

## **Scepticism with regard to Reason\***

David Owen, University of Arizona

### **Section One: Introduction**

Until recently, philosophical scholarship has not been kind to Hume's arguments in "Of scepticism with regard to reason" (*A Treatise of Human Nature*, 1.4.1).<sup>1</sup> Reid gives the negative arguments a pretty rough ride, though in the end he agrees with Hume's conclusion that reason cannot be defended by reason.<sup>2</sup> Stove's comment that the argument is "not merely defective, but one of the worst arguments ever to impose itself on a man of genius" (Stove 1973), while extreme, is not untypical. Many important books on Hume (e.g. Stroud 1977) simply ignore it, though this may be because it is difficult to find any trace of the arguments in the *Enquiry Concerning the Human Understanding*.<sup>3</sup> Furthermore, when attention was paid to the arguments, it was devoted mainly to the second of the two negative arguments Hume puts forward, and that argument was held to contain an elementary mistake concerning beliefs about beliefs (McNabb 1951).

Fogelin's important work on Hume's scepticism shows the role that "Of scepticism with regard to reason" must play in any assessment of Hume's scepticism, but he is hardly friendly to the arguments of 1.4.1 themselves.<sup>4</sup> A more sympathetic account of Hume's argument was presented in Morris's important 1989 article. Morris argued that the issue concerned the level of confidence we have in our beliefs, and furthermore, that the negative arguments were directed, not at reason in general, but at a certain "formalist" conception of reason, a conception that Hume replaced with his own. Annette Baier (1991) followed Morris concerning this latter point. Owen (1994), while agreeing with Morris' sympathetic rendering of the arguments, argued that its target was not limited, but quite general. Fogelin (1993, following his 1985 and 1983) also argued that Hume's target was quite general, and concluded that Hume never entirely rejected the sceptical consequences of the negative arguments.

Although the sceptical arguments are generally held to show that beliefs based on reason are unjustified, Garrett (1997) and Owen (1999) argued that the negative arguments were not meant to show that such beliefs were in danger of being unjustified, but rather that they were in danger of ceasing to remain beliefs at all. One of their arguments hinged on treating Hume's use of "evidence" to mean, not epistemological evidence, but "evidentness". This interpretation has been challenged by Kevin Meeker (2000).

In Section 2, I will briefly outline the arguments of 1.4.1, consider their origins and investigate whether and to what extent they survive in Hume's later works. In Section 3, I will outline and assess some severe difficulties that Hume's arguments appear to face. In dealing with these difficulties, it will emerge that Hume is more concerned with the retention of beliefs in the face of sceptical arguments than with their justification. In Section 4, I will argue that Hume attached great importance to the arguments of 1.4.1. I will further argue that assessing Hume's negative arguments in this section should be done in the context of his positive arguments. As these arguments explain how we manage to retain beliefs in the face of sceptical arguments, it seems charitable to interpret his negative arguments as attempts to show that our beliefs based on reason threaten to cease to be beliefs at all. This will be discussed in the context of Hume's account of belief or assent as the more forceful and vivacious conception of an idea. In general, I will argue that the negative sceptical arguments are to be interpreted, not as showing that our beliefs lack justification, but as showing that the faculty of reason, considered as functioning alone, undermines itself. But I will also argue that this not a "merely psychological", non-sceptical thesis. It has significant epistemological import: reason cannot be defended just by reason. The workings of reason can be understood only by appeal to apparently trivial properties of the imagination.

## **Section Two: The Arguments**

### **a) Outline of the Negative Arguments**

Hume describes the result of the first negative argument, in 1.4.1, as "all knowledge degenerates into probability" (T 180, 1.4.1.1)<sup>5</sup> or "all knowledge resolves itself into probability" (T 181, 1.4.1.4). The point is one about certainty and fallibility: although knowledge due to demonstration is certain, Hume's first argument purports to show that, as we are prone to error, we must make a probability judgment about whether we have performed any given demonstration correctly. Consider the very first sentence of this section: "In all demonstrative sciences the rules are certain and infallible; but when we apply them, our fallible and uncertain faculties are very apt to depart from them, and fall into error." (T 180, 1.4.1.1) Even if the rules of demonstration are "certain and infallible", we cannot be sure that the faculty of reason has functioned properly in any particular instance of demonstration. Reason "is a kind of cause, of which truth is the natural effect." (T 180, 1.4.1.1) But this effect is sometimes prevented from occurring "by the irruption of other causes, and by the inconstancy of our mental powers" (T 180, 1.4.1.1). Demonstration produces a claim to knowledge, something which we take to be true with full conviction. But consideration of our fallible natures produces "a new judgment, as a check or controul on our first judgment" (T 180, 1.4.1.1). This new judgment is only probable.

Hume argues that it is this probable judgment that we rely on, not the original knowledge claim produced by the demonstration. This claim is a statement of fact, not a recommendation. Otherwise, he argues, why would a mathematician “run over his proofs” and seek “the approbation of his friends” (T 180, 1.4.1.2)? Why else would a merchant, not only seek an “accomptant”, but require the “accomptant” to keep records, i.e., to create an “artificial structure of the accompts” (T 181, 1.4.1.2)? The point is that our fallible faculties require a check to see that they are functioning properly. If they are not functioning properly, they will not produce truths. Such a check results in a belief which supplants the original knowledge claim, and hence the conviction is lowered from the certainty of demonstration to the lesser assent of high probability. It is rather like using an electronic calculator to perform a feat of long division: we believe the result because we believe that the engineers and production lines have designed and produced an accurate calculator. This is belief, not knowledge.

Hume goes on to argue that similar considerations concerning our fallibility apply to any probability judgment, including the probability judgment we may make about the result of a piece of demonstrative reasoning. “In every judgment, which we can form concerning probability, as well as concerning knowledge, we ought always to correct the first judgment, deriv’d from the nature of the object, by another judgment, deriv’d from the nature of the understanding.” (T 181-82, 1.4.1.5) The point is not just that every probability judgment is less than completely certain (doubt “deriv’d from the nature of the object”), but that further uncertainty, concerning that probability judgment, is increased by reflection on our fallibility (doubt “deriv’d from the nature of the understanding.”) This new judgment is itself susceptible to reflection, and “we are obligi’d by our reason to add a new doubt deriv’d from the possibility of error in the estimation we make of the truth and fidelity of our faculties.” (T 182, 1.4.1.6) But this judgment, even if it

be favourable to our preceding judgment, being founded only on probability, must weaken still further our first evidence, and must itself be weaken’d by a fourth doubt of the same kind, and so on *in infinitum*; till at last there remain nothing of the original probability, however great we may suppose it to have been, and however small the diminution by every new uncertainty... Let our first belief be never so strong, it must infallibly perish by passing thro' so many new examinations, of which each diminishes somewhat of its force and vigour. (T 183-2, 1.4.1.6)

### **b)Outline of the Positive Argument**

The goal of both negative arguments is the reduction of the confidence or assurance we place in

knowledge or belief claims.<sup>6</sup> If one accepted the results of these arguments, one would “be really one of those sceptics, who hold that all is uncertain, and that our judgment is not in *any* thing possest of *any* measures of truth and falshood” (T 183, 1.4.1.7).<sup>7</sup> Hume’s reaction to these arguments is neither to accept their results nor to find any fault in the arguments themselves.

Both points are made in the following passage:

But as experience will sufficiently convince anyone, who thinks it worth while to try, that tho’ he can find no error in the foregoing arguments, yet he still continues to believe, and think, and reason as usual (T 184, 1.4.1.8).

It is of course a question of some importance why and how we continue to reason, and believe on the basis of reason, in spite of these arguments. Hume gives an outline of his explanation in the remainder of the very same sentence:

he may safely conclude, that his reasoning and belief is some sensation or peculiar manner of conception, which ‘tis impossible for mere ideas and reflections to destroy.

Hume is saying that some feature of his account of reasoning and belief explains how we manage to continue to put our faith in reason, in spite of these good sceptical arguments. More strongly, Hume says that whole point of his putting forward the sceptical arguments was to emphasize this feature of his account of reasoning and belief:

My intention then in displaying so carefully the arguments of that fantastic sect, is only to make the reader sensible of the truth of my hypothesis, *that all our reasonings concerning causes and effects are deriv’d from nothing but custom; and that belief is more properly an act of the sensitive, than of the cogitative part of our natures.* (T 183, 1.4.1.8)

Hume’s response to the negative arguments is not to find some flaw in the arguments, but to accept the arguments and nonetheless explain why we continue to reason and believe.

Furthermore, he claims that his motivation for putting these arguments forward was to show that his own account of reason and belief was uniquely able to deal with them. These are complex matters, to which we will return in Section 4.

### **c) Antecedents of the negative arguments**

Whether and to what extent Hume’s negative arguments have antecedents is a question of some interest, and not much discussed.<sup>8</sup> Hume’s reference to the sceptics is clearly a reference to the sceptical tradition of ancient times, rediscovered in the 16<sup>th</sup> and 17<sup>th</sup> centuries, and transformed beyond all recognition by Descartes.<sup>9</sup> I know of no clear, unequivocal antecedents to either of Hume’s negative arguments, but there are some suggestive similarities. In the *Principles*, Descartes says “Our doubt will also apply to other matters which we previously regarded as most certain - even the demonstrations of mathematics... One reason for this is that we have

sometimes seen people make mistakes in such matters and accept as certain... things which seemed false to us.”<sup>10</sup> The argument is similar to Hume’s first negative argument: since we are fallible, and make mistakes, we can’t accept as certain even the results of demonstrations. An awareness of the unreliability of the faculty of reason causes us to treat the conclusions of reason with less than full certainty.

It might seem that Hume’s argument is different from Descartes’s in the following way. Descartes thought that error in others, and in our past selves, gave us reason to wonder whether we might be making a mistake in demonstrative reasoning, or whether a certain (or all) demonstrative argument(s) might be unsound. But it looks as if Hume is arguing, concerning a demonstrative argument, not just that it might be unsound, but that it actually turns into a probable argument. Fogelin (Fogelin 1993) argues that this is a consequence of Hume’s claim that “knowledge *degenerates* into probability”. Against Hume, Fogelin argues that “the fact that there may be some chance that a demonstrative argument is invalid does not change it into a different kind of argument.” (p. 103)<sup>11</sup> But I think Hume need not disagree with this. His claim that “knowledge degenerates into probability” must mean, as I will argue below,<sup>12</sup> something like “knowledge claims become embedded in belief claims”. The result of the first part of the sceptical argument is to turn the claim “I know that p” into the claim “I believe that I know that p.” And like all beliefs, such a belief is characterized by force and vivacity, which can vary. The process of demonstration yields knowledge and certainty. Hume’s first argument purports to show that, as we are prone to error, we must make a probability judgment about whether we have performed the demonstration correctly; this doesn’t change the demonstration, though it does change the confidence with which we treat its result.

