would be, "The correct norms are those that when followed produce the greatest ratio of true beliefs," or "The correct norms (for me) are those that are endorsed by my culture." The criterion, if it is to be at all illuminating, should be framed in non-evaluative terms.

We can think of the project of formulating a criterion of norm correctness as an effort to distinguish those epistemic norms of which we approve from those of which we disapprove. Seen in this light, however, it is quite another project to *defend*, in the sense of advocating, the use of norms that have whatever property the criterion specifies as belonging to the "correct" norms. The former project is usually a matter of conceptual analysis, while the latter need not be. Once an analysis of the concept *justification* is offered, an opponent is always free to ask, "But why should I want beliefs that are justified, with 'justification' thus construed?" "In what sense is it *good* (or good for *me*) to reason in that manner?" A criterion for norm correctness is merely intended to provide a non-circular specification of factors that partition the set of norms into two categories.<sup>4</sup> It is quite another matter to indicate

a sense in which the members of the one category are *better* than the members of the other. We do not necessarily discover the source of epistemic value by simply finding a criterion for distinguishing the norms we approve of from the ones we do not.

To see how these parts of an epistemological theory fit together, consider an influential version of reliabilism, due to Alvin Goldman.<sup>5</sup> Goldman sees the epistemic norms as rules permitting certain cognitive state transitions, given certain cognitive states. More specifically, since Goldman holds that the justification of a belief is a matter of the reliability of the psychological process that produced or sustained the belief, the relevant norms will be those that advert to cognitive processes. A correct set of norms is one that produces a sufficiently high ratio of true beliefs, i.e., a set of norms that licenses beliefs that are produced by sufficiently reliable cognitive processes.

Not only does reliabilism tend—waiving a few notoriously persistent exceptions—to get the cases right (i.e., to classify as justified roughly those beliefs that we intuitively thought were justified), but it also has a ready answer to the question of what is good about the norms it counts as good. In *defending* this criterion of norm correctness, the reliabilist might claim that having mostly true beliefs is desirable because it helps us to meet other, pragmatic ends. An agent whose beliefs are mostly true will be one whose actions will generally tend to have the consequences she wanted them to have.<sup>6</sup> So the answer to the question, “Why should I prefer justified to unjustified beliefs, with ‘justification’ thus construed?” is simply, “You’ll get more of what you want.”

One virtue of this sort of theory is that considerations of utility enter only at the level of the defense of the criterion, rather than at the level of the criterion itself. Consider, by way of contrast, a view according to which utility is offered *as a criterion* of norm correctness. For example, one might claim that a belief is justified just in case it brings pleasure. On this simple hedonic view, the relevant norms will have little to say about the processes responsible for the production of the belief, but much to say about the contents of the belief, the epistemic agent’s social position, her goals, etc., since presumably these (rather than the cognitive processes) are the factors that will determine whether a given belief produces pleasure or not.

One immediate problem with this sort of view is that the norms of epistemic justification would cease to be in any important sense *epistemic*. The whole notion of epistemically justified belief would become otiose, for there would be no beliefs that would be epistemically justified but not already desirable for some other reason. A view according to which utility

enters only at the level of the defense of the criterion, on the other hand, would still be able to distinguish the norms of practical rationality from those of epistemic rationality, for even though reasoning in accordance with the proper epistemic norms is claimed to generally increase utility, it is not at all guaranteed to do so in every case.

Furthermore, it is—intuitively—*false* that (epistemically) proper reasoning is guaranteed to increase utility in every case; nor is it true that all beliefs that produce pleasure are epistemically justified. This points to another problem involved with invoking utility at the level of the criterion: it gets the wrong answers, at least intuitively. Although defending such a criterion would be quite easy, it does an extremely poor job of capturing our intuitions about justified belief.

More importantly for the present purposes, it does not seem to capture those beliefs (or belief-forming methods) that Hume wants to recommend. Belief in miracles presumably does bring pleasure to some people, but Hume would not want to claim that it is therefore epistemically rational for those people to believe in miracles.<sup>7</sup> I take it that when Hume “make[s] bold to recommend philosophy” (T 271), he has in mind something more objective and more ambitious than the claim that he himself, given his particular likes and dislikes, is best served by rejecting claims about miracles. He thinks that the rest of us ought—epistemically—to do so as well.

I will argue below that Hume invokes utility only at the level of the defense of the criterion. Hume will thus be able to avoid problems of this sort and will have the resources for criticizing the happy zealot.<sup>8</sup>

To summarize, I see an epistemological theory as having at least the following components: (i) a specification of the epistemic norms, or at least a rough characterization of the nature of these norms (whether they advert to beliefs, or psychological mechanisms, or what have you); (ii) a criterion of norm correctness (a way of partitioning the set of norms into those that will eventually be endorsed and those that will not); and (iii) a defense of this criterion (a specification of what is good about the one set of norms). A few desiderata are already apparent. The specification of the norms will have to be in some sense consonant with the criterion of norm correctness; whether the norms advert to beliefs or psychological mechanisms, for example, will impose some constraints on the candidate criteria (and *vice versa*). The criterion of norm correctness (a) should be cast in non-evaluative terms, (b) should be one that is in some intuitive sense an *epistemic* criterion (otherwise there is no obvious sense in which the resulting theory is an *epistemological* theory), and (c) should capture our ordinary intuitive judgments about which beliefs are justified (in the case of a conservative epistemology) or at least capture

the epistemologist's views about which beliefs are justified (in the case of a more revisionary epistemology).

As it turns out, I think that Hume's epistemology is fairly conservative, in the sense that the beliefs he eventually counts as justified are pretty much in accordance with our ordinary pretheoretical intuitions about justification. What I find distinctive about Hume's epistemology is the way in which he addresses (i)–(iii) above. In rough outline, I will argue that, according to Hume, (i) the epistemic norms are principles licensing the “influence” of a certain class of general rules; (ii) the distinction between the two classes of general rules is founded on “extensiveness and constancy,” in a sense to be explained below; and (iii) what is good about being influenced by the extensive general rules is that such doxastic behavior tends to increase utility.

## II. Epistemic Norms and Two Kinds of General Rules

Hume's first and most explicit general distinction between reasonable and unreasonable belief in the *Treatise* occurs in his discussion of philosophical and unphilosophical probability at I iii 11–13.<sup>9</sup> The context here is Hume's psychological account of belief formation. Some of the psychological principles governing probable belief are “receiv'd by philosophers, and allow'd to be reasonable foundations of belief and opinion” (T 143). Other mechanisms are responsible for unphilosophical probability, in that they produce varying degrees of belief in a way that is “disclaimed by philosophers” (T 143). Hume's distinction between philosophical and unphilosophical probability here is an epistemic distinction, and it is here that we should begin looking for the epistemic norms that Hume will eventually endorse.

Hume's basic account of (philosophical) probability is well known: as the result of experiencing a constant conjunction between *C* and *E*, we eventually, by “slow steps” (T 130), form an association between the two in such a way that the idea of *C* or the experience of *C* alone causes an “enlivening” of the idea of *E*. And since, for Hume, belief just is an enlivening of an idea, the association causes us to form the belief that *E* will occur. The conjunctions need not be entirely constant, however. An imperfect correlation between *C* and *E* will result in an imperfect habit, thus transmitting a lesser degree of vivacity to the idea of *E*. So if *C* is often, but not always, followed by *E* in our experience, our belief that *C* occurred will cause us to believe that *E* will occur, but with a lesser degree of conviction. The strength of the habit is determined by both the frequency and the uniformity of the supporting experiments. “Proofs,” in Hume's terminology (T 124) derive from the strongest possible habits, where a large number of experiments has consistently yielded the same results.

Nor need the experience be of exactly the same objects: suppose we have acquired a habit of expecting *E* to follow from *C*. The occurrence of *C\**, which is similar to but not identical to *C*, will cause us to form an expectation of *E*, or something similar to *E*. The strength of this assurance will be a function of the strength of the original assurance and the similarity between *C* and *C\**. It is in this way that Hume accounts for analogical inference.

