

comment on Kevin Meeker's
"Was Hume Mathematically Challenged?"

Meeker argues that in order to understand Hume's "Of scepticism with regard to reason" we need to realize that he is using a Baconian model of probability rather than a Bayesian, or more generally Pascalian, one.¹ Read properly, Hume is not the blunderer concerning probability that many of his critics harshly portray. I can't find anything Meeker says to disagree with. It seemed initially to me that, building on foundations laid by L. J. Cohen, Dorothy Coleman, and Barry Gower among others, he puts the point past doubt. However, Hume has taught us to be more modest in our convictions. Therefore, on the assumption that there is still room for doubt, I will try to strengthen Meeker's point with some additional considerations. I will summarize some differences between the two models of probability, and show why only the Baconian one is consistent with Hume's Pyrrhonian approach to assent.

Elsewhere I have argued that the best way to reconcile Hume's skepticism with his constructive theorizing, is to read him as following Sextus (as interpreted by Michael Frede) in recognizing two kinds of assent.² There is the ideal, normatively governed assent, which I have called active endorsement of a view as true based on good reasons. And there is the natural, causally governed assent, which I have called passive acquiescence in a view forced upon one by appearances. Hume tries to show that the former kind, beloved of his opponents and of most of us,

¹ Book 1, Part 4, Section 1 of David Hume, *A Treatise of Human Nature*, ed. David Fate Norton and Mary J. Norton (Oxford: Clarendon Press, 2007), cited by (T Book.Part.Section.Paragraph).

² Sextus Empiricus, *Outlines of Scepticism* (Cambridge: Cambridge University Press, 2000); Michael Frede, "The Skeptic's Two Kinds of Assent and the Question of the Possibility of Knowledge," in *Essays in Ancient Philosophy* (Minneapolis: University of Minnesota Press, 1987), pp. 201-22; Donald L. M. Baxter, *Hume's Difficulty: Time and Identity in the Treatise* (London and New York: Routledge, 2008), Chap. 1.

is never actually granted. He tries to show that an ideal reasoner ought to, and therefore will, end up suspending all assent (including dissent) whatsoever. He then argues that the reason we don't actually suspend assent when faced with skeptical arguments that "admit of no answer" (EHU 12.15 note 32)³ is that, for actual reasoners, assent is passive acquiescence governed not by normative considerations, but by causal principles. The section Meeker focusses on, "Scepticism with regard to reason," is a prime example of Hume's two part argument.

Hume thinks that both kinds of assent come in degrees. The relevant difference here is that complete suspension of all active endorsement--the state the Pyrrhonians claim to have found themselves in after enquiry--is possible.⁴ On the other hand complete suspension of passive acquiescence is not usually possible except during a short time of philosophical bedazzlement or else when one is unconscious.

A Pascalian approach to probability, even a subjectivist one that takes probabilities as degrees of belief, cannot capture this aspect of Hume's position on active endorsement. The Pascalian assumes without argument that, rather than being the result of the most careful reasoning, the Pyrrhonian position is simply irrational.⁵ The problem is the classical laws of probability, with which the Pascalian approach begins. These laws are incompatible with the complete suspense of assent qua active endorsement.

Since we are concerned with the probability of members of a class of sentences, let's formulate the laws accordingly:

- (1) The probability of any sentence is greater than or equal to 0.

³ David Hume, *An Enquiry concerning Human Understanding*, ed. Tom L. Beauchamp (Oxford: Clarendon Press, 2000), cited by (EHU Section.Paragraph).

⁴ I'm grateful to Lionel Shapiro for making me aware that I was taking this point for granted without emphasizing it.

⁵ "Any procedure that proportions degree of belief in violation of the probability axioms . . . is irrational." John Earman, *Hume's Abject Failure* (New York, Oxford University Press, 2000), p. 30.

(2) If a sentence is a truth of classical logic then its probability is equal to 1.

(3) For logically incompatible sentences, the probability of their disjunction is equal to the sum of their probabilities.⁶

Since the disjunction of a sentence and its negation is a truth of classical logic, it has a probability of 1, by law (2). It follows from that and law (3) that the probability of the negation of a sentence is equal to 1 minus the probability of the sentence.