Indirect evidence for this analogy between Descartes’s argument and Hume’s comes from the fact at least two commentators suggest that Hume’s negative arguments in 1.4.1 partially survive in Part 1, Section 10 of the first *Enquiry*, which is explicitly about Descartes.<sup>13</sup> Furthermore, reflection on the analogy with Descartes helps us counter a difficulty for Hume put forward by Thomas Reid. Philosophers, Reid plausibly reminds us, oppose probability to demonstration. But Hume, Reid accuses, must oppose probability to infallibility, because the only reason he gives for knowledge degenerating into probability is that we are not infallible.<sup>14</sup> I think Reid’s point rests on what I alleged to be a mistake in the previous paragraph. Hume doesn’t turn demonstrations into probable arguments; he lowers the degree of certainty with which we treat the conclusion of demonstrations. But why should the mere fact of fallibility lead to that result? The answer is easy on the Cartesian picture: fallibility leads to doubt, hesitation or lack of confidence. In Descartes’s method, anything that could be doubted is to be treated as false. Since consideration of our fallibility leads to doubt about the truth of the conclusions of

demonstrations, such conclusions must be treated as false and the demonstrations as unsound. Hume doesn't treat everything doubtful as false, but he does, like most philosophers of the early modern period, treat doubt and hesitation as a sign that we are dealing, not with demonstrations but with probabilities. The argument from fallibility to probability proceeds via the notion of doubt.<sup>15</sup>

Antecedents of Hume's second negative argument, which we will call the regress argument, are harder to find. Fogelin calls it an "ancient trope", but admits that Hume gives it a new twist by "suggesting that these successive evaluations must progressively drive the probability of the *original* judgment down to "nothing." (Fogelin 1983, p. 401)<sup>16</sup> Reid makes the intriguing suggestion that Hume's argument is based on Zeno's paradoxes of motion:

If we trace the journey of Achilles two thousand paces, we shall find the very point where the old man is overtaken. But this short journey, by dividing it into an infinite number of stages, with corresponding estimations, is made to appear infinite. In like manner, our author, subjecting every judgment to an infinite number of successive probable estimations, reduces the evidence to nothing.<sup>17</sup>

So just as Zeno tries to show that a finite distance cannot be crossed with an infinite number of steps, so Hume's argument attempts to show that a finite amount of confidence or assurance cannot survive an infinite number of diminutions:

No finite object can subsist under a decrease repeated *in infinitum*; and even the vastest quantity, which can enter into human imagination, must in this manner be reduc'd to nothing. Let our first belief be never so strong, it must infallibly perish by passing thro' so many new examinations, of which each diminishes somewhat of its force and vigour. (T 182-83, 1.4.1.6)

Fred Wilson (in Wilson 1985) reminds us that Hume himself explicitly links the regress argument to a consideration about chains of testimony:

the connexion betwixt each link of the chain in human testimony has been there suppos'd not to go beyond probability, and to be liable to a degree of doubt and uncertainty. Every new probability diminishes the original conviction; and however great that conviction may be suppos'd, 'tis impossible it can subsist under such re-iterated diminutions. This is true in general; tho' we shall find [note referring to Part 4, section 1 of Book 1] afterwards, that there is one very memorable exception, which is of vast consequence in the present subject of the understanding. (T 145-46, 1.3.13.5)

There is no doubt that comparison of the regress argument of 1.4.1 to this point about testimony,

which is itself just an instance of a general point about chains of reasoning, is crucial to understanding the regress argument. We will explore the comparison further in section 4.<sup>18</sup>

#### **d) Successors of the arguments in Hume**

It is natural enough to think that “the argument of the *Treatise* which, as we saw, was intended to reduce all knowledge claims to probabilities and then drive all probabilities down to “nothing” is nowhere to be found”<sup>19</sup> in the *Enquiry Concerning Human Understanding*. Instead, Fogelin claims, Hume’s arguments in the *Treatise* concerning scepticism about reason are replaced in the *Enquiry* by the rather dull arguments about infinite divisibility found in Part 2 of Section 12.<sup>20</sup> But at least two commentators suggest that Hume’s discussion of antecedent scepticism in the first four paragraphs of Part 1 of Section 12 of the *Enquiry* should be seen as reflecting the arguments of “Scepticism with regard to reason”.<sup>21</sup> Antecedent scepticism, in its strong Cartesian form, starts from a doubt about our faculties “whose veracity... we must assure ourselves, by a chain of reasoning, deduced from some original principle, which cannot possibly be fallacious or deceitful.” (EHU 149-150, 12.3) Hume argues, as Reid argued against Hume’s negative arguments of 1.4.1,<sup>22</sup> that there is no such principle, and that even if there were, we could not “advance a step beyond it, but by the use of those very faculties, of which we are supposed to be already diffident.” (EHU 150, 12.3)<sup>23</sup>

It might be thought that the very fact that Hume presents this as a Cartesian argument, which he rejects, is evidence that it is not to be treated as a successor to the negative arguments of 1.4.1. But we must remember Hume’s positive arguments in 1.4.1, and the way he deals with the negative, sceptical arguments. He accepts them as good arguments, but insists that we nonetheless retain beliefs. This is similar to the position developed on p. 150 (12.1.3) of the *Enquiry*. He there claims that the Cartesian doubt can plainly never be attained (we still retain beliefs), and, furthermore, that this sort of scepticism, were it ever to be attained, is such that “no reasoning could ever bring us to a state of assurance and conviction upon any subject.” Saying this in the *Enquiry* is similar to the position he takes in the *Treatise*: this sort of scepticism is not the sort one can argue one’s way out of. It requires a different response. In addition, we should note that Hume’s discussion (and rejection) of the extreme Cartesian scepticism is immediately followed by a description, and an acceptance, of a more moderate antecedent scepticism. This is the mature and reflective version of a little noticed feature of the negative arguments of 1.4.1: Hume never suggests that there are problems with the result of the first negative argument, and appears to accept that all knowledge degenerates into probability. We will discuss this further in Section 3.

Where else do Hume's arguments survive? Consider the following paragraph from the *Abstract*:

By all that has been said the reader will easily perceive, that the philosophy contained in this book is very sceptical, and tends to give us a notion of the imperfections and narrow limits of human understanding. Almost all reasoning is there reduced to experience; and the belief, which attends experience, is explained to be nothing but a peculiar sentiment, or lively conception produced by habit. Nor is this all. When we believe any thing of *external* existence, or suppose an object to exist a moment after it is no longer perceived, this belief is nothing but a sentiment of the same kind. Our author insists upon several other sceptical topics; and upon the whole concludes, that we assent to our faculties, and employ our reason only because we cannot help it. Philosophy would render us entirely *Pyrrhonian*, were not nature too strong for it. (T 657, N27)

Of the clause "Almost all reasoning is there reduced to experience;" David Norton says "Hume argues that all demonstrative reasoning 'resolves itself' into probable reasoning - into reasoning based on experience."<sup>24</sup> This seems plausible, as the whole paragraph can be interpreted as referring to Part 4 of Book I of the *Treatise: Of the sceptical and other systems of philosophy*. Looked at in this way, the second sentence refers to 1.4.1, the fourth sentence refers to 1.4.2, the first part of the fifth sentence to the doubts raised in 1.4.3 through 1.4.6, while the rest of that sentence and the last sentence refer to 1.4.7, "Conclusion to this book."<sup>25</sup>

The point is hardly crucial, but in fact I don't think the paragraph can bear this interpretation. Consider the second sentence again: "Almost all reasoning is there reduced to experience; and the belief, which attends experience, is explained to be nothing but a peculiar sentiment, or lively conception produced by habit." This would be a very strange way to sum up the point of 1.4.1. First of all, "almost all reasoning" is unlikely to mean "demonstrative reasoning"; it is much more likely to mean "probable reasoning" because most reasoning *is* probable reasoning. Secondly, nowhere in 1.4.1 does Hume explain belief. Rather he *uses* his explanation of belief, which occurs in sections 7 through 10 in Part 3, to counter the conclusion of the negative arguments of 1.4.1. So the above sentence is much more likely to refer to the main results of Part 3: *Of knowledge and probability*. Those results were, firstly, showing that when making probable inferences we are not determined by reason, but by custom or habit ("Almost all reasoning is there reduced to experience"), and, secondly, explaining belief, or the results of probable reasoning, not as a pale imitation of knowledge, but as something more like a feeling ("the belief, which attends the experience, is explained to be nothing but a peculiar sentiment, or lively conception produced by habit.")

Finally, as Fogelin points out,<sup>26</sup> Hume's claim that reason, considered in isolation, will self-destruct,<sup>27</sup> and his explanation in 1.4.1 of why nonetheless we do retain beliefs, are echoed in the following passage from Part I of the *Dialogues*:

All sceptics pretend, that, if reason be considered in an abstract view, it furnishes invincible arguments against itself, and that we could never retain any conviction or assurance, on any subject, were not the sceptical reasonings so refined and subtile, that they are not able to counterpoise the more solid and more natural arguments, derived from the senses and experience.<sup>28</sup>

### **Section 3: The Negative Arguments**

#### **a) Knowledge and probability**

Although it is the second negative argument, the regress argument, that has received the most attention, the first argument at the beginning of 1.4.1 itself raises some complex and interesting issues. One concerns the difference between demonstration and intuition. While intuition is the immediate apprehension of two ideas standing in a certain relation, demonstration is the indirect awareness of such a relation, mediated by a chain of ideas. Furthermore, Hume limited demonstration to relations of quantity and number, primarily algebra and arithmetic.<sup>29</sup> Now in these passages in 1.4.1, Hume speaks only of demonstration, not of intuition, and it is perhaps important that all his examples are arithmetical. This supports the notion that his target here was the result of demonstration, not intuition. On the other hand, Hume sometimes uses "demonstrative" synecdochically for both intuition and demonstration.<sup>30</sup> Furthermore, his conclusion is that "all knowledge resolves itself into probability", and there is no suggestion that he intends this to be limited to demonstrative knowledge. He says:

'tis easily possible, by gradually diminishing the numbers, to reduce the longest series of addition of two single numbers; and upon this supposition we shall find it impracticable to shew the precise limits of knowledge and of probability (T 181, 1.4.1.3).