Now, Hume is well aware that not all probable belief is the direct result of these sorts of conditioning; sometimes the effect of custom is produced “in an *oblique* and *artificial* manner” (T 104). We are obviously capable of making causal judgments on the basis of a single experience. How does Hume’s associationism accommodate this fact? “Tho’ we are here suppos’d to have had only one experiment of a particular effect, yet we have many millions to convince us of this principle: *that like objects, plac’d in like circumstances, will always produce like effects*; and as this principle has establish’d itself by a sufficient custom, it bestows an evidence and firmness on any opinion, to which it can be apply’d” (T 105). Similarly, when confronted with an imperfect correlation, “we commonly take knowingly into consideration the contrariety of past events; we compare the different sides of the contrariety, and carefully weigh the experiments, which we have on each side: Whence we may conclude, that our reasonings of this kind arise not *directly* from the habit, but in an *oblique* manner” (T 133).

“All these kinds of probability are receiv’d by philosophers, and allow’d to be reasonable foundations of belief and opinion. But there are others, that are deriv’d from the same principles, tho’ they have not had the good fortune to obtain the same sanction” (T 143). It is here that Hume begins his discussion of “unphilosophical probability.” To take one example,

an experiment, that is recent and fresh in the memory, affects us more than one that is in some measure obliterated; and has a superior influence on the judgment. . . . A lively impression produces more assurance than a faint one; because it has more original force to communicate to the related idea. (T 143–4)

An important kind of unphilosophical probability is

deriv’d from *general rules*, which we rashly form to ourselves, and which are the source of what we properly call PREJUDICE. An *Irishman* cannot have wit, and a *Frenchman* cannot have solidity; for which reason, tho’ the conversation of the former in any instance be visibly agreeable, and of the latter very judicious, we have entertain’d

such a prejudice against them, that they must be dunces or fops in spite of sense and reason. Human nature is very subject to errors of this kind. (T 146–7)

Not all general rules, however, lead to error: there is also a second class that includes those “general rules, by which we ought to regulate our judgment concerning causes and effects” (T 149).<sup>10</sup> “The vulgar are commonly guided by the first, and wise men by the second” (T 150). We “ascribe the one inference [the one that is in accordance with the latter sort of general rule] to our judgment, and the other to our imagination” (T 149).

Two important features of general rules are immediately apparent: (1) they are in some sense operative in producing or modifying belief; they are the sort of thing that we can use “to regulate our judgment”; vulgar and wise alike are “guided” by them, and (2) the different kinds of general rules correspond to a distinction between the judgment and the imagination (Hume is here using ‘imagination’ in the narrow, opprobrious sense), between the wise and the vulgar. It should be noted that all that is thus far accomplished by (2) is that Hume distinguishes two kinds of general rules, one kind of which he endorses, the other kind he rejects; this does not yet tell us anything about what the relevant criteria for endorsement are. This shows that general rules have an important epistemological significance for Hume, but just what general rules are and what their relationship to epistemic norms is have yet to be explained.

Hume never tells us exactly what he takes general rules to be, but his account of their origin is illuminating:

Should it be demanded why men form general rules, and allow them to influence their judgment, even contrary to present observation and experience, I shou’d reply, that in my opinion it proceeds from those very same principles, on which all judgments concerning causes and effects depend. . . . [T]is the nature of custom not only to operate with its full force, when objects are presented, that are exactly the same with those to which we have been accustom’d; but also to operate in an inferior degree, when we discover such as are similar. (T 147)

Among the explicit examples he offers of general rules are “An Irishman cannot have wit” (T 146), “the augmenting the numbers of any sum augments the passion” (T 141), and the rules for judging cause and effect, e.g., the cause is always prior to the effect, the cause and the effect must be contiguous



in space and time, the difference in the effects of two resembling objects must proceed from that particular in which they differ. He even “establishes” a few general rules of human psychology, including “wherever the mind constantly and uniformly makes a transition without any reason, it is influenc’d by these relations [of contiguity, resemblance, and causation]” (T 92) and “whatever ideas place the mind in the same disposition or in similar ones, are very apt to be confounded” (T 203).

Hume’s account of the origin of general rules, combined with his examples, indicate that when talking about general rules, he merely has in mind belief-like states with the content of statistical or universal generalizations.<sup>11</sup> I call general rules “belief-like states” for the same reason I think Hume calls them “general *rules*,” as opposed to “general *beliefs*”: his official view is that a belief is an enlivened idea, and an idea is a copy of an impression. Since all impressions are particular, rather than general (each “must necessarily have a determinate quantity and quality” [T 19]), it follows that the term “general belief” would be something of a misnomer, in precisely the way that “general idea” is. Of course, Hume has recourse here to the machinery of I i 7, where he explains how a disposition to call related ideas to mind can make ideas “general in their representation” even though “in themselves individual” (T 20). The details of how this would work for general beliefs are unimportant here, and I will not pursue them; the point is merely to explain why Hume calls them “rules,” rather than “beliefs,” even though, for all intents and purposes, they are beliefs.<sup>12</sup> I will ignore these complications in what follows and simply refer to them as beliefs.<sup>13</sup>

The term “rules” might suggest that general rules simply *are* what I have been calling epistemic norms. However, it is important not to identify the two. One difference between epistemic norms as I see them and general rules as Hume sees them is that the latter are typically not about belief formation. The general rules Hume mentions are generalizations about objects, not about inferences (or at least not always about inferences). The term “rule” is misleading in this respect, for it suggests that general rules are prescriptions of some sort. The examples Hume offers indicate that they are clearly not.<sup>14</sup> Still, Hume thinks that there is a distinction to be made between “good” rules and “bad” rules, the ones that guide the wise and the ones that guide the vulgar. Assuming for now a principled distinction between the two sorts of rules (this will be the topic of the next section), exactly what role do the general rules play? Well, to say that there are some rules we should be “guided” or “influenced” by and some we should not is just to say that there are (correct) epistemic norms recommending (or allowing) the influence of some general rules while forbidding the influence of others. For convenience, I will call

the former general rules the “good” general rules and the latter the “bad” ones; similarly, the “correct” epistemic norms will be those that recommend or allow the influence of the “good” general rules, *mutatis mutandis* for the “incorrect” epistemic norms.<sup>15</sup>

Among the questions this raises is that of what it means to be “influenced” by a general rule. We can say that a general rule influences an agent (better, an agent’s holding a general rule influences that agent) just in case the general rule has an effect on the agent’s behavior—including, but not limited to, her doxastic behavior.<sup>16</sup> For the present purposes we can ignore epistemologically irrelevant instances of influence and say that an agent is influenced by a general rule whenever holding the general rule causes the agent to modify some belief in order to render it more conformable to the general rule.<sup>17</sup>

One important type of influence occurs when a general rule augments the immediate effect of experience. We saw earlier that custom can operate in an “oblique” manner. The immediate effect of experiencing a single conjunction is just the belief that the conjunction obtained. However, the general rule that similar objects produce similar effects can take us beyond the single experience and produce belief in a causal connection.<sup>18</sup> In other cases, general rules, like “all Irishmen lack wit,” can, according to Hume, determine our judgment *despite* the immediate effect of experience. Here we see general rules not merely augmenting, but overriding the more immediate effects of experience.

Throughout the *Treatise*, general rules play the role of correcting, or at least altering, the immediate effects of experience. This explains how the mind, “by a general rule assigns to a thousand guineas, a stronger passion than to nine-hundred and ninety nine” (T 142). The difference between the two passions, before reflection, is small enough to be unnoticeable; it is only after formulating the general rule “that the augmenting the numbers of any sum augments the passion” (T 141) that we are able to say that the one passion is stronger than the other.<sup>19</sup> It is by the influence of general rules that “the understanding corrects the appearances of the senses, and makes us imagine, that an object at twenty foot distance seems even to the eye as large as one of the same dimensions at ten” (T 632). The use of general rules enters into our aesthetic judgments in the same way:

external beauty is determined merely by pleasure; and ’tis evident, a beautiful countenance cannot give so much pleasure, when seen at the distance of twenty paces, as when it is brought nearer us. We say not, however, that it appears to us less beautiful: Because we know

what effect it will have in such a position, and by that reflexion we correct its momentary appearance. (T 582)

And similarly, it is the use of general rules that causes us to esteem someone spatially and temporally distant from us as much as a similar person more nearby, even though the virtues of the latter cause us more pleasure than the virtues of the former (T 582). In these cases, we correct for the immediate effects of experience by relying on the general rule that increasing any distance decreases the pleasure that an object yields.<sup>20</sup>

Perhaps the most epistemologically significant function of general rules is in causal inference, where uncorrected experience would have us latch on to spurious correlations:

We shall afterwards take notice of some general rules by which we ought to regulate our judgment concerning causes and effects [here Hume refers to I iii 15, the section entitled “Rules by which to judge of causes and effects”] . . . . By them 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 conjoined with it. But as this frequent conjunction necessarily makes it have some effect on 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. (T 149)

Although the normal principles of association cause us to latch onto accidental antecedent conditions as possible causal agents, the use of the good general rules can come in to help us “*correct* this propensity” (T 148; emphasis added); even though “all philosophy [is] ready to be *subverted*” by the use of the bad rules, it is “*sav’d* by a new direction of the very same principle” (T 150, emphases added).