The Baconian approach of Hume, as I read him, denies the conjunction of these laws. Consider law (1). Remember that one of Hume's overriding themes is, "A wise man . . . proportions his belief to the evidence" (EHU 10.4). Hume's concern with probability is concern with arriving at the appropriate degree of belief. Since the subjectivist Pascalian theorists have absconded with the term 'degree of belief,' however, let me say that Hume is concerned with the appropriate *degree of assent*. The differences between them will become clear as I contrast the two approaches to probability. In any event, it is natural, when thinking of degrees of assent, to consider the whole range from full dissent to full assent. As Meeker says, for Hume the probability of a sentence is equal to 0 when the evidence is equally weighty for and against it. Therefore it is natural to represent full assent with a positive number, say 1, and full dissent with a negative number, say -1. Therefore Hume would deny the first law.

One might point out that it is all one whether we put the middle point of the range of dissent at 0, as Hume is wont to do, or at .5, as is familiar from the Pascalian approach, so Hume need not dissent from law (1). But there are two problems with this rejoinder. First, the Pascalian scale of 0 to 1 with .5 in the middle does not as perspicuously represent the fact that assent tends in one direction, dissent in an opposite direction, and suspense of judgment in neither direction. The scale I have proposed for Hume, does. The second problem first requires an examination of the other laws.

⁶ My source is Alan Hajek in the Stanford Encyclopedia of Philosophy, s.v. "Interpretations of Probability," <http://plato.stanford.edu/entries/probability-interpret/>

Consider law (2). Hume is clear that “all knowledge resolves itself into probability,” which was his way of saying that the appropriate degree of assent is less than entire for every sentence, even logical truths (T 1.4.1.4). Since our conviction concerning every truth depends on a fallible process of confirmation--a process whose strengths and weaknesses are supported by past experience--our conviction should never be entire. Our degree of assent should not be the highest on the scale. So, no sentence should have the highest possible probability, not even truths of classical logic.

Now, granted, the laws above do not explicitly say that 1 is the highest probability, but that is how they have been applied. In any event, the difference is actually starker. Since the Pyrrhonian finds that reasoning in the most careful manner leads to suspending all assent qua active endorsement, the Pyrrhonian will neither assent to nor dissent from even laws of classical logic.

Now add in law (3). The conjunction of (2) and (3) precludes the situation of Pyrrhonian skeptics. The Pyrrhonian finds himself suspending assent as active endorsement concerning all things. When the Pyrrhonian finds equally compelling considerations for a sentence and for its negation, he finds himself suspended between them, with no degree of assent nor of dissent for either. A degree of assent equal to 0 for both is a good way of representing this situation. But notice that the sum of the degrees of assent for the sentence and its negation would likewise be 0. The conjunction of laws (2) and (3) would have it be 1. After all the disjunction of a sentence and its negation is a truth of classical logic. But the Pyrrhonian suspends active assent even for truths of classical logic.

The only way to get a degree of assent plus the same degree of assent to add up to the same degree of assent is to let it equal 0. That is the second problem with pegging suspense of judgment at .5.

The classical laws of probability, read as laws of the degree of assent to sentences, are incompatible with complete suspension of assent qua active endorsement. Since Hume’s goal is to show that complete suspension would be the obligation and the fate of an idealized assenter, an interpretation of Hume relying on the classical laws of probability is going to get him wrong.

I don't claim to have shown that the Pyrrhonian is right. I just claim to be showing that a theory about proportioning assent that rules out of court the skeptic's sophisticated approach to assent, is not automatically the right one. A Baconian model is more accommodating than the Pascalian to Pyrrhonism's important approach to assent, and that is a mark in its favor.

Which brings me back to my intent to give additional support to Meeker's thesis. At least with regard to the sort of assent I have called "active endorsement of a view as true," Hume thinks the appropriate response is suspension, for every sentence. That is the point of "Of scepticism with regard to reason." Interpreting him with a Pascalian model of probability will preclude understanding him. So Meeker is right to urge us to use a Baconian one, instead.