It is not just impractical to show that while complex demonstrations are swallowed up by probability judgments, simpler demonstrations and intuitions remain knowledge; it may be incoherent: "if any single addition were certain, every one wou'd be so, and consequently the whole or total sum; unless the whole can be different from all its parts." (T 181, 1.4.1.3)

I think the situation is this. The more complex a process of demonstration is, by virtue of its complexity, the more prone it is to error, and hence the more easily susceptible to this argument it is.<sup>31</sup> Naturally enough, Hume concentrates on examples of this kind. But once it is

admitted that “none will maintain, that our assurance in a long numeration exceeds probability”, the argument gets a foothold, and then Hume can extend it to simpler demonstrations and intuitions.<sup>32</sup>

Another issue that this first sceptical argument raises is this. Hume says that “knowledge and probability are of such contrary and disagreeing natures, that they cannot well run insensibly into each other, and that because they will not divide, but must be either entirely present, or entirely absent.” (T 181, 1.4.1.3) Hume makes this claim in the course of arguing that if the argument applies to long numerations, it will apply to the addition of two single numbers as well. But this raises an interesting difficulty, perhaps even a profound issue. If knowledge and probability are of such differing natures, why need they conflict at all? Is not the knowledge that two plus two equals four one thing, and the doubts about our performing calculations correctly another? Why does the certainty of the demonstration turn into the different sort of conviction or assent we give to belief?<sup>33</sup> There is no doubt that there is, at the very least, a *prima facie* problem here. Hume is quite clear about what characterizes the conviction or assent given to propositions that are known by intuition or demonstration:

In that case, the person, who assents, not only conceives the ideas according to the proposition, but is necessarily determin'd to conceive them in that particular manner, either immediately or by the interposition of other ideas. (T 95, 1.3.7.3)

This passage occurs early on in Hume's discussion of belief and at first glance might seem to support the view that for Hume knowing and believing are much the same thing, viz., a manner of conceiving ideas. But a moment's reflection rules that possibility out. For one thing, it is supposed to be easy to see what the difference between assent and dissent are for knowledge, but very difficult for belief. There is no suggestion that knowledge requires the extra force and vivacity characteristic of belief. More importantly, Hume makes it quite clear what he means by “manner” in the above quotation about intuition and demonstration: it is conceiving propositions positively or negatively. In intuition and demonstration, we can conceive them only in one way (this is an “absolute necessity” (T 95, 1.3.7.3)), while in belief it is equally easy to conceive the proposition positively or negatively.

So the certainty and assent characteristic of knowledge is due to the impossibility of conceiving an alternative, while the assent characteristic of belief is the force and vivacity of the ideas believed. But now it looks as if no probable belief could have any effect on a known proposition. If something known is such that its contrary is inconceivable, what effect could a

belief have? Turn the inconceivable into the conceivable? If belief and knowledge were the same sort of thing for Hume, i.e., if belief were on the same scale as knowledge only lower, this would not be a problem. But as the conviction or assent we give to belief is quite distinct from that we give to knowledge, according to Hume, the problem remains.<sup>34</sup> It is solvable, I suggest, not by converting the knowledge claim into a belief claim, but by imbedding the knowledge claim inside a belief claim. “I know that p” becomes, under conditions of doubt or uncertainty as to whether or not we have followed the rules of demonstration correctly, “I believe that I know that p.” The conviction with which “p” is held will be no stronger than the assurance of the belief.

Treating Hume’s conclusion of the first negative argument in this way has three advantages: it solves the problem of how probability can affect knowledge; it defends Hume against the charge brought by Fogelin and Reid, that the possibility of error does not turn one sort of argument into another; and it doesn’t have the consequence that demonstration and intuition effectively disappear from our cognitive repertoire. This last point is especially important because Hume allows the conclusion of the first negative argument to stand.<sup>35</sup> But is it a plausible or even coherent interpretation? Antonia LoLordo suggests that it is not.<sup>36</sup> Demonstration (and intuition) involve a robust sort of certainty, not reducible to force and vivacity. How could I have a probable belief that I am in the grip of such certainty? Wouldn’t such a belief entail the absence of such certainty? This is an important point, and dealing with it adequately would require a thorough investigation of Hume’s concept of demonstrative certainty.<sup>37</sup> One point to bear in mind is the similarity this issue has to the Cartesian question, how I can doubt what I clearly and distinctly perceive? Well, I can’t, obviously, at least not as long as I am clearly and distinctly perceiving. But once I am distracted by thoughts of the errors that I, and others, have made in the past, it seems perfectly easy for doubt to creep in. One way of putting the point is this: when I know a proposition, I perceive that a certain relation holds between two ideas. I can’t help but perceive that relation as long as the ideas remain the same. I have, as it were, a *de re* attitude towards those the ideas and the relation in which they stand. It is quite literally inconceivable that they should fail to stand in that relation. But now suppose that I am no longer thinking directly about that proposition, but am thinking a thought about that proposition. I might think, for example, that others had made errors about similar propositions in the past. I have something more like a *de dicto* attitude towards that thought. And now it seems perfectly possible to think that perhaps the ideas stand in the relation I took them to stand in, and perhaps they do not. The sceptical consideration places me at one remove, as it were, from my own thoughts.

We should note that the eventual solution Hume presents later on in 1.4.1 is a solution to

the challenge posed by the second sceptical argument, i.e., that the assurance or conviction we have in any judgment threatens to disappear, and not this first argument, i.e., that all knowledge degenerates into probability. So it looks as if the conclusion of the first argument remains intact. This might well be considered unsatisfactory, but with a little adjusting, I think it can plausibly be seen as a stable position that may well be true. First of all, let us remember that according to the current interpretation we are treating Hume's claim that all knowledge degenerates into probability in a nonstandard way. It is usual to understand this claim as amounting to something like this: any claim that one has knowledge that  $p$  must be replaced by a claim that one has only probable belief that  $p$ . I have suggested that we treat it instead as saying: any claim that one has knowledge that  $p$  must be replaced by the claim that one has a probable belief that one has knowledge that  $p$ . It is not that the claim to knowledge drops out; it is just that it becomes embedded in a belief claim.

Suppose I claim to know that  $3467 = 2895 + 572$ , perhaps on the basis of using a calculator. In many contexts, perhaps a discussion of the difference between demonstrative and probable arguments or an argument about scepticism, I can be persuaded that it is more precise to say that I believe with a high degree of probability that I know that  $3467 = 2895 + 572$ . In ordinary circumstances, it would rarely be appropriate to say that I believe that I know that  $3467 = 2895 + 572$ ; we usually have only the simple attitude towards the arithmetical proposition. But philosophers can be interested in the more complex attitude. There are important differences between the arithmetic proposition, my cognitive state with respect to the arithmetical proposition, and my beliefs about that cognitive state. Nonetheless, if my belief turns out to be true, then so does the embedded knowledge claim.<sup>38</sup> On this view, the conclusion of Hume's argument is not that we can be certain that knowledge never obtains, but only that we cannot be certain just when it does. But we do have a highly probable belief, on various occasions, that it does. This seems to be a sustainable, indeed plausible, position for a cautious sceptic to take. Eschewing the excesses of negative dogmatism, Hume can be content with the moderate scepticism that entails a healthy sense of one's own fallibility.<sup>39</sup>

### **b) The regress argument**

Hume goes on to argue that the very same considerations which lead us to doubt whether we have performed a demonstration correctly also apply to any probability judgment, including the probability judgment we make about the result of a piece of demonstrative reasoning. "In every judgment, which we can form concerning probability, as well as concerning knowledge, we ought always to correct the first judgment, deriv'd from the nature of the object, by another judgment, deriv'd from the nature of the understanding." (T 181-82, 1.4.1.5) Our inherent

fallibility is always a consideration, weakening the force with which the original belief is held. As this sort of judgment can reiterate, the result appears to be that the degree of assent will eventually reduce to nothing; we will, it appears, be left with a mere idea, with none of the force and vivacity that characterizes a belief: "Let our first belief be never so strong, it must infallibly perish by passing thro' so many new examinations, of which each diminishes somewhat of its force and vigour." (T 183, 1.4.1.6) The point is not that a belief, with full force and vigour, is seen to be unjustified; rather, it is that because the force and vigour continually decrease, the idea seems in danger of ceasing to be a belief at all. As a matter of fact, our beliefs do not degrade in this matter, and Hume goes on to give an explanation of why they retain their force and vivacity. We will turn to that issue in Section 4.

It is this regress argument towards which the vitriol, mentioned at the beginning of this paper, has been directed. There are, it seems to me, three basic objections to this argument. Objection one, owing to McNabb, is as follows:

Let us call a judgement which is not about judgements, but about other things, a first-order judgement, and a judgement about the reliability of a first-order judgement a second-order judgement. Now it seems evident to commonsense that the second-order judgement that I am very likely, though not certain, to be correct in some first-order judgement increases rather than diminishes the authority of that first-order judgement. (McNabb 1951, p. 101.)

The point is that when the result of a first order judgment is itself the subject of a second-order judgement, our confidence in the first order judgement does not necessarily decrease, as it would if that confidence was simply a probability considered as the product of the probability of the first-order judgment and the probability of the second-order judgement. McNabb's point at least has the virtue of not assuming that Hume's argument is well represented as the apparent mathematical truism that a probability of less than one will continually decrease as it is successively multiplied by numbers less than one. But Hume's argument cannot be interpreted that way; the conclusion of the argument thus interpreted would be that, for any belief  $p$ , we end up having believing  $p$  with zero probability, i.e., we have a belief with probability one in not- $p$ . This clearly is not what Hume concluded. The point of Hume's argument is "the total extinction of belief and evidence" (1.4.1.6) or "a total suspence of judgment." (1.4.1.8) It is a sceptical argument, not the argument of a negative dogmatist.

McNabb says that "it seems evident to commonsense that the second-order judgement that I am very likely, though not certain, to be correct in some first-order judgement increases rather than diminishes the authority of that first-order judgement." We have already seen that this

is false in general: when the first order judgment is a knowledge claim and the second order judgment is a probability judgment, the authority of the knowledge claim is diminished. But does a judgment about a belief that  $p$  always reduce the certainty with which we hold  $p$ , given that we are not concerned with the simple product of probabilities? We will answer this question incorrectly unless we bear in mind, again, that Hume is not concerned with a scale the end point of which is a belief in  $p$  with a probability of zero. The bottom of Hume's scale is uncertainty, not certainty of falsehood. One way of making the point is in terms of a Baconian rather than a Pascalian conception of probability. As Dorothy Coleman says, "Pascalian scales take the lower extreme of probability to be disprovability or logical impossibility; the Baconian scale takes the lower extreme to be only non-provability or lack of proof."<sup>40</sup> Another way of making the point is to think of Hume's argument in the following way.<sup>41</sup> We must remember that each successive judgment is a judgment based on doubts about the reliability of our cognitive faculties, on our awareness of the mistakes which we and others have made in the past in making judgments or forming beliefs of just this sort. When we reflect on our fallibility, the appropriate response is to increase the margin of error concerning the belief which we are considering. Suppose the first judgment results in a belief that  $p$ , which we hold at a very high level, say 0.9. The second judgment might lead us to think that this judgment involves a margin of error so that in fact we ought to revise our confidence level to somewhere, exactly where we are not sure, between, say, 0.81 and 0.95. A third judgment, again based on consideration of the fallibility of our faculties, might lead us to revise it yet again to somewhere, again exactly where we are not sure, between 0.72 and 0.96. And so on, until the range in which our confidence level might fall is so great that it no longer makes sense to say that we have any confidence left in the belief at all. This is the total extinction of belief and evidence that results in a total suspension of belief.

The second two objections are well presented in Fogelin 1985, pp. 17-19. They both share the assumption, already rejected, that Hume's argument is a matter of calculating formal probabilities. Objection two is that "we can imagine each diminution becoming progressively smaller such that the sum of the diminution approaches a finite limit." But as Fogelin notes, this objection fails as long as "there is some finite degree of probability below which the chance of error never falls." The third objection is perhaps the most interesting.<sup>42</sup> If it is demonstratively certain that  $2 + 2 = 4$ , then, to the extent that it makes sense to assign a probability at all, the probability of that proposition is 1. Any subsequent doubts we might have about whether we have performed the demonstration correctly are irrelevant. The probability of a demonstrative proposition doesn't change; it is what it is. Similarly with a proposition of probability of less than 1. "However certain or uncertain we are about our ability to calculate probabilities, if a proposition has a certain probability, that (tautologically) is the probability it has." The

probability, or certainty, of the original proposition doesn't change, whatever probability we assign to the proposition that our assignment of a probability to the original proposition was correct.