Not only can general rules modify particular beliefs; they can also augment or override other general rules. In fact, immediately following the passage just cited from T 149, Hume redescribes the same phenomenon as a contest not between a general rule and a particular belief, but between two

general rules. The first general rule entices us to believe that the correlation between two frequently conjoined things will continue, and the second general rule overrides this influence in the case of spurious correlation.

The more or less immediate effect of experience is often a kind of unphilosophical probability. In all these cases, Hume thinks, it is the influence of (the good) general rules, *and only this*, that allows us to correct our judgment:

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." (T 150; emphasis added)

Exactly how general rules serve their corrective function is not entirely clear; nor is it especially relevant for the present purposes. Sometimes Hume seems to think that we need to consciously consider a general rule in order for it to affect belief: "A like reflexion on *general rules* keeps us from augmenting our belief upon every encrease of the force and vivacity of our ideas" (T 632). "By that reflexion [on the fact that faces that fail to cause pleasure from a distance often do from up close] we correct its momentary appearance" (T 582). Alternatively, however, Hume seems to suggest in I iii 15 that the rules for judging cause and effect would perform their function even if they were never explicitly, consciously entertained:

Here is all the Logic I think proper to employ in my reasoning; and perhaps even this was not very necessary, but might have been supply'd by the natural principles of our understanding. Our scholastic headpieces and logicians shew no such superiority above the vulgar in their reason and ability, as to give us any inclination to imitate them in delivering a long system of rules and precepts to direct our judgment, in philosophy. (T 175)

Sometimes the general rule overrides immediate experience because we consciously reflect on the rule, although perhaps all that is needed for the effect is that we (tacitly) believe the general rule, which is presumably what the vulgar are doing here. I will remain neutral on this aspect of Hume's psychology in what follows.

### III. Hume's Criterion of Norm Correctness

I have tried to clarify somewhat the relationship between epistemic norms and general rules; simply put, the norms recommend or allow the influence of various general rules, and the good norms are the ones that endorse the influence of the good general rules. Thus the question of the criterion for norm correctness becomes the question of the criterion for distinguishing the good from the bad general rules. The two kinds of general rules are "in a manner set in opposition to each other" (T 149); it could hardly be otherwise, since they figure into distinct sets of epistemic norms, which thereby license different inferences. "Sometimes the one, sometimes the other prevails, according to the disposition and character of the person" (T 150). In virtue of what, however, are some general rules "authentic" (T 150), the product of judgment, rather than mere imagination (T 149), the ones by which "wise men" (T 150) reason? Hume's use of such evaluate terms as "authentic," "judgment," and "wise" only indicates that Hume thinks there is a distinction, and apparently an epistemic one; it does not tell us on what the distinction is founded.

What, then, is Hume's criterion for norm correctness? For starters, the distinction between good and bad general rules cannot be founded on the *origins* of these rules, for they have essentially the same origins; all general rules are the result of treating resembling objects similarly. There are several important differences between good general rules and bad ones: the former are "more *extensive* and *constant*" than the latter (T 149, emphases added). "When we take a review of this act of the mind [believing in accordance with the bad general rules], and compare it with the more *general* and authentic operations of the understanding, we find it to be of an *irregular* nature. . . , which is the cause of our rejecting it" (T 150, emphases added). In order to "justify" himself for "blaming the antient philosophers" for making bad inferences, Hume distinguishes

in the imagination [in the broad sense] betwixt those principles which are *permanent*, irresistible, and *universal* . . . [and those] which are *changeable*, weak, and *irregular*. . . . The latter . . . are observ'd only to take place in weak minds, and *being opposite to the other principles* of custom and reasoning, *may easily be subverted* by a due contrast and opposition. *For this reason* the former are received by philosophy, and the latter rejected. (T 225, emphases added)

In addition, beliefs formed on the basis of the good rules are more stable and enduring, less “capricious” (T 149) than beliefs formed on the basis of bad general rules.

In these passages we find Hume emphasizing two distinct families of properties through the use of such terms as “extensive,” “general,” “constant,” and “universal,” on the one hand, and “permanent,” as opposed to “capricious” and “irregular,” on the other hand. I will classify the latter family of properties together under the heading of “stability,” where the stability of a belief is to be understood simply as its propensity to endure. I will argue in the next section that stability enters only into the defense of the criterion, not into the formulation of the criterion. The more important properties at this stage of the epistemological enquiry are in the former category.

Hume’s use of “extensive,” “constant,” “general,” and “universal” in describing the good general rules suggests the following two principles concerning those general rules that ought to influence our belief:

- (1) *The Extensiveness Constraint*: The good general rules are only those that are held on the basis of a large number of experiences.<sup>21</sup>
- (2) *The Constancy Constraint*: The good general rules are only those for which experience has provided few or no apparent exceptions.

I will say that a general rule is *extensive* just in case it satisfies (1) and *constant* just in case it satisfies (2).<sup>22</sup> Together, these seem to be sufficient for a general rule’s being a good one. A general rule is good just in case, and to the extent that, it is both extensive and constant, i.e., it is based on a large range of experience, which has admitted of few apparent exceptions. Consequently, the best general rules will be those associated with proofs in the sense of I iii 11; “that all men must dye” and similar rules “are entirely free from doubt and uncertainty” (T 124),<sup>23</sup> though presumably a general rule can fall short of proof and still count as a good rule. As a first approximation, then, we can state Hume’s criterion of norm correctness as follows: the correct norms are the ones that license beliefs that are compatible with the agent’s extensive and constant general rules.<sup>24</sup>

Obviously, a given general rule can satisfy one of the above constraints without satisfying the other. A generalization from a single novel type of experiment, for example, would satisfy (2) but not (1). The goodness of general rules, however, ought to constitute an ordering (more specifically, a simple ordering, in the sense that any general rule is either better than, worse than, or as good as, any other general rule). It is difficult to be very

precise here, but a plausible suggestion is that the goodness of a general rule be measured as a function of the strength that the associated custom would have in the absence of any influence from education, “surprise and wonder” (EHU 95), and the like—i.e., if only the associative mechanisms of frequency and uniformity, as described at the beginning of section II above, were operative.

Hume clearly thinks that the Extensiveness Constraint is relevant. The rules of I iii 15, e.g., that the cause always precedes the effect, or that the cause and the effect are always spatiotemporally contiguous, are beliefs that we hold on the basis of a vast number of experiences. Not only are these and similar beliefs themselves justified, but their influence tends to result in justified belief. Some of the justification that depends on this influence would be quite mysterious otherwise. In discussing causal inference from a single case, Hume notes that “tho’ we are here suppos’d to have had only one experiment of a particular effect, yet we have had *many millions* to convince us of this principle; *that like objects plac’d in like circumstances, will always produce like effects*; and as this principle has establish’d itself by a sufficient custom, it bestows an evidence and firmness on any opinion to which it can be apply’d” (T 105, first emphasis added).<sup>25</sup> Even where there is only a single observation of the causal relation in question, the resulting belief is not, in fact, *based* on a small sample, since it is based at least partially (and obliquely) on the belief that like objects produce like effects.