If my interpretation of Hume's negative arguments are correct, it is not difficult to see why these objections miss the mark. Suppose that it is demonstratively true that  $2 + 2 = 4$ . Of course, no doubts of mine will ever change that. Now suppose that the probability that the next roll of a fair die will show 4 is 1 in 6. No doubts of mine will change that either, though weighing the die might. If I have got Hume right, he never questions any of this. Rather, his point is that because of awareness of our fallibility, we can never rely on knowledge claims. We can at best rely on beliefs about our claim to knowledge. Similarly, because of awareness of our fallibility, it looks as if we can't rely on any straightforward belief claim either. Whatever strength of belief we have in some proposition, it looks as if we can at best rely only on some belief about that belief. And this results in an increase in the margin of error of each successive belief; such an increase leads to a decline in confidence in the truth of the original proposition. One way to look at it is to think of each judgment after the first to be a matter of doubting. How could further doubt fail to decrease the confidence we have in any proposition?

Part of the point is that what Hume is concerned with in these negative arguments is not some formal assignment of probability, calculated according to the calculus. He is concerned with the confidence or degree of assent we have in any proposition.<sup>43</sup> For Hume, the confidence or degree of assent we have in some proposition is simply a matter of the degree of force and vivacity the corresponding idea has. As the force and vivacity that an idea has decreases, the danger is that it will cease to be a belief at all. The sceptical threat of the negative arguments of 1.4.1 is not that the beliefs we have may turn out to be unjustified; it is that the beliefs, by losing their force and vivacity, may not survive as beliefs, but only as mere ideas. This is still a sceptical threat, but of a rather different sort from that which modern epistemologists are used to finding.<sup>44</sup> The negative arguments of 1.4.1 don't show that there are no rational grounds for our beliefs; they show that our beliefs are in danger of ceasing to be beliefs at all. The problem isn't that reason can't justify our beliefs, or actually shows them to be unjustified; the problem is that our beliefs, as produced by causal or probable reasoning, threaten to disappear in the face of sceptical arguments. If sceptical arguments are arguments that produce doubt and uncertainty, then the negative arguments of 1.4.1 are certainly sceptical in this sense. But it doesn't follow that they are sceptical in the sense with which most modern epistemologists are concerned.

When Hume worries about "a total extinction of belief and evidence" (T 183), the

concern is not justification, but quite literally the extinction of belief.<sup>45</sup> This is a sceptical worry, in that it produces doubt and uncertainty. But does this characterization draw the teeth of scepticism? Doesn't Hume's argument have more epistemological bite than this? It helps to remember that Hume is concerned with scepticism with regard to reason, where reason is the faculty we use to reach truth, especially by inferential means, i.e., by demonstrative and probable arguments. Hume's negative arguments show "that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life." (T 267-68, 1.4.7.7) When a proposition is left only with "the lowest degree of evidence", it is conceived with very little force and vivacity, and thus ceases to be believed. For Hume, the degree of assent, or amount of force and vivacity, just is what we consider to be the likelihood of the belief's being true. "Our reason", Hume says in the opening paragraph of this section, "must be consider'd as a kind of cause, of which truth is the natural effect."<sup>46</sup> If it turns out that the products of reason lose their force and vivacity, then they will cease to be beliefs. That is, they will cease to be ideas which we assent to as true. That would be a sceptical result, but not because it is a matter of showing beliefs to be unjustified. It is a matter of showing that they cease to be beliefs, i.e., they cease to be things to which we assent as true.

Hume's negative arguments thus have real epistemological import: unless the arguments can be dealt with, there is a serious problem with us assenting to anything as true. Furthermore, although the arguments don't directly concern justification, they certainly have a consequence for the way we think our beliefs are or are not justified. The faculty of reason is supposed to produce truths; that is its function. We are justified in believing propositions expressing these truths only in so far as the faculty of reason functions as it should. Hume's negative arguments cast serious doubts on this; the understanding, when it acts alone, entirely undermines itself. If reason functioned the way we thought it did and should, then the beliefs that reason gives rise to would be justified. But it doesn't, so they aren't, or at least not in the way we supposed them to be. Left to its own devices, reason cannot defend itself or the "truths" it purports to produce; the justification which we may have thought was available turns out to be lacking. The case for claiming that Hume's negative arguments have real sceptical bite, even when interpreted as I have interpreted them, is strengthened by consideration of the passage that opens, and a passage that comes near the end of, section 1.4.2 (*Of scepticism with regard to the senses*):

Thus the sceptic still continues to reason and believe, even tho' he asserts, that he cannot defend his reason by reason (T 187, 1.4.2.1).

This sceptical doubt, both with respect to reason and the senses, is a malady, which can never be radically cur'd, but must return upon us every moment, however we may chase it away, and sometimes may seem entirely free from it. 'Tis impossible upon any system to defend either our understanding or senses; and we but expose them farther when we endeavour to justify them in that manner. As the sceptical doubt arises naturally from profound and intense reflection on those subjects, it always encreases, the farther we carry our reflections, whether in opposition or conformity to it. Carelessness and inattention alone can afford us any remedy. (T 218, 1.4.2.57)<sup>47</sup>

The apparent inability to retain beliefs in the face of sceptical arguments has profound sceptical consequences. It is not merely a psychological point; if reason cannot be defended by reason, then there is something self-defeating about being purely rational. This issue is best discussed in light of Hume's positive response to the negative arguments in 1.4.1, to which I now turn.

## **Section 4: Hume's Response to the Negative Arguments**

### **a) Outline of Hume's response, and the theory of belief**

Perhaps the best argument for my interpretation of Hume's negative arguments as being mainly concerned with the retention of beliefs in the face of sceptical arguments is his solution to the problem posed by those arguments. He claims that even though one "can find no error in the foregoing arguments" (T 184, 1.4.18), we still continue to have beliefs. He does not proceed to show that these beliefs are in fact justified, in spite of the arguments; rather, his concern is to show how it is possible that we can retain them at all. Consider these passages:

...[A]fter the first and second decision; as the action of the mind becomes forc'd and unnatural, and the ideas faint and obscure; tho' the principles of judgment, and the ballancing of opposite causes be the same as at the very beginning; yet their influence on the imagination, and the vigour they add to, or diminish from the thought, is by no means equal. Where the mind reaches not its objects with easiness and facility, the same principles have not the same effect as in a more natural conception of the ideas; nor does the imagination feel a sensation, which holds any proportion with that which arises from its common judgments and opinions. (T 185, 1.4.1.10)

No wonder, then, the conviction, which arises from a subtle reasoning, diminishes in proportion to the efforts, which the imagination makes to enter into the reasoning, and to

conceive it in all its parts. Belief, being a lively conception, can never be entire, where it is not founded on something natural and easy. (T 186, 1.4.1.11)

Hume explains how, given his theory of belief, the relevant ideas manage to retain enough force and vivacity, even in the face of sceptical arguments, to remain beliefs. It is difficult to understand Hume's response to these arguments without bearing in mind just what he thinks beliefs are, and how they are formed. Beliefs are distinguished by their feeling, i.e., by their force and vivacity, and this feeling is analogous to that found in sense experience. "[P]robable reasoning is nothing but a species of sensation", Hume said (T 103, 1.3.8.12), a sentiment echoed in his response on T 185 (1.4.1.10), quoted above, where he claims that the subsequent judgments of diminishing probability are such that the imagination fails to feel the relevant sensation when considering them. As a result, the original "common judgments and opinions" retain the relevant force and vivacity, and remain beliefs. If the problem Hume was dealing with was the justification of beliefs, this solution would completely miss the point. But, given the undeniable fact that we do retain beliefs, if the problem is, how do we manage to retain these beliefs in the face of sceptical arguments, Hume's solution, whatever one thinks of its merits, is at least on target.

In his resolution of the second negative argument of 1.4.1, Hume does not try to show that the reasoning of that argument is faulty, or that our beliefs are after all justified. Rather, he immediately says that the point was really just to bolster his own account of belief:

My intention then in displaying so carefully the arguments of that fantastic sect, is only to make the reader sensible of the truth of my hypothesis, *that all our reasonings concerning causes and effects are deriv'd from nothing but custom; and that belief is more properly an act of the sensitive, than of the cogitative part of our natures.* (T 183, 1.4.1.8)

He goes on to say, not that we should replace the principles of reasoning that led to this impasse, but that we should recognize that it is the principles of reasoning which we all use, *considered in isolation from the nature of the beliefs which such reason produces*, that cause the trouble:

I have here prov'd, that the very same principles, which make us form a decision upon any subject, and correct that decision by the consideration of our genius and capacity, and of the situation of our mind, when we examin'd that subject; I say, I have prov'd, that these same principles, when carry'd farther, and apply'd to every new reflex judgement,

must, by continually diminishing the original evidence, at last reduce to nothing and utterly subvert all belief and opinion. (T 184, 1.4.1.8)

The problem is not so much with reason or reasoning, but with a failure to recognize the nature of belief:

If belief, therefore, were a simple act of the thought, without any peculiar manner of conception, or the addition of a force and vivacity, it must infallibly destroy itself, and in every case terminate in a total suspension of judgment. (T 184, 1.4.1.8)

Since one “can find no error in the foregoing arguments” but one “still continues to believe”, we may “safely conclude” that our “reasoning and belief is some sensation or peculiar manner of conception, which ‘tis impossible for mere ideas and reflections to destroy.” (T 184, 1.4.1.8) Here again we get the comparison of probable reasoning and belief with sensation. When we reflect on how we reason and come to believe, we must keep this fact in mind. When we lose sight of it, we “lose ourselves in perpetual contradiction and absurdity.” (T 155, 1.3.13.20)<sup>48</sup>

What is needed is not a new theory of reasoning or a way of defending our reasoning by reason, but an answer to the question "*how it happens, that even after all we retain a degree of belief, which is sufficient for our purpose, either in philosophy or common life.*" (T 185, 1.4.1.9) Hume's answer is disarmingly simple: we retain a degree of belief and conviction in spite of the regress argument because the reasoning is too complex and artificial to have any influence on us:

I answer, that after the first and second decision; as the action of the mind becomes forc'd and unnatural, and the ideas faint and obscure; tho' the principles of judgment, and the ballancing of opposite causes be the same as at the very beginning; yet their influence on the imagination, and the vigour they add to, or diminish from the thought, is by no means equal. (T 185, 1.4.1.10)

There is nothing wrong with the reasoning; it is simply that it has, in these circumstances, no apparent lasting effect on our belief.