Our prejudicial general beliefs about Irishmen, on the other hand, are prejudicial only in that they are based on too few experiences. This is why Hume says that these general rules are “rashly” formed (T 146).<sup>26</sup> Of course, I am using “prejudice” here in the epistemic sense, *qua* species of unphilosophical probability. Not every general belief that derogates a class of people need count as an *epistemic* failing. Hume’s restriction to “what we *properly call* PREJUDICE” (T 146, emphasis added) suggests that he is using the term in the literal sense of pre-judging. To pre-judge, however, is simply to form an opinion prior to investigating a suitably large sample. The very worst instances of pre-judging occur prior to investigating any sample at all, but a belief can be prejudicial even when based on experience, provided that the sample is sufficiently small.

The Extensiveness Constraint, however, cannot provide the whole story. Suppose that after a great deal of experience, I come to believe that most *As* are *Bs*. Now I am confronted with a new *A* that appears not to be a *B*. Should I conclude that the present appearance was misleading, and that the apparent non-*B* really is a *B* after all? It depends, I think, not only on how many experiences support the rule that most *A*’s are *B*’s, but also on the *proportion* of *A*’s that have been found to be *B*’s. (Compare “grass is green” and “humans

are mortal.”)<sup>27</sup> Correcting a recalcitrant experience is far more reasonable when the experience conflicts with an exceptionless rule than when it conflicts with a rule that has admitted of several exceptions already.<sup>28</sup>

One of Hume’s primary epistemological concerns is with proper causal reasoning, in particular, distinguishing spurious correlation from genuine causation. Here the Constancy Constraint is indispensable. The general rule that similar objects produce similar effects will lead us astray precisely because spurious correlations are still correlations, even though imperfect ones. “What we have found once to follow from any object, we conclude will for ever follow from it; and if this maxim be not always built upon as certain, ’tis not for want of a sufficient number of experiments, but because we frequently meet with instances to the contrary” (T 131). This rule differs from the rules of I iii 15 in that the latter are exceptionless (provided, of course, that the rules constitute an adequate theory of causation, a topic I will not address here), and therefore more constant.

Suppose that we have extensive experience of objects of type *C* and objects of type *E* and that our experience has conformed to all eight of Hume’s rules of I iii 15, i.e., experiences of *C*’s are always prior to experiences of *E*’s; a *C* is never experienced unless an *E* is; an *E* is never experienced unless a *C* is, etc. *E*’s will typically also be found to be correlated with some other prior, spurious phenomena of type *S*. In such a case, it is guaranteed that the general rule that *C*’s cause *E*’s will satisfy the Extensiveness Constraint and the Constancy Constraint at least as well as any general rule that *S*’s cause *E*’s. If the correlation between *E*’s and *S*’s is imperfect, then the rule that *C*’s cause *E*’s will satisfy the constraints better (the rule that *S*’s cause *E*’s must either admit of some counterinstances or at least be supported by fewer experiments) and thus count as a better general rule. It is reasonable therefore to allow this general rule to override the less extensive and constant one.<sup>29</sup>

If, on the other hand, we observe a perfect correlation between *E*’s and *S*’s, then the two general rules, “*C*’s cause *E*’s” and “*S*’s cause *E*’s,” will be equally constant, and quite likely, equally extensive. In such a case, however, the intuitive verdict is that we should remain neutral between the two hypotheses. Causal reasoning is difficult, as Hume is well aware (T 175). Failure to observe a *C* prior to an observed *E* does not decrease the constancy of the rule that *C*’s cause *E*’s, but it does not increase the extensiveness of it either. A good controlled experiment is one where a situation is created that will decrease the constancy of one of the competing general rules while increasing the extensiveness of the other. Where we cannot legitimately prefer one causal hypothesis to another, it seems to be in cases where both general rules are roughly equal in extensiveness and constancy. Even here, however, it



might be possible to make some headway by explicitly invoking the rules of I iii 15. These rules, as already mentioned, are exceptionless and based on an extremely large number of experiences.

I have been arguing that Hume's criterion for norm correctness is roughly that the correct norms are the ones that license beliefs that are compatible with the agent's more extensive and constant general rules. Not all beliefs, presumably, need to be influenced by a general rule in order to be justified. But influence from the good general rules is acceptable, and no justified beliefs are held due to influence from the bad general rules.

Although I will proceed below in terms of the criterion just stated (for the sake of simplicity), it is only approximately correct, and despite Hume's rough distinction between the two classes of general rules, he seems to have something more complex in mind. The general rule that similar objects produce similar effects, for example, is clearly a good general rule—otherwise its role in single-experiment causal reasoning could not be maintained—but the more extensive and constant rules of I iii 15 clearly ought to take precedence over it. The following is one possible attempt at a more precise reconstruction of Hume's theory of justification.

- (1) General rule *R* is *prima facie* justified for *S* at *t* iff *R* is extensive and constant.
- (2) Two beliefs *conflict* for *S* at *t* iff *S*'s considering them both at *t* would produce a sense of uneasiness, of "contrast and opposition" (T 225); they are *compatible* otherwise. (Conflict thus embraces more than mere logical inconsistency.)
- (3) General rule *R1* *defeats* *R2* for *S* at *t* iff *R1* and *R2* conflict for *S* at *t* and *R1* has a higher total score on the measure of extensiveness and constancy for *S* at *t* than *R2*.
- (4) General rule *R* is *undefeated* for *S* at *t* iff *R* is *prima facie* justified for *S* at *t*, and *S* does not hold any other general rule that defeats *R* at *t*.
- (5) A particular probable belief, *b*, is *prima facie* justified for *S* at *t* iff either (i) *b* is a perceptual belief, i.e., a lively copy of a present impression, (ii) *b* is a lively memory belief, or (iii) *b* is the result of modifying a particular belief due to the influence of a *prima facie* justified general rule.

(6) *b* is (*ultima facie*) justified for *S* at *t* iff *b* is *prima facie* justified for *S* at *t*, and *S* does not hold any undefeated general rules that conflict with *b* at *t*.

Obviously, the above makes too many commitments concerning what ought to be free parameters of an epistemological theory to receive serious textual support; Hume says little or nothing to support (5), for example, over several possible near variants. However, it seems to have the right basic flavor—most importantly, it illustrates Hume's epistemological concern with defeasibility.<sup>30</sup>

Something like this would explain how the general rule that similar objects produce similar effects is supposed to work in Hume's epistemology of single-experiment causal inference. As an extensive and constant general rule, it can confer a degree of *prima facie* justification on the relevant causal hypothesis; in order to be *ultima facie* justified, however, this hypothesis must also survive potential defeat by the (undefeated) rules of I iii 15. On the other hand, the belief held "in spite of sense and reason" (T 147) that this Frenchman is a fop is not even *prima facie* justified according to the present account, for it results only from the modification of a particular belief by the influence of a general rule that is *not* extensive and constant and therefore not *prima facie* justified.<sup>31</sup>

I have concentrated on causal inference, because this is where Hume's discussion of general rules is most salient. Yet it is certainly not merely with respect to causal inference that Hume sees a distinction between better and worse inference. Although I cannot provide a thorough defense of it here, I want to briefly describe how the role of general rules can be extended to cover other beliefs that concern Hume.

The "fictions" of the ancient philosophers (substance, power, occult qualities, etc.) are "instances, wherein the Peripatetics have shewn that they were guided by every trivial propensity of the imagination" (T 224); here is a species of belief formation that Hume finds blameworthy, yet it is not in any straightforward sense a type of causal inference, at least not the sort covered by the rules of I iii 15.<sup>32</sup> I would suggest that the mistake these philosophers are making is that they are failing to rely on some very extensive and constant general rules. One such rule is that our simple ideas are preceded by the corresponding impressions. The extensiveness and constancy of this "first principle [of the] science of human nature" (in some sense, no rule is more extensive, for this one applies to all of our experience) is what allows Hume to infer that we have no idea of substance and the like. So perhaps what the sloppy metaphysician is doing wrong is ignoring this good general rule.