Considered in isolation, this is an odd response. It is odd not just because we might have expected an answer in terms of justification. Even once we realize that Hume's concern here is the retention, not the justification, of belief, we might still be surprised. Why should the complexity of the argument matter? Why should it be the case that after the first or second

iteration, the subsequent judgments have no effect? We need to remember the general account of reason within which Hume is working. Hume is concerned, both positively and negatively, with an account of reasoning of the sort Descartes sketches in the *Regulae*, i.e., an account in terms of "chains of ideas". Descartes, like Locke after him, thought that "reasoning" produced less certainty than intuition because the relation between the relevant ideas, while direct in the case of intuition, was mediated in the case of reasoning by intermediate ideas. As the number of intermediate ideas increases, and the chain of reasoning becomes longer, the relationship between the ideas at each end of the chain of ideas becomes more indirect, and the certainty of the conclusion is lessened. Intuitions are more certain than demonstrations, and longer and more complex demonstrations are less certain than shorter and simpler ones. It was a common-place of 17<sup>th</sup> and 18<sup>th</sup> centuries theories of reasoning that complexity reduces certainty.<sup>49</sup>

Hume frequently comments on the difficulty of keeping one's attention on a long chain of reasoning and worries about its effect on the diminution of our beliefs. For instance, at the beginning of Book III, he speaks of the trouble in retaining the convictions of reason, which seem to vanish "in the common affairs of life... like the phantoms of the night on the appearance of the morning." (T 455, 3.1.1.1) He goes on to say that

This is still more conspicuous in a long chain of reasoning, where we must preserve to the end the evidence of the first propositions, and where we often lose sight of all the most receiv'd maxims, either of philosophy or common life.

And in 1.3.13, he is concerned about the fact that the impact of any piece of historical evidence is vitiated by passing "thro' many millions of causes and effects, and thro' a chain of arguments of almost immeasurable length." (T 145, 1.3.13.4) In fact, *prima facie*, any complex and lengthy chain of reasoning will have little influence on us. A special case must be made to explain the case when, Hume wants to claim, a particular sort of complex and lengthy chain of reasoning does actually influence us. In the historical evidence case, he argues that every step in the long chain of reasoning is the same: "There is no variation in the steps. After we know one, we know all of them; and after we have made one, we can have no scruple as to the rest... By this means a long chain of argument, has... little effect in diminishing the original vivacity." (T 146, 1.3.13.6) And at the beginning of Book III, he argues that his lengthy chain of reasoning should influence us, because of the importance of the subject matter:

Morality is a subject that interests us above all others: We fancy the peace of society to be at stake in every decision concerning it; and 'tis evident, that this concern must make

our speculations appear more real and solid, than where the subject is, in a great measure, indifferent to us.

But no such special circumstances attend the argument of 1.4.1, and the reasoning there neither can nor does influence us. Hume's claim in general is that long and complex patterns of reasoning have less and less influence on us, in proportion to the length and the abstruseness of their subject matter. And as the number of steps, which are required to remove all the evidence or assent we attach to a proposition, increases, so influence of the argument on our beliefs gets vanishingly small.

Where reason is lively, and mixes itself with some propensity, it ought to be assented to. Where it does not, it never can have any title to operate on us. (T 270, 1.4.7.11)<sup>50</sup>

Reason's hold on us is limited, and a good thing too. If its influence were unlimited, it would entirely destroy itself. It is only because its influence is limited by other aspects of our nature that it can have any influence. We can be rational only if we are only partly rational. If belief were “a simple act of thought”, governed entirely by the faculty of reasoning functioning in isolation, we could not retain our beliefs in the face of sceptical arguments. But we do retain beliefs, because “*belief is more properly an act of the sensitive, than of the cogitative part of our natures.*”

#### **b) The importance of Hume's internal references to 1.4.1: the testimony example**

Hume took these sceptical arguments very seriously, at least in the *Treatise*. And it certainly looks as if he continued to accept the results of the first negative argument.<sup>51</sup> That Hume attached great importance to the second of these arguments is shown by the fact that he referred to it at least five times, twice before the argument occurs and three times after. Hume first refers to it in 1.3.13, immediately after posing the historical evidence conundrum, mentioned above, and in the context of making a general point about human testimony.<sup>52</sup> He says:

[T]he connexion betwixt each link of the chain in human testimony has been there suppos'd not to go beyond probability, and to be liable to a degree of doubt and uncertainty... Every new probability diminishes the original conviction; and however great that conviction may be suppos'd, 'tis impossible it can subsist under such reiterated diminutions. This is true in general; tho' we shall find [footnote referring to 1.4.1] afterwards, that there is one very memorable exception, which is of vast consequence in the present subject of the understanding. (T 145-46, 1.3.13.5)

At one point, Wilson interprets this passage as follows: “With a footnote, Hume explicitly identifies the structure of this regress with that of the regress that generates scepticism with regard to reason.” (Wilson 1985, p. 324) This is a natural way to interpret this forward looking reference. Here is a defence of the natural reading. The general truth is that the longer a chain of a reasoning, the less certain we are of its conclusion. In the above passage on T 145-6 (1.3.13.5), Hume asserts a particular instance of that truth, i.e., the longer the chain of testimony, the less credence we give to the content of that testimony. He then makes the forward reference to 1.4.1. Wilson takes the reference to be explicitly to the second negative argument, i.e. to the regress argument. Just as the testimony example shows that the credence we give to the content of testimony is lessened as the chain of testimony increases, so the regress argument shows that credence we give to a belief is lessened, to the point of disappearing, as the regress continues. Furthermore, like the testimony case, at least as it occurs in the “celebrated argument against the *Christian Religion*,” the regress argument turns out to be “a memorable exception” to the general truth. In fact, historical evidence does survive, in the right circumstances, and so too do our beliefs survive the regress argument. The survival of our beliefs “is of vast consequence in the present subject of the understanding.” (T 146, 1.4.1.5)<sup>53</sup>

In spite of its initial plausibility, I don’t think the natural reading can be correct. The general truth is that certainty decreases with complexity. Where does Hume deploy this truth in 1.4.1? Not in the regress argument itself, but in his *response* to it. The regress argument fails to persuade us because it is too long and subtle. Although the first and second iteration may reduce the “original evidence, “after the first and second decision; as the action of the mind becomes forc’d and unnatural, and the ideas faint and obscure; tho’ the principles of judgment, and the ballancing of opposite causes be the same as at the very beginning; yet their influence on the imagination, and the vigour they add to, or diminish from the thought, is by no means equal.” (T 185, 1.4.1.10) Testimony is supposed to *support* a belief, while the regress argument *undermines* a belief; so the apparent *failure* of long chains of testimony to support beliefs can’t be analogous to the apparent *success* of the regress argument in undermining beliefs. The general truth about length decreasing certainty shows that longer chains of testimony *reduce* the degree of belief. The same truth shows that the force of the regress argument begins to fade after the first few iterations, and that the original belief is *retained*. Under certain circumstances, outlined on T 146 (1.3.13.6), belief can be *retained* through a long chain of historical evidence; this is an exception to the general truth. It is an exception because as “most of these proofs are perfectly resembling, the mind runs easily along them, jumps from one part to another with facility... By this means a long chain of argument, has as little effect in diminishing the original vivacity, as a much shorter wou’d have” (T 146, 1.3.13.6). If the same exception held in 1.4.1, the regress would work, and

we would be left with no beliefs. But it doesn't. There "the mind reaches not its objects with easiness and facility" (T 185, 1.4.1.10). In sum, increase of length and complexity tend to decrease belief; that is the general truth. The survival of historical evidence is an exception to the general rule, and we have historical beliefs. No such exception is available to the regress argument, and it fails, because of the general truth. So we have beliefs.<sup>54</sup>

Here is my interpretation of the testimony passage on T 145. Hume says that it is true in general that lengthy chains of testimony reduce the original probability. We have a chain of judgements, one made by each person who passes on the original testimony that is the origin of an historical claim. What is true in general is that reiterated probability judgements, such as found in these chains, tend to reduce the original conviction. Although true in general, Hume argues in the next paragraph that in the case of an historical chain of testimony, the original conviction survives this apparent diminution. And there is a sense in which, like the historical evidence case, the argument in 1.4.1 is a "memorable exception" to the general truth of probability diminution. It is an exception, like the historical evidence case, because the conviction of the original judgment survives the long chain of reason. It is memorable because unless it was an exception, we would retain no beliefs based on probable reasoning at all.<sup>55</sup>

This forward reference to 1.4.1 is important. Not only does it show that Hume attached great importance to the argument and to his response, it also shows that Hume's response to the argument is but another instance of a general truth of Hume's theory of reasoning. Long chains of reasoning have little effect on us, especially when the content is abstruse.

### c) Other references to 1.4.1

Hume next refers to 1.4.1 at T 153 (1.3.13.16-17), just a few pages later. Hume here is concerned to explain why an "open and avow'd" violation of honour "the world never excuses, but which it is more apt to overlook, when the appearances are sav'd, and the transgression is secret and conceal'd." The explanation is complex, but the reference to 1.4.1 comes in the following passage:

The labour of the thought disturbs the regular process of the sentiments, as we shall observe presently [footnote referring to 1.4.1]. The idea strikes not on us with such vivacity; and consequently has no such influence on the passion and imagination.

This reference to 1.4.1 is important because it indicates that the arguments of that section, and Hume's response to it, are to be seen in the light of Hume's theory of belief and belief formation,

a theory that treats belief and probable reasoning as more a matter of sensation than calculation. The phenomenon referred to here is not the sceptical argument of 1.4.1 but rather the feature of human nature that saves us from its consequences, that is, the quite general feature that abstruse arguments produce ideas which lack sufficient vivacity to have much influence on us.

Hume goes on, in the pages immediately following, to extol the virtues of his account of probable reasoning largely because it is embedded in the larger context of belief formation. Unless a theory can account for the belief we have in the conclusion of an argument, it is going to run into just the problems that Hume outlines in 1.4.1. Hume's theory of reasoning, like his predecessors', would run into just those problems if it were not embedded in his overall account of belief as being formed by custom and the imagination. He says, having summarized his account of probable reasoning and having pointed out how it is sensitive to his account of belief as a more forceful and vivacious idea,

All these phenomena lead directly to the precedent system; nor will it ever be possible upon any other principles to give a satisfactory and consistent explication of them. Without considering these judgements as the effects of custom on the imagination, we shall lose ourselves in perpetual contradiction and absurdity. (T 154-55, 1.3.13.20)

Hume seems to think that his account of belief and belief formation is uniquely able to deal with sceptical results; unless a theory treats belief as analogous to sensation, the result will be perpetual contradiction and absurdity.

The third and fourth references to the arguments of 1.4.1 frame the discussion in 1.4.2, and have already been discussed.<sup>56</sup>

The fifth reference to the argument in 1.4.1 occurs in "Conclusion to this book", and is probably at least as important as the first reference:

For I have already shewn [footnote referring to 1.4.1], that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life. We save ourselves from this total scepticism only by means of that singular and seemingly trivial property of the fancy, by which we enter with difficulty into remote views of things, and are not able to accompany them with so sensible an impression, as we do those, which are more easy and natural. (T 267-68, 1.4.7.7)

Although the dialectic of this section is extremely difficult, it seems to me that we should read this passage in the following way: when the understanding, or reason, even on Hume's view of reason, acts alone, it is prey to the regress argument. On Hume's view, reason is not an independently functioning faculty which acts alone, following only its own rules. The beliefs we form as a result of a chain of reasoning are formed only when enough vivacity is communicated to the last idea in the chain. Beliefs cannot be formed in isolation from the sensitive side of our nature. That is the lesson of the negative arguments about probable reasoning, commonly called the problem of induction. And even if, counterfactually, beliefs could be formed by reason in isolation from the sensitive side of our natures, they would not survive sceptical arguments such as those of 1.4.1. That is the lesson of "Scepticism with regard to the reason". It is the ability of ideas to be enlivened by their association with present impressions that explains the production of beliefs; it is the inability of that vivacity to survive complex and repeated patterns of reasoning that explains the retention of beliefs in the face of sceptical arguments.<sup>57</sup>

#### **d) Conclusion**

1.4.1, "Of scepticism with regard to reason" is important for many reasons. Although the second negative argument, the regress argument, has received the most attention, the first negative argument is itself interesting and important. If I am correct, the conclusion to that argument, suitably interpreted, stands: knowledge claims must be embedded in belief claims. Although this doesn't rule out the possibility of knowledge, it does drastically limit the range and frequency of knowledge claims. Even considered in isolation, this is an important sceptical result, and survives as the moderate or mitigated scepticism of the first *Enquiry*.

The details of the regress argument are difficult, and its interpretation, especially in light of the forward reference to it in the argument about historical evidence, controversial. But several points have emerged. To start with, the argument, or something closely related to the argument, has echoes in the second *Enquiry*'s antecedent scepticism. In each case, the argument cannot be rebutted; it is just not the sort of sceptical position out of which one can argue one's way. A different response is called for. Hume's response calls upon his theory of belief, and he thinks the fact that his theory of belief provides a way to avoid the conclusion of a sound argument is further evidence in support of that theory. A belief is distinguished from a mere idea by its extra force and vivacity. A piece of reasoning is a chain of ideas, and if an argument is to persuade us, the vivacity must be transferred along the chain of ideas, and preserved in the conclusion. Such preservation is difficult in lengthy and complex arguments, especially those that concern abstruse subjects. The sceptical argument that would have us conclude that no

beliefs can survive is itself of this sort; its conclusion has no apparent lasting effect on us, even though we can find no fault with the argument.

Hume says: “Nature, by an absolute and uncontrollable necessity has determin’d us to judge as well as to breathe and feel” (T 183, 1.4.1.7). We are so constituted that we just can’t maintain acceptance of the sceptical conclusion, even though we can find no fault in the argument that supports it. This response raises several interesting issues concerning Hume’s attitude towards scepticism. For one thing, we must bear in mind that, even though we cannot maintain the state of suspension of all belief, the reflective among us can and do achieve it for a short space of time when in the grip of philosophical reflection. And this is bound to affect us. That is why I said that the conclusion of the skeptical argument has no *apparent* lasting effect. As Fogelin remarks, the moderate scepticism that characterizes Hume’s general attitude is a product of the collision of the unmitigated scepticism, which is supported by the regress argument, with our natural propensities to believe. Fogelin says that this “causal explanation of moderate scepticism as the natural terminus of philosophical reflection is, I believe, Hume’s major contribution to the skeptical tradition.” (Fogelin 1983, p. 399) Another consequence of Hume’s solution to scepticism with regard to reason is shared by his response to scepticism with regard to the senses; in each case one’s beliefs survive only because nature “has not left this to his choice, and has doubtless esteem’d it an affair of too great importance to be trusted to our uncertain reasonings and speculations.” (T 187, 1.4.2.1) The sceptical considerations of the early sections of Part 4 of Book 1 lead us to a very different view of the faculty of reason and the faculty of the senses from that with which we started. In the end, the workings of these faculties, and the way they produce beliefs, is to be explained in terms of principles of the imagination. Hume’s scepticism supports his naturalism.

## List of Works Consulted

- Ainslie, Donald, "Hume's Scepticism and Ancient Scepticism", in Jon Miller and Brad Inwood, editors, *Hellenistic and Early Modern Philosophy* (New York: Cambridge University Press, 2003), pp. 252-273.
- Baier, Annette, *A Progress of Sentiments: Reflections on Hume's Treatise* (Harvard University Press: Cambridge 1991).
- Bennett, Jonathan, *Learning from Six Philosophers* (Oxford University Press: Oxford 2001), volume 2.
- Burnyeat, Myles, *The Sceptical Tradition* (University of California Press: Berkeley 1983).
- Burnyeat, Myles, and Frede, Michael, eds., *The Original Sceptics: A Controversy* (Hackett: Indianapolis 1997).
- Coleman, Dorothy, "Baconian Probability and Hume's Theory of Testimony", *Hume Studies* 27 (2001), pp. 195-226.
- Descartes, René, *The Philosophical Writings of Descartes*, 2 vols, trans. Cottingham et al, (Cambridge: Cambridge University Press 1985).
- Falkenstein, Lorne, "What Happens when Beliefs Conflict?", unpublished paper, read at Hume Society Conference, Monterey 1997.
- Fine, Gail, "Descartes and Ancient Scepticism: Reheated Cabbage?", *The Philosophical Review* 109 (2000), pp. 195-234.
- Fogelin, R. J., "The Tendency of Hume's Scepticism", in Burnyeat 1983, pp. 397-412.
- Fogelin, R. J., *Hume's Scepticism in the Treatise of Human Nature* (Routledge: London 1985).
- Fogelin, R.J., "Hume's Scepticism" in Norton, David, ed., *The Cambridge Companion to Hume* (CUP: Cambridge 1993), pp. 90-116.
- Garrett, Don, *Cognition and Commitment in Hume's Philosophy* (OUP: New York 1997).
- Garrett, Don, "'A Small Tincture of Pyrrhonism': Scepticism and Naturalism in Hume's Science of Man", in Walter Sinnott-Armstrong, ed., *Pyrrhonian Scepticism* (OUP: Oxford 2004).
- Garrett, Don, "Hume's Conclusions in Conclusion of this Book", in Saul Traiger, ed., *The Blackwell Guide to Hume's Treatise* (Oxford 2006) pp. 151-176.
- Hacking, Ian, "Hume's Species of Probability", *Philosophical Studies* 33 (1978), pp. 21-37.
- Hankinson, R.J., *The Sceptics* (Routledge: London and New York 1995).
- Hume, David, *Dialogues Concerning Natural Religion*, ed. Kemp Smith, Norman (Bobbs-Merrill: Indianapolis 1947).
- Hume, David, *Enquiries Concerning the Human Understanding and Concerning the Principles of Morals*, ed. L.A. Selby-Bigge (Clarendon Press: Oxford 1970).
- Hume, David, *A Treatise of Human Nature*, ed. L.A. Selby-Bigge and P.H. Nidditch (Clarendon

Press: Oxford 1987).

Hume, David, *An Enquiry concerning Human Understanding*, ed. Tom Beauchamp (Oxford University Press: Oxford 1999).

Hume, David, *A Treatise of Human Nature*, eds. David Norton and Mary Norton (Oxford University Press: Oxford 2000).

Kemp Smith, Norman, *The Philosophy of David Hume* (MacMillan: London 1966).

LoLordo, Antonia, "Probability and Scepticism about Reason in Hume's *Treatise*", *The British Journal for the History of Philosophy* 8 (2000), pp. 419-446.

McNabb, D.G.C., *David Hume: His Theory of Knowledge and Morality* (Basil Blackwell: Oxford 1951).

Meeker, Kevin, "Hume's Iterative Probability Argument: A Pernicious Reductio", *Journal of the History of Philosophy* 38 (2000), pp. 221-238.

Morris, William Edward, "Hume's Scepticism About Reason", *Hume Studies* 15, 1989, pp. 39-60.

Nozick, Robert, *Philosophical Explanations* (Oxford: Clarendon Press 1981).

Popkin, R.H., *The History of Scepticism from Erasmus to Spinoza* (University of California Press: Berkeley 1979).

Popkin, R.H., *The High Road to Pyrrhonism*, Watson, R.A., and Force, J.E., eds. (Hackett: Indianapolis 1980).

Owen, David, "Reason, Reflection and *Reductios*", *Hume Studies* 20 1994, pp. 195-210.

Owen, David, *Hume's Reason* (OUP: Oxford, 1999)

Owen, David, "Locke and Hume on Belief, Judgement and Assent", *Topoi* 22 2003, pp. 15-28.

Passmore, John, *Hume's Intentions* (Duckworth: London 1968).

Penelhum, Terence, *Hume* (New York: St. Martins Press 1975).

Popkin, Richard, *Scepticism from Erasmus to Spinoza* (Berkeley: University of California Press 1979).

Reid, Thomas, *Philosophical Works*, 2 vols, ed. William Hamilton (1895), reproduced, with introduction by Harry Bracken (Georg Olms Verlagsbuchhandlung: Hildesheim 1967).

Stove, David, *Probability and Hume's Inductive Scepticism* (Clarendon Press: Oxford 1973).

Stroud, Barry, *Hume* (Routledge: London 1977).

Waxman, Wayne, "The Point of Hume's Scepticism with Regard to Reason: The Primacy of Faculty Affect in the Theory of Human Understanding", *Hume Studies* 24 1998, pp. 235-273.

Wilson, Fred, "Is Hume a Sceptic with Regard to Reason?", *Philosophy Research Archives* 10 1984, pp. 275-319.

Wilson, Fred, "The Origins of Hume's Sceptical Argument Against Reason", *History of Philosophy Quarterly* 2 (1985), pp. 323-336.

Wilson, Fred, *Hume's Defence of Causal Inference* (Toronto: University of Toronto Press 1997).

## Notes

Parts 3 and 4 of this paper have a distant ancestor in chapter 8 of Owen 1999. Many thanks to Donald Ainslie, Lorne Falkenstein, Bob Fogelin, Don Garrett, Antonia LoLordo, Kevin Meeker, Ted Morris, Angela Coventry and Wayne Waxman. I have learned much, not just from their published work, but also from many discussions concerning topics related to this paper over the last few years. Pressure from several of these friends has persuaded me that the negative arguments of 1.4.1 have more epistemological import than I once thought. Various versions of this paper have been read at the Hume Society Conference in Helsinki, the Pacific APA, Departmental Colloquium at Uppsala University and the University of Quebec at Montreal, the Philosophy in Assos Conference and the scepticism group lead by Plino Junqueira Smith in São Paulo.

This paper was commissioned, in 2001, for *The Cambridge Companion to Hume's Treatise*, ed. by Donald Ainslie. It was completed in June 2002, though minor revisions have been made since. It is to be translated into Portuguese and published in a collection of essays on Hume, edited by Livia Guimarães. It is available in English at

<http://www.ic.arizona.edu/ic/dwo/David's%20Papers/swrtR1.pdf>.