Every different object appears to [the philosophers] entirely distinct and separate; and they perceive, that 'tis not from a view of the nature and qualities of objects we infer one from another, but only when in several instances we observe them to have been constantly conjoin'd. But these philosophers, instead of drawing a just inference from this observation, and concluding, that we have no idea of power or agency, separate from the mind, and belonging to causes; I say, instead of drawing this conclusion, they frequently search for the qualities in which this agency consists. (T 223)

In addition, the good general rules, by virtue of their greater extensiveness, may be able to account for the difference between the philosophers' and the vulgar's conception of chance:

The vulgar, who take things according to their first appearance, attribute the uncertainty of events to such an uncertainty in the causes, as makes them often fail of their usual influence, tho' they meet with no obstacle nor impediment in their operation. But philosophers *observing*, that *in almost every part of nature* there is contain'd a vast variety of springs and principles, which are hid, by reason of their minuteness or remoteness, find that 'tis at least possible the contrariety of events may not proceed from any contingency in the cause, but from the secret operation of contrary causes. (T 132, emphases added)

The difference here seems to be that the vulgar are relying on particular experiences, while the philosophers are relying on a very extensive and constant general rule. But for the application of such general rules, we would never have any reason to think that the behavior of dice or tossed coins is governed by complex deterministic causal factors, since the only immediately apparent regularities here are statistical regularities, which suggest statistical, rather than deterministic, causal factors. It is only by generalizing and placing coins and dice in a larger reference class that includes objects that behave in determinately predictable ways, that we begin to even suspect that they are subject to the same deterministic forces as everything else. But this just is the application of a more extensive general rule.

The primary virtue of the present interpretation is that it posits a sensible criterion, one that is in a fairly straightforward sense an *epistemic* criterion, and one that seems to capture the cases well. The reasoning of which Hume explicitly approves all involves the influence of extensive and constant general rules, and I have suggested a way in which many of the

beliefs of which Hume disapproves can be interpreted as involving either the influence of general rules that fail to meet the Extensiveness and Constancy Constraints or the failure to take account of relevant extensive and constant general rules.

I think that there are a few reasons for Hume's failure to be more explicit about using extensiveness and constancy as a criterion. One reason is that Hume is not entirely consistent in his effort to distinguish the formulation of the criterion from the defense of the criterion—this, I think, is why his talk about extensiveness and constancy is so frequently bound up with his talk about stability. Another reason is simply that extensiveness and constancy constitute such an uncontroversial, even platitudinous, criterion that Hume might very well not have bothered giving much argument for it. There is nothing objectionable about the claim that we ought, epistemically, to rely on those general rules that are based on a larger and more uniform, rather than a smaller and less consistent, fund of experience. The affinities of this principle to Bernoulli's theorem make it that much less in need of argument as an epistemic principle. What is distinctive and original about Hume's epistemology is not the criterion itself, but the way it fits into Hume's psychological theory concerning general rules and the way it leads to a uniquely Humean defense of philosophical reasoning.

As we saw toward the beginning of this section, Hume rarely mentions extensiveness and constancy without also mentioning stability. These notions are so entwined in his discussions that he seems to have thought there was some strong and significant connection between them. This does not mean that stability is part of the criterion for norm correctness, however. The link between extensiveness and stability, I think, is that the influence of extensiveness and constant general rules tends to produce stability. Stability, on my view, appears only in the *defense* of the criterion, a topic to which we can now turn.

#### IV. The Defense of the Criterion

I have been arguing that Hume distinguishes good from bad general rules (and thereby the correct from incorrect epistemic norms) along the criterion of extensiveness and constancy. Given this distinction between good and bad—philosophical and unphilosophical—reasoning, why should one reason like a philosopher? It is here that I think Hume places his appeal to utility, or pleasure.

Pleasure has two very different roles which it might play here. First, reasoning in a particular manner might carry with it a sort of intrinsic pleasure.

In addition, however, such reasoning clearly also has a certain extrinsic, or instrumental, value. Although Hume mentions the former role in I iv 7, it is only the latter that provides a defense of the Humean criterion; reliance on the good general rules is better because of its instrumental, not its intrinsic, value.

There are many ways in which the influence of good general rules conduces to instrumental utility for Hume, but I want to focus on one in particular, for it is the most interesting in terms of Hume's general psychological framework. I mentioned earlier that being influenced by the more extensive and constant general rules tends to result in belief sets with a greater stability. How does this work? The two most important factors determining the psychological certainty of a general rule are the frequency and the uniformity of the experiences that produce the rule. The more extensive and constant a general rule is, the harder it is going to be to eliminate that belief, everything else being equal. Suppose I form a prejudicial belief on the basis of a few experiences, e.g., that Irishmen lack wit. A handful of clever Irishmen could reduce this belief to nothing, since it is only a handful of dim Irishmen on which the belief was based in the first place. But it would take an incredibly large number of contrary experiences to sufficiently diminish the vivacity of our most extensive general rules, since they are based on so much larger a set of experiences in the first place. Analogous considerations hold for constancy. So the reason why greater extensiveness and constancy tends to produce greater stability is simply that these beliefs are accompanied by more deeply entrenched habits of association. And the link here will obtain whether the extramental world is generally uniform or not. Thus, the greater extensiveness and constancy of the good rules *accounts for* their propensity to produce more stable belief sets.

An important way in which reliance on the good general rules contributes to instrumental utility is by satisfying curiosity.

By the vivacity of the idea we interest the fancy, and produce, tho' in a lesser degree, the same pleasure, which arises from a moderate passion. As the vivacity of the idea gives pleasure so its certainty prevents uneasiness, by fixing one particular idea in the mind, and keeping it from wavering in the choice of its objects. (T 453)

Notice that all that is needed to produce the pleasure here is belief; it is just the enlivening of the idea that produces the feeling of satisfaction. Hume's use of the term "certainty" here must be taken in the psychological sense of confidence or degree of assurance. As such, however, all beliefs are on an

equal footing in the sense that the enlivening of *any* belief would provide pleasure, at least in the short term. This passion, even though it is called “the love of truth” (T 448, 452) is actually insensitive to the truth of the belief in question. Curiosity seeks answers to questions, but any answer will do; it is the enlivening that produces the pleasure, not the truth. A lively falsehood provides more satisfaction (again, at least in the short run) than a faint truth; the passion is perhaps more properly called “the hatred of ignorance.”<sup>33</sup> This passion is not, however, insensitive to stability. Even though any belief will satisfy the uneasiness of having an unanswered question, long term satisfaction requires a belief that will endure. I have just argued that the greater extensiveness and constancy of the good general rules causes them to produce more stable beliefs. This is why the good general rules are in a better position vis-à-vis curiosity than the bad general rules, and this provides a (partial) source of epistemic value for those rules. Why reason like the wise? Part of the answer is that such reasoning produces more stable beliefs and thus provides a more enduring pleasure in the satisfaction of curiosity.

Note that this is an instrumental value possessed the good general rules; there is no evidence of any sort of intrinsic value that differs between the two sorts of rules. This theme is reflected in the Conclusion of Book I: the *immediate* influence of the passions here is to get us to ask philosophical questions, not to tell us how to go about answering them. “Where am I, or what? From what causes do I derive my existence, and to what condition shall I return?” (T 269) “If we are philosophers, it ought only to be upon sceptical principles, and from an inclination, which we feel to the employing ourselves after that manner” (T 270).

I feel my mind all collected within itself, and am naturally *inclin'd* to carry my view into all those subjects, about which I have met with so many disputes in the course of my reading and conversation. I cannot forbear having a curiosity to be acquainted with the principles of moral good and evil, the nature and foundation of government, and the cause of those several passions and inclinations, which actuate and govern me. . . . These sentiments spring up naturally in my present disposition; and shou'd I endeavour to banish them, by attaching myself to any other business or diversion, I *feel* I shou'd be a loser in point of pleasure, and this is the origin of my philosophy. (T 270-1)

There is an intrinsic pleasure associated with the pursuit of philosophical questions. The bulk of Hume's appeal to the sentiments here, to the intrinsic

pleasures on offer, is aimed at showing the value of philosophical *questions*, not philosophical *methods* for answering these questions.