“Hume’s Conclusions” (Garrett 2006) appeared long after this paper was written. His discussion of 1.4.1, *inter alia*, is highly recommended, as is Garrett 2004. These papers, plus chapter 10 of Garrett 1997, constitute an important and significant account of Hume’s skepticism. (April 2009)

---

<sup>1</sup> Passmore’s discussion (in Passmore 1968, first published in 1952), pp. 134-37, is a notable exception, though he does think that in the discussion of scepticism in the *Treatise* “Hume lapses into inconsistencies of the most startling character.” (Passmore 1968, p. 133) See also Fred Wilson’s two articles, published in the mid-80’s. These are reworked in Wilson 1997. See footnote 5 for ways of referring to Hume’s *Treatise* and his first *Enquiry*.

<sup>2</sup> Reid describes the claim that “the truth and fidelity of our faculties can never be proved by reasoning; and that therefore our belief of it cannot be founded on reasoning” as “a manifest truth”. Thomas Reid, *Essays on the Intellectual Powers of Man*, Essay 7, chapter 4 “Of Mr. Hume’s Scepticism with Regard to Reason” (Reid 1895, vol 1, p. 485).

<sup>3</sup> Compare Penelhum 1975, p. 198 n., “I omit discussion here of the unappetizing arguments of Section 1 of Part IV of Book I of the *Treatise*, ‘Scepticism with Regard to Reason’.” Fogelin, having cited Penelhum here, continues “He [Penelhum] then remarks, quite correctly, that this skeptical argument is not repeated in the *Enquiry*” (Fogelin 1985, p. 173 n. 1.) See Section 2 of

---

this paper for some evidence that the negative arguments, at least the first negative argument, of 1.4.1, are represented in the *Enquiry*. It is likely that both Penelhum and Fogelin had in mind only Hume's second negative argument, and not the first.

<sup>4</sup> See Fogelin 1983, 1985, 1993. See especially Fogelin 1985, pp. 17-19.

<sup>5</sup> References to *A Treatise of Human Nature* are of the form 'T n, 1.2.3.4', where 'n' is a page number in Hume 1987, while '1.2.3.4' refer to the book, part, section and paragraph numbers, as numbered by the Nortons in Hume 2000. References of the form 'N12' refer to the paragraph numbers of the *Abstract*, as found in Hume 2000. References to *An Enquiry Concerning Human Understanding* are of the form 'EHU n, 1.2', where 'n' is a page number in Hume 1970 and '1.2' are section and paragraph numbers, as numbered by Tom Beauchamp in Hume 1999.

<sup>6</sup> "[E]ntire confidence in any truth", "his confidence encreases", "universal assent and applauses of the learned world", "gradual encrease of assurance" (all from T 180, 1.4.1.2), "our assurance in a long numeration" (T 181, 1.4.1.3), "a greater assurance in his opinions" (T 182, 1.4.1.5), "the original uncertainty", "a new uncertainty", "every new uncertainty" (all from T 182, 1.4.1.6).

<sup>7</sup> Note the problem the sceptic faces (or poses) is lack of certainty, and hence uncertainty about truth, not lack of justification.

<sup>8</sup> Among the few discussions are I know are Fogelin 1985, n. 2 pp. 173-4, Ainslie 2003 and Wilson 1985. Bennett finds in Hume's first negative argument an echo of Descartes (Bennett 2001, p. 319). Bennett also shares my view on the importance of this relatively neglected argument: "The heart of iv.1 is in its first paragraph - Hume's insight that *every* human faculty is a part or aspect of the natural world; its exercise involves the functioning of some mechanism; any mechanism can malfunction; so no human faculty is proof against error." (Bennett 2001, p. 318; see note 34 below for further discussion of this point.)

<sup>9</sup> See Popkin 1979 and 1993, Hankinson 1995, Burnyeat and Frede 1997, and Fine 2000.

<sup>10</sup> *Principles of Philosophy*, Part One, Section 5. In Descartes 1985, vol. 1, p. 194. See also Part Four of his *Discourse on the Method*, *ibid.* vol.1, p. 127: "And since there are men who make mistakes in reasoning, committing logical fallacies concerning the simplest questions in

---

geometry, and because I judged I was as prone to error as anyone else, I rejected as unsound all the arguments I had previously taken as demonstrative proofs.” And see also the first of the *Meditations on First Philosophy, ibid.*, vol. 2, p. 14: “What is more, since I sometimes believe that others go astray in cases where they think they have the most perfect knowledge, may I not go wrong every time I add two and three or count the sides of a square, or in some even simpler matter, if that is imaginable?”

<sup>11</sup> Reid argues against Hume in a similar fashion: “one false step in a demonstration destroys the whole, but cannot turn it into another kind of proof.” Reid 1895, vol 1, p. 485.

<sup>12</sup> Section 3, Part a “Knowledge and Probability”

<sup>13</sup> See the next part of this section of this paper, “Successors of the arguments in Hume”.

<sup>14</sup> Reid 1895, vol. 1, p. 485.

<sup>15</sup> Kemp Smith says that Hume does not “question the reliability of reason properly executed” (Kemp Smith 1966, p. 358). It is “the irruption of other causes” (T 180, 1.4.1.1) that prevents us from reaching truth, and truth is the “natural effect” of reason. This makes it look as if there is an important difference between Hume and Descartes here. Descartes wonders whether our faculty of reason might be inherently unreliable, while Hume, at least of the start of this section, is happy to admit that in “all demonstrative sciences the rules are certain and infallible” (T 180, 1.4.1.1). But he immediately adds “but when we apply them, our fallible and uncertain faculties are very apt to depart from them, and fall into error.” So it looks as if Hume’s position here is that if properly executed, reason reaches the right results, but that the faculty of reason is such that it is liable not to be properly executed. And surely this is to question the reliability of reason. Furthermore, Hume’s conclusion is that, when left to its own devices, reason self-destructs. There is something dubious, if not exactly unreliable, about such a faculty.

Garrett (2006) suggests that Hume’s characterization of reason as a cause of truth, where the production of truth is sometimes prevented by “the inconstancy of our mental powers”, invites us to think of Hume as appealing here to the probability of causes, “where there is *contrariety* in our experience and observation.” (1.3.12.3) Such a *contrariety* “may give us a kind of hesitating belief for the future” (1.3.12.5). So here is another route from fallibility to probability: reflection on our fallibility provides us with the mixed experience which leads to judgments of the probability of causes.

---

<sup>16</sup> In his 1985, Fogelin makes it clear that the ancient trope he has in mind is the argument from the criterion of truth. (Fogelin 1985, n. 2, pp. 173-74). Ainslie (2003) concurs with this as a point of similarity, but argues, quite persuasively, that “it is hard to equate the ancient Pyrrhonists with Hume’s ‘total’ sceptics.” (p. 8)

<sup>17</sup> Reid 1895, vol. 1, p. 487.

<sup>18</sup> Hume’s point about testimony at T 145 (1.3.13.5) is made in the context of his veiled reference to “a very celebrated argument against the *Christian Religion*”. Norton mentions both Craig’s argument in *Craig’s Rules of Historical Evidence*, and the argument of “A Calculation of the Credibility of Human Testimony”, as possible candidates for the argument to which Hume is referring. See Hume (2000), p. 464. Wilson, although recognizing the importance of these sources, argues that Berkeley’s *Alciphron* is a better candidate. See Wilson 1985, *passim*. The point about testimony weakening as the chain increases in length was, as Wilson documents, a commonplace in legal and philosophical discussion in the 17<sup>th</sup> and 18<sup>th</sup> century, and was the basis for ruling out hearsay. See Locke, *An Essay Concerning Human Understanding*, 4.16.10.

<sup>19</sup> Fogelin 1983, p. 409.

<sup>20</sup> Beauchamp supports this in his “Editor’s Introduction” to Hume 1999, pp. 54-56.

<sup>21</sup> See Selby-Bigge’s “Comparative Tables of Contents of the *Treatise* and of the *Enquiries* and *Dissertation on the Passions*”, Hume 1970, p. xxxv. Cf. Passmore 1968, p. 134: “[T]here is *antecedent* scepticism, of the sort recommended by the Cartesians... This antecedent scepticism is closely related to the ‘scepticism with regard to reason’ which Hume presents in the *Treatise*, although it is there commingled, as it is in Descartes, with what Hume calls ‘consequent scepticism’ - the scepticism which arises out of our discovery that our faculties not only might, but do in fact, lead us into error.”

<sup>22</sup> Reid 1895, vol. 1, p. 489.

<sup>23</sup> If Garrett is right about the first negative argument in 1.4.1 being an instance of the probability of causes (see note 15 above), then that argument must be classified as a piece of consequent, not antecedent scepticism, and the suggestion that the first negative argument of 1.4.1 survives in

---

some form in the first part of the last section of the *Enquiry* fails. In any event, the appeal to doubts about our faculties in each case is, at the very least, suggestive.

<sup>24</sup> See Hume 2000, p. 568.

<sup>25</sup> Norton also points out, surely correctly, that the sentence “Philosophy would render us entirely *Pyrrhonian*, were not nature too strong for it” is a clear echo of 1.4.1.7-8.

<sup>26</sup> Fogelin 1983, p. 405-406.

<sup>27</sup> “For I have already shewn, [here there is a reference to 1.4.1] that the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or common life.” (T 267-8, 1.4.7.7)

<sup>28</sup> Hume 1947, p. 135. Assuming that this passage reflects what Hume actually believed, it lends support to the view argued for in the next section that the negative arguments, if not countered by Hume’s positive account, would establish, not that our beliefs are unjustified, but that they would cease to be beliefs at all. Hume says “we could never retain any conviction or assurance, on any subject”. Conviction or assurance just is belief, for Hume.

<sup>29</sup> See Owen 1999, chapter 5, for a discussion of Hume on demonstration .

<sup>30</sup> For example, Hume says “If you assert, that vice and virtue consist in relations susceptible of certainty and demonstration, you must confine yourself to those *four* relations, which alone admit of that degree of evidence.” (T 463, 3.1.1.19) By “demonstration”, he must mean “intuition or demonstration”, because he has already argued that only one of these four relations is capable of sustaining demonstrative reasoning. See T 70-71 (1.3.1.3-5).

<sup>31</sup> The Nortons remind us, in the annotation to 1.4.1.1, that for Locke, the results of demonstration were less certain than those of intuition, in part because of comparative length and complexity of the former. This suggests that Hume in this paragraph can be taken to argue that demonstrations are even less certain than Locke thought. See Hume 2000, pp. 470-471. For more detail, see Owen 1999, chapter 3.

---

<sup>32</sup> See Garrett 1997, pp. 223-24 for further argument that Hume intends his first negative argument to apply to both intuition and demonstration.

<sup>33</sup> I was made aware of this interesting problem by Falkenstein 1997. Falkenstein thinks there is a good deal to be said for keeping the two cognitive modes separate, and limiting the effect one can have upon the other.