The defense of philosophical methods of belief formation, on the other hand, requires an appeal to instrumental value. Where Hume explicitly compares the vulgar to the wise, or philosophy to superstition, it is these instrumental values (which include, but are not limited to, stability) that take center stage. Since we cannot help but form beliefs, hence following *some* epistemic norms or other,

we ought only to deliberate concerning the choice of our guide, and ought to prefer that which is safest and most agreeable. And in this respect I make bold to recommend philosophy, and shall not scruple to give it the preference to superstition of every kind or denomination. For as superstition arises naturally and easily from the popular opinions of mankind, it seizes more strongly on the mind, and is often able to disturb us in the conduct of our lives and actions. (T 271-2)

And, of course, as Hume has famously noted, “the errors in religion are dangerous: those in philosophy only ridiculous” (T 272).

Although Hume does make offhanded appeals to utility elsewhere (T 225, for example), his most extended discussion of the utility of certain belief-formation procedures occurs in his defense of philosophy in I iv 7. This, as I have been arguing, is a very different project from the one that attempts to specify which rules are good and which are bad. It is one thing to ask how the people we call wise reason, and another question altogether whether and why we ought to reason like them. Hume is offering here a defense of philosophy, i.e., a defense of the philosophical method for answering questions, i.e., a defense of the reliance on the more extensive and constant general rules.<sup>34</sup> This is a recommendation of philosophy over superstition, reasoning like the wise as opposed to the vulgar, reliance on judgment rather than the imagination. The recommendation is based on an appeal to utility, but the recommendation *presupposes a distinction* between philosophy and superstition, the wise and the vulgar, judgment and the imagination. Without an independent specification of these dichotomies, the recommendation would be vacuous. It is not the utility of the belief-forming practices that makes us attribute them to reason or to the imagination, nor the ability to satisfy their own curiosity that distinguishes the philosophers from the vulgar. What distinguishes the philosophers from the vulgar, reason from the imagination, is the reliance on a certain class of general rules. Reliance on extensive

and constant general rules is what makes a belief justified; utility is what makes having justified beliefs desirable.

This is not to say that every justified belief is more utile than any unjustified belief; if this were true there would be little point in distinguishing the formulation of the criterion from the defense of the criterion. A defense of philosophy need not show that epistemic “oughts” are the only “oughts” there are. It need not show that reliance on philosophical methods will give us all that we desire—only that such reliance will give us, overall, more of what we desire than will reliance on unphilosophical methods (or sporadic reliance on philosophical methods). It is far easier to determine—from the inside, as it were—whether some particular belief is justified than to determine what the pragmatic consequences of that belief are going to be. Experience shows that the conditional probability of satisfying our desires given a reliance on philosophical methods is higher than the prior probability of satisfying our desires, and this supports the general rule that we ought to reason in accordance with philosophical method.

It is important to point out that by allocating stability and utility to the level of the defense of the criterion, rather than the formulation of the criterion, we end up with a very different epistemology than we might have. Although beliefs that result from the influence of the good general rules *tend* to be more stable and more utile than those that do not, there is no necessary connection between stability and the extensive and constant general rules. Louis Loeb, for example, reads Hume as claiming roughly that a belief is justified if and only if it results from a cognitive mechanism that tends to produce stable beliefs.<sup>35</sup> The main problem with such a view is that it gets the wrong answer concerning the beliefs that result from education. Hume clearly thinks that beliefs resulting from education are unjustified, even though—perhaps because—they often “take such deep root, that ’tis impossible for us, by all the powers of reason and experience, to eradicate them” (T 116).<sup>36</sup> The best way to obtain stability is to be dogmatic; since this is not the way to obtain justification, justification cannot be identified with stability. The present account avoids this difficulty by denying that stability is part of the criterion for distinguishing justified from unjustified beliefs and locating it instead in the defense of the criterion.

Nor can Hume identify the justification of a belief with the utility of a belief. As mentioned in section 1, belief in miracles makes some people happy. Hume would not want to claim that those people are therefore justified—*epistemically*—in believing in miracles. There is perhaps a sense in which those people ought (*prima facie*) to believe in miracles, but it is not an epistemic sense of “ought.” Such belief would still be the product of imagination, rather



than the understanding. The view I am attributing to Hume resembles a sort of rule-utilitarian epistemology. The difference, however, is that a genuine rule-utilitarian epistemology would formulate the criterion in terms of utility and therefore would claim that a belief is epistemically justified if and only if it results from some belief-forming method (or psychological mechanism) that tends to promote utility. The main problems with such a view are (a) that it is hard to see why it should count as an *epistemological* theory, and (b) that it seems to get the wrong answers.

The view that I have been expounding is, in an important sense, a skeptical view. Although it does admit the possibility of justified beliefs, it divorces questions of justification from questions of truth. There is no assurance that reliance on the more extensive and constant general rules will result in beliefs that are true, or even beliefs that have a high objective probability of being true. However, by claiming that some beliefs are, in fact, justified, it is a moderate, a mitigated, skepticism. We know that Hume considers himself a skeptic (T 273–4) and yet at the same time wants to distance himself from “total scepticism” (T 183). One way to do this is to deny that epistemic justification carries with it any interesting connection to truth, while at the same time, to find *something* valuable about epistemic justification. “We might hope to establish a system or set of opinions, which *if not true (for that, perhaps, is too much to be hop’d for)* might at least be satisfactory to the human mind, and might stand the test of the most critical examination” (T 272, emphasis added).

## V. Summary and Conclusion

I think that we are now in a position to see the grand sweep of the epistemological argument in the *Treatise*. Working backwards, we—or at least some of us (T 272)—have a natural curiosity regarding abstruse or philosophical questions. This imparts an instrumental value on anything that can provide answers to these questions. This is the source of the value, the normativity, in Hume’s epistemology. But not all answers are equally valuable; philosophy and the Catholic Church address many of the same questions but provide different answers, so we need to decide which source of answers we should turn to. We need to “deliberate concerning the choice of our guide” (T 271). The answers that the philosophical method provides are better in the sense of being more permanent, less disruptive of our daily lives, and generally more conducive to happiness. Thus, the philosophical method derives its greater value from being a better means of satisfying curiosity (and keeping it satisfied) as well as meeting other, daily, pragmatic ends.

This explains why we should formulate beliefs in accordance with the philosophical method, but how do we go about doing this? We look for the general rules that are the most extensive and constant and allow them to influence our belief; extensiveness and constancy provide the mark by which we can tell whether we are reasoning like the wise or like the vulgar. So we have specified a source of normativity, i.e., said what is good about good reasoning, and described a method for determining which belief-forming practices are most likely to achieve that good. It follows that the correct epistemic norms are simply the ones that advocate the influence of the general rules that the criterion specifies as good, that is, the more extensive and constant ones.

I began by pointing to a dilemma that Hume faces in the conclusion of Book I of the *Treatise*: on the one hand, Hume's skepticism prevents him from claiming that a certain methodology is more likely to yield the truth, yet he wants to claim that some belief-forming methods are better than others. The solution to this dilemma, I have suggested, is to find some other feature, besides truth-conduciveness, that makes the philosophical methods valuable. Thus, even if we are left with no guarantee that even our justified beliefs are true, or even likely to be true, it does not follow that any belief is as epistemically acceptable as any other. Hume can distinguish between good and bad reasoning, and can do so in a way that at least appears to be consistent with the skeptical arguments for which he is most famous.

## NOTES

I would like to thank the editors and referees of this journal for very helpful comments. Thanks also to David Truncellito and Lorne Falkenstein for comments on much earlier drafts of this paper, and especially to David Owen for comments on several drafts and many illuminating discussions of this material.

1 Page references to Hume's *Treatise* (T) are provided in the text. I quote from *A Treatise of Human Nature*, ed. L. A. Selby-Bigge, 2nd ed., revised by P. H. Nidditch (Oxford: Clarendon Press, 1978). Quotations from *An Enquiry concerning Human Understanding* (EHU) are from *Enquiries concerning Human Understanding and concerning the Principles of Morals*, ed. L. A. Selby-Bigge, 3rd ed., revised by P. H. Nidditch (Oxford: Clarendon Press, 1975).

2 For example, Norman Kemp Smith (*The Philosophy of David Hume* [London: MacMillan, 1941]) and followers have concentrated on the involuntariness of belief; Louis Loeb ("Hume on Stability, Justification, and Unphilosophical Probability," *Journal of the History of Philosophy* 33 [1995]: 101–32) on stability; Fred Wilson ("Hume's

Defence of Causal Inference," *Dialogue* 22 [1983]: 661–94) on the love of truth; Don Garrett (*Cognition and Commitment in Hume's Philosophy* [New York: Oxford University Press, 1997]) and David Owen ("Philosophy and the Good Life: Hume's Defence of Probable Reasoning," *Dialogue* 35 [1996]: 485–503) on utility; and Thomas Hearn ("General Rules' in Hume's *Treatise*," *Journal of the History of Philosophy* 8 [1970]: 405–22), Marie Martin ("The Rational Warrant for Hume's General Rules," *Journal of the History of Philosophy* 31 [1993]: 245–57), and others on Hume's notion of general rules.

3 This is John Pollock's terminology in *Contemporary Theories of Knowledge* (Savage, Md.: Rowman & Littlefield, 1986). Alvin Goldman (*Epistemology and Cognition* [Cambridge: Harvard University Press, 1986]) uses "J-rules" (short for "justificational rules") to denote what I am calling epistemic norms.

4 For ease of exposition, I will largely ignore the fact that justification comes in degrees, and that therefore, so too should the correctness of norms. It turns out that the criterion I ascribe to Hume nicely captures this feature.

5 In *Epistemology and Cognition*.

6 The only place to my knowledge where Goldman explicitly addresses the defense of the reliabilist criterion is in "Epistemic Folkways and Scientific Epistemology," in his *Liaisons* (Cambridge, MA: MIT Press, 1992).

7 This point is related to the previous one. There is a sense in which one ought to engage in wishful thinking (barring undesired long-term consequences, etc.); it is simply not an epistemic sense of "ought."

8 Although the simple hedonic theory sketched above is offered mainly to illustrate the distinction between formulating and defending the criterion, it seems to capture the essence of Garrett's "Title Principle" (in *Cognition and Commitment*), which Garrett gets by taking very seriously Hume's claim that "where reason is lively, and mixes itself with some propensity, it ought to be assented to" (T 270). I doubt that Hume is speaking in earnest here, but rather, indicating the return of the philosophical "good-humour'd disposition" (T 270).

9 The term "philosophical probability" is actually mine, rather than Hume's; he does not label either kind of probable belief until he is done discussing what I am calling "philosophical probability," and then he distinguishes it from what he calls "unphilosophical probability." "Probability" and "probable belief" here are intended as psychological, rather than epistemic, terms.

10 Here Hume refers to his logic of causal reasoning of I iii 15, which includes his eight principles for determining whether two objects are causally related.

11 I think that it is important to offer a clear formulation of what general rules are; this is why I state so baldly that general rules are simply belief-like states with the content of statistical or universal generalizations. Even Marie Martin's "Rational Warrant" and Hearn's "General Rules," though they contain the term "general rules" in the title, never give us a clear statement of what general rules are supposed to be. Neither does Hume, and this is why a clear statement is so sorely needed.

12 One consequence of this feature of Hume's psychology is that he cannot distinguish between a firm conviction that *most C's cause E's* and the weak belief that *all C's cause E's*. A moderate disposition to expect an *E* following a *C*-observation could result either from few experiences of *C-E* correlation or many experiences of *C-E* correlation conjoined with several instances of *C* conjoined with not-*E*. This is why I am allowing general rules to have the content of either statistical or universal generalizations.

13 Some authors, e.g., Martin, "Rational Warrant" and Loeb, "Hume on Stability," suggest that general rules (or at least the good ones) are higher order mental states—roughly, beliefs about our belief-forming processes. Hume does claim at T 149 that the rules for judging causes and effects "are formed on the nature of our understanding, and on our experience of its operations in the judgments we form concerning objects," but the first clause here is extremely unclear, and when he actually lists these rules, it is clear that their content is not about our mental states in any straightforward sense, but rather, about objects. My guess is that the reference at T 149 to reflection on the operations of the understanding is merely a result of Hume's analysis of the idea of causation. The necessity involved in causation is "nothing but that determination of the thought to pass from causes to effects and from effects to causes, according to their experienc'd union" (T 166). If we did not reflect upon the operations of our understanding, we could not have the idea of causation, but it is only in this very attenuated respect that the rules for judging causes and effects are *about* the understanding. This is even more clearly the case for beliefs about Irishmen. Whether the distinction between the two kinds of general rules corresponds to a distinction between first-order and second-order generalizations will be addressed below.

14 A number of people in conversation and one referee from this journal have insisted that general rules really are prescriptions of some sort, and that the modal language Hume uses in formulating the rules indicates some sort of normativity, or at least something more than mere general belief. Why else, I am frequently asked, would he use the term "rule"? It is worth noting that the first time Hume uses the word "rule" in the *Treatise* is in discussing the *rule* that ideas are exact copies of impressions (T 3). In fact, so far as I can tell, all the laws of Humean psychology are called "rules" (see T 92, 203, 346). The term "rule," like our term "law," obviously has certain uses that are devoid of normative connotation. *Some* general rules are about how people ought to behave (e.g., at T 572 Hume seems to be claiming that we generalize from the claim that women in their childbearing years should be chaste to the (more) general rule that women should be chaste), but since not all are, this cannot be what makes something a general rule. Nor could the occurrence of modal operators be a distinguishing feature of general rules, since only some general rules are stated with modal language. Given Hume's views on physical necessity, it is far more likely that such terms as 'must' and "cannot" merely serve to emphasize the exceptionless character of the generalizations. Thus, the prejudicial belief is not that there is something contradictory about a Frenchman having solidity, but rather the belief that Frenchmen never, *ever*, have solidity. Given the etiology of general rules, it is hard to see how they could be anything other than mere generalizations.

15 My use of evaluative terms, like “good” and “bad,” “wise” and “vulgar,” and even the quasi-evaluative “philosophical” and “unphilosophical,” are intended here merely as placeholders. What—if anything—is *good* about the “good” norms will not be addressed until the defense of the criterion. Since the frequent use of scare quotes would become tiring, I will omit them in what follows. Let the reader please understand, however, the weak sense in which I am using such terms.

Loeb, in “Hume on Stability,” has pointed out that Hume tends to distance himself from genuinely normative language in his discussion of philosophical and unphilosophical probabilities: they are “receiv’d by philosophers” or “disclaim’d by philosophers” (T 143). This is an important observation, though I disagree with Loeb’s explanation for this distance. Loeb claims that it is because Hume eventually settles on a kind of skepticism that cannot maintain the distinction. I think it is because—here, at least—Hume is being careful to separate the question of the criterion from that of the defense of the criterion; we do not want to assume, while formulating the criterion, that the one set of norms is genuinely better than the other set, on pain of rendering the defense of the criterion trivial. Hume is not, of course, entirely consistent in maintaining this detached language, which is perhaps why the distinction between formulation and defending a criterion has gone unnoticed by Hume’s commentators.

16 General rules can influence us in a number of ways. My belief that Irishmen lack wit may cause me to *say* that Irishmen lack wit, for example. Though such influence is hardly epistemologically significant, it does illustrate the general notion of influence.

17 I mean the term “modify” here in a very broad sense; modification of a belief should include adoption, rejection, and temporary suspension, as well as changes in content, and so forth.

18 Although (aside from the appended section at T 630–2, which would have been inserted into section I iii 10) Hume does not explicitly mention general rules until I iii 12 (T 141), the notion actually makes its appearance as early as I iii 8, at T 104–5, where Hume discusses causal inference from a single case, since the principle that similar objects produce similar effects is a general rule.

19 There is an interesting ambiguity here. Hume’s talk about “assigning” (T 142) the greater passion to the greater number makes it look as if the role of general rules in this case is limited to our own mental state ascription, that the use of the general rule does not really affect the passion itself, only our judgment concerning the passion. But this would make our knowledge of our own impressions at least sometimes inferential, rather than introspective (at least with respect to their *force*, even if not with respect to their content). If this is right, then, despite remarks to the contrary (T 190), it appears that Hume is committed already in the *Treatise* to a kind of fallibilism concerning our knowledge of our own mental states, a view that is not made explicit until the first *Enquiry* and even then, only with respect to our ideas (EHU 21–2).

20 Hearn, in “General Rules,” recognizes that there are two kinds of general rules but claims that one sort of rule is the result of treating resembling objects similarly,

and that the other kind serves a corrective role. We are now in a position to see what is wrong with this view. First of all, Hume quite explicitly insists that *all* general rules are the result of treating similar objects similarly (T 147). Secondly, all general rules are capable of overriding the immediate effects of experience; this happens both in prejudice and in proper causal reasoning. The difference between the good rules and the bad rules is that only when it is the good rules that are doing the overriding does this overriding count as “correction.” This, of course, is hardly a substantive claim but merely another way of saying that the good rules are good.

21 The Extensiveness Constraint bears some significant similarities to Bernoulli’s Theorem, otherwise known as the (Weak) Law of Large Numbers. Bernoulli’s Theorem claims, roughly, that for certain kinds of sequences, as the sample size increases, so does the probability that the frequency of events found in the sample will match that in the population from which the sample is drawn. Intuitively (though somewhat inaccurately), the more experiences a generalization is based on, the more likely it is to be true—hence the “Law of Large Numbers.” One important difference, however, between this and Hume’s Extensiveness Constraint is that Hume’s constraint concerns only the goodness, or justification—not the truth—of the rules. Hume never says anything about the objective probability of our having true beliefs as a result of relying on the good general rules.

I think that there is a reason for this, and that is that Hume cannot help himself to the standard defenses of Bernoulli’s Theorem. First of all, Bernoulli’s Theorem is a limit theorem, and Hume is distrustful of the sort of mathematics such a proof would involve. (The idea of a limit requires the idea of arbitrary closeness. Hume argues in I ii 1 that none of our ideas are infinitely divisible, and this would preclude us from having an idea of arbitrary closeness.) Secondly, although the Law of Large Numbers seems true, it just is the claim that, under certain conditions, those instances that we have not experienced will (probably) resemble those that we have experienced. As such, however, it is simply a special case of the Uniformity Principle, the claim that the future will resemble the past. Hume, of course, is famously aware of the circularity involved in any attempt to provide an inductive argument for this claim. Bernoulli’s Theorem is something that we believe, and it is important that we believe it, but it is not something for which we could provide an adequate *a priori* or *a posteriori* argument. To defend his Extensiveness Constraint, Hume will have to appeal to something other than the truth of the resulting beliefs. This will be addressed in the next section.

22 Hume occasionally uses the term “constant” in other senses, including one that suggests stability, but more often, the term is used to signify uniformity in the sample.

23 Hume uses terms like “doubt” and “uncertainty” sometimes in the psychological sense, and sometimes in the epistemic sense. In this particular context, he seems to mean both.

24 Again, I am ignoring the fact that justification comes in degrees. One virtue of the present criterion, however, is that it seems to capture this fact (though it does not enter into the first approximation just offered), since the goodness of general rules also comes in degrees. Note that this is not a virtue that can be claimed for the second-order generalization view mentioned above in note 13. If the difference between the

good rules and the bad rules is that the former are second-order generalizations, while the latter are first-order generalizations, then the distinction between the good and the bad rules will be a difference in kind, not in degree.

25 This context (Hume is discussing the psychological mechanisms that make it possible to infer causation from a single case) indicates that Hume's use of "evidence" here intended in the psychological, rather than the epistemological sense. Nonetheless, it is equally clear that Hume thinks that such inferences are *reasonable*, at least *prima facie*. The principle just cited, however, is *not* one of the rules of I iii 15, and we will see why shortly.

26 Loeb, in "Hume on Stability," denies that "rash" here could be a matter of being based on a small sample, since Hume allows justified causal inference from a single observation. However, I have just explained how, where such causal inferences are justified, they are not in fact based on a small sample.

27 Whether a general rule should override a particular perceptual belief should depend not only on the character of the general rule, but also on the degree of justification of the perceptual belief. Hume does not address this complication, so I will largely ignore it in what follows.

28 Although I am restricting my attention to the *Treatise*, it is worth pointing out that this sort of view is quite clearly expressed in EHU, in the section on miracles, which Hume had originally intended to include in the *Treatise*.

29 In saying that a given general rule is less extensive and constant than another, I do not mean to imply that it is both less extensive and less constant; rather, I mean that it has a lower total score of extensiveness and constancy in roughly the way that was suggested earlier.

30 Though Hume is presumably a foundationalist (some beliefs are basic, in the sense that they do not require inferential support from other beliefs for their *prima facie* justification), his is a sophisticated enough foundationalism that it does require coherence with the rest of an agent's (justified) beliefs to move from *prima facie* to *ultima facie* justification, as the most sophisticated contemporary versions of foundationalism do. Though coherence is not sufficient for justification, it is necessary, and Hume seems to be the first to have really taken this seriously.

31 The Constancy Constraint was spelled out in terms of *apparent* exceptions not so much because of anything that Hume says, but because it seems right. Even if I can explain away a number of apparent exceptions to some rule, the fact that there were apparent exceptions ought to (and presumably, according to Hume's psychology, will) decrease my confidence in the rule.

This restriction will also provide an escape route from the sorts of biases that are likely to occur in small samples. Suppose that the first ten Frenchmen I meet really do lack solidity. Even though the eleventh doesn't, I may be to some extent justified in treating him as a merely apparent exception to the rule (though only to some extent, since the rule in question is not very extensive). His apparent solidity, however, will weaken the constancy and hence the epistemic strength of the general rule, and further apparent exceptions will weaken it more. Even if I persist in

explaining away all the new apparent exceptions, the resulting beliefs become more and more unjustified, due to the decreasing constancy of the general rule. Such an approach is relevant not only to prejudice but could perhaps be extended to explain what is epistemically wrong with the introduction of *ad hoc* auxiliary hypotheses introduced to save some favored scientific theory from refutation. Even though the phenomena are saved, the laws decrease in constancy.

32 My language here is unavoidably infelicitous. It may be incoherent, on Hume's theory, to talk about *belief* in occult qualities or substance, given that, subject to certain qualifications, we have no ideas of these. This is a subtlety that I think leaves the main point intact. There is *something* that the scholastic metaphysicians are doing wrong, and it's something that is *epistemically* wrong. For want of a better term, I will call it "belief," in substance, occult qualities, or what have you.

33 Fred Wilson, "Hume's Defence of Causal Inference," appeals to curiosity as the source of value for good inference. I think that what I have just said here shows why this will not work; curiosity (alone) does not allow for a distinction between philosophical and vulgar methods of producing answers. This argument parallels one that Wilson offers against viewing involuntariness as the source of epistemic value.

34 Of course, Hume's defense of philosophy must be read not as recommending that we reason the way philosophers actually, or even typically, reason, but that we reason in accordance with the epistemic principles that philosophers have traditionally endorsed. Philosophers do not have a monopoly on proper reasoning (see for example, T 272), nor do they always reason properly; rules of reasoning are presumably like the rules for judging causes and effects in being "very easy in their invention, but extremely difficult in their application" (T 175).

35 This is most explicit in "Stability, Justification, and Hume's Propensity to Ascribe Identity to Related Objects" (*Philosophical Topics* 19 [1991]: 237–70), where he claims, "[a]s a first approximation, a belief is justified just in case it results from a belief-forming mechanism that tends to produce stable sets of doxastic states" (238). His later writings are more tentative: "Hume takes claims about justification to turn on claims about instability in belief" ("Instability and Uneasiness in Hume's Theories of Belief and Justification," *British Journal for the History of Philosophy* 3 [1995]: 301–27; the quoted words appear on 320). Loeb's view is sophisticated enough that space prohibits dealing with it in detail, but the discussion in "Instability and Uneasiness," on 324, makes it clear that Loeb reads Hume as endorsing those belief-forming mechanisms that result in "reluctant or obstinate" beliefs.

36 There is perhaps a sense in which education could be said to produce unstable belief sets, since the beliefs it produces are "frequently contrary . . . even to themselves in different times and places" (T 117). This unusual sense of stability, however, is not the one that Loeb has in mind (certainly not in "Instability and Uneasiness"); such "instability" would not be a psychological property of a single individual, and hence would not be a motivating factor for that individual's doxastic practices.