<sup>34</sup> For further discussion on Hume's distinction between knowledge and belief, and its relation to Locke's, see Owen 2003. That paper begins to address a topic that deserves much further study. The results of both demonstrations and proofs ("proofs" in Hume's technical sense, i.e., "those arguments, which are deriv'd from cause and effect, and which are entirely free from doubt and uncertainty" (1.3.11.2)) are certain. But the certainty is of a different character and comes from a different source in each case. The certainty of a belief which results from a proof just is the manner of conceiving it, i.e., with a very high degree of force vivacity. For Hume, the degree of certainty and the level of assent or degree of belief are the very same thing. And its source is the exceptionless uniformity of the proof of the belief. Now it is clear what the source of the certainty of an item of knowledge (the result of demonstration or intuition) is. It is the inconceivability of the alternatives. But what is the character of the certainty, and of the assent we give to knowledge? It is not force and vivacity, surely. Could it be our literal inability to conceive of alternatives? The limits of our conceptual ability do not appear to be things we struggle with every time we claim to know something. Whatever the nature of demonstrative certainty, Hume appears committed to the view that it in part depends on our psychology, or cognitive architecture. What we know depends on causal mechanisms, and those mechanisms (like all natural mechanisms) can go wrong. The first negative argument of 1.4.1 forces us to confront these issues. Thanks to Donald Ainslie, Lorne Falkenstein and Antonia LoLordo for pressing me on all this. Some of Falkenstein and LoLordo's points were made in their respective contributions to an Author Meets Critics session at the Pacific APA, March 2002, on Owen 1999.

<sup>35</sup> For discussion of this point, see the next paragraph.

<sup>36</sup> In her contribution to the Author Meets Critics session at the Pacific APA, March 2002, on Owen 1999.

<sup>37</sup> See footnote 34 above.

---

<sup>38</sup> The strategy of distinguishing between first order knowledge and belief claims on the one hand, and second-order belief claims about knowledge on the other was suggested to me by Nozick's well known discussion of epistemology in Nozick 1981. He there argues for the now familiar claim that it may be true that I know that  $p$  even though it is false that I know that I know that  $p$ . For instance, I may not know that I know that I am sitting in front of the fire, because for all I know I may be asleep in bed dreaming. But if it turns out I am not dreaming, but am awake in front of the fire, then I do know that I am sitting in front of the fire. Kevin Meeker tells me that most modern epistemologists would be unhappy with the rejection of the entailment of "knowing that one knows  $p$ " from "knows  $p$ ". But this shouldn't affect our interpretation of Hume.

<sup>39</sup> It is not completely clear whether Hume intended the conclusion of the first argument of 1.4.1 to stand or not. In any case, the first argument is untouched by Hume's solution to the problem posed by the second argument. Furthermore, I think that the position of moderate scepticism I have just sketched is both a plausible conclusion to the first argument, and consistent with the cautiously sceptical views Hume expresses elsewhere. For example, consider the concluding words of Book 1:

On such an occasion we are apt not only to forget our scepticism, but even our modesty too; and make use of such terms as these, *'tis evident*, *'tis certain*, *'tis undeniable*; which a due deference to the public ought, perhaps, to prevent. I may have fallen into this fault after the example of others; but I here enter a *caveat* against any objections, which may be offer'd on that head; and declare that such expressions were extorted from me by the present view of the object, and imply no dogmatical spirit, nor conceited idea of my own judgment, which are sentiments that I am sensible can become nobody, and a sceptic still less than any other. (T 274, 1.4.7.15)

See also Hume's description of moderate, antecedent scepticism, EHU 150, 12.4.

<sup>40</sup> Coleman 2001. The relevance of Coleman's point to my discussion was brought to my attention by Lewis Powell.

<sup>41</sup> This interpretation of Hume's argument was first brought to my attention by Nicole Hassoun, in a paper she wrote for a seminar on Hume's *Treatise* at the University of Arizona, Spring 2002. I have since discovered that is also put forward by Bennett, in Bennett 2001, p. 315.

<sup>42</sup> Fogelin notes that it was made, in essence, by Reid and, in detail, by Hacking. See Fogelin

---

1985 n. 6, p. 174, and Hacking 1978.

<sup>43</sup> This is the important lesson of Morris 1989. Of course, as Kevin Meeker reminds me, we can have a formal assignment of probabilities, where probability is interpreted subjectively. And Fogelin presents “a more sophisticated version of Hume’s argument” (Fogelin 1985, p. 19), which he relates, via Hacking 1978, to Neyman’s theory of confidence values (Fogelin 1985, p. 174, note 5.) I am not sure that either Meeker or Fogelin would agree that thinking of Hume’s argument in terms of declining level of assent should lead one towards thinking of it, less as a matter of declining rational grounds, and more as a matter of declining evidence, where evidence is treated in the 18<sup>th</sup> century sense of “evidentness.” See the next note.

<sup>44</sup> This interpretation is defended in Owen 1999, chapter 8, and a roughly similar one is defended in Garrett 1997, chapter 10. Both of these, as well as Morris 1989, are criticized in Meeker 2000. One of the main points of contention is Hume’s use of term “evidence”. Meeker treats it in the standard, epistemological way, while Owen and Garrett argue that Hume uses “evidence” more in the sense of “evidentness”. The evidence of a belief, for Hume, just is the degree of conviction or assent we attach to it, that is it is a matter of the force and vivacity of the relevant idea. When Hume speaks of “a total extinction of belief and evidence” (T 183, 1.4.1.6) he means the disappearance of the relevant force and vivacity that turns a mere idea into a belief. For details, see Owen 1999, pp. 185-88. See also the glossary entry for “evidence” in Hume 2000, and Bennett 2001, p. 315.

<sup>45</sup> Consider also “Let our first belief be never so strong, it must infallibly perish by passing thro’ so many new examinations, of which each diminishes somewhat of its force and vigour.” (T 183, 1.4.1.6)

<sup>46</sup> Hume makes a similar point about memory as a faculty on T 153 (1.3.13.19). Having characterized force and vivacity as the qualities that “constitute in the mind, what we call the BELIEF of the existence of any object”, he says “This force and this vivacity are most conspicuous in the memory; and therefore our confidence in the veracity of that faculty is the greatest imaginable, and equals in many respects the assurance of a demonstration.” The faculty of memory produces the most forceful and vivacious ideas; that is why the ideas of memory are considered, with such a high degree of confidence, to be true.

<sup>47</sup> Thanks to Donald Ainslie for pointing out to me that references to 1.4.1 virtually frame the

---

discussion of scepticism with regard to the senses in 1.4.2. The symposium on Hume's scepticism, held at the Hume Society Conference in Helsinki, July 2002, was meant to encourage a look at the first two sections of Part 4 of Book I of the *Treatise* as a continuous discussion. The other symposiasts were Donald Ainslie and Ken Winkler. See footnote 2 above for Reid's response to Hume's claim that we cannot defend reason by reason. Reid, and Beattie following him, thought that this was a "manifest truth", rather than a sceptical result.

<sup>48</sup> The topic of this stage of 1.3.13 is just the same as the topic of the stage of 1.4.1 that we are now considering: the importance of Hume's "peculiar manner" account of belief.

<sup>49</sup> In Hume's case, that length and complexity lessen the certainty with which the conclusion of an argument is held is partially due to his theory of the association of ideas:

two objects are connected together in the imagination, not only when the one is immediately resembling, contiguous to, or the cause of the other, but also when there is interposed betwixt them a third object, which bears to both of them any of these relations. This may be carried on to a great length; tho' at the same time we may observe, that *each remove considerably weakens the relation*. (emphasis added) (T 11, 1.1.4.3)

This and other aspects of Hume's account of reasoning are discussed in Owen 1999. LoLordo, in her 2000, also thinks that thinking of a piece of reasoning as a chain of ideas should affect the way we interpret the argument of 1.4.1. Waxman interprets the argument in terms of the changing degree of our facility in moving from one idea to another. See Waxman 1998. Lack of space prevents further discussion of these interesting accounts.

<sup>50</sup> In Garrett 1997, this principle is called "The Title Principle", and is given an important role to play.

<sup>51</sup> Consider the following, from the third part of Section 12 of the *Enquiry*:

The greater part of mankind are naturally apt to be affirmative and dogmatical in their opinions... But could such dogmatical reasoners become sensible of the strange infirmities of human understanding, even its most perfect state, and when most accurate and cautious in its determinations; such a reflection would naturally inspire them with more modesty and reserve, and diminish their fond opinion of themselves, and their prejudice against antagonists" (EHU 161, 12.24).

<sup>52</sup> The full context of this passage is very complex. Hume is considering the third instance of

---

unphilosophical probability. He starts out by once again pointing out that the length and complexity of arguments can diminish the certainty with which their conclusions are held: “tho’ our reasonings from proofs and from probabilities be considerably different from each other, yet the former species of reasoning often degenerates insensibly into the latter, by nothing but the multitude of connected arguments.” (T 144, 1.3.13.3) The point is developed in the rest of the paragraph. He then raises the problem of historical evidence, already mentioned. The point about testimony follows, but it is made in the context of “a very celebrated argument against the *Christian Religion*” (T 145, 1.3.13.5) (see note 18 above). If the argument were correct, then “there is no history or tradition, but what must in the end lose all its force and evidence.” In other words, the argument against the Christian religion is just an instance of the general problem of historical evidence. Hume gives his solution to the problem on the next page. I outlined the solution in section 4a) of this paper. Although Hume thought the historical evidence problem could be solved, it still remains the case that the longer the chain of testimony, the less the certainty of the information testified to.

<sup>53</sup> See also Ainslie 2003: “As David Owen has reminded us, it was a common-place of early-modern logic to hold that the certainty of an argument was inversely proportional to its length and complexity. Hume’s sceptical argument is meant to show that every argument should be infinitely complex, and thus we should have no faith in the verdicts of our reason.” Although Ainslie explicitly distances himself from Wilson’s comparison of the testimony case to the regress argument, he nonetheless, like Wilson, considers the regress argument to be an instance of the general truth that complexity diminishes certainty. This is what I called “the natural reading”. I will argue, against the natural reading, that Hume’s forward reference to 1.4.1 is not to the regress argument, but to Hume’s *response* to the regress argument.

<sup>54</sup> Another point against the natural interpretation is that the point about conviction not surviving long chains of testimony is made in 1.3.13 as a point of unphilosophical probability. But the second negative argument is supposed to rest on nothing but reason. It would be entirely out of keeping with Hume’s purpose in 1.4.1 for the negative argument to turn on a point of unphilosophical probability, but entirely in keeping with his purpose for his *response* to that argument to turn on such a point. Wilson argues that it follows from the natural reading that Hume regarded the second negative argument as unsound (Wilson 1984, pp. 278-82). I agree with the inference, but conclude by *modus ponens* that the natural reading is false. Further evidence for my interpretation comes from Hume’s reference at T 267-68 (1.4.7.7), which is clearly to his response to the regress argument, and not to the argument itself: “We save

---

ourselves from this total scepticism only by means of that singular and seemingly trivial property of the fancy, by which we enter with difficulty into remote views of things.”

<sup>55</sup>Strictly speaking, what Hume says here is misleading, and the 1.4.1 case is not really an exception, though it is memorable. Hume’s solution to the sceptical arguments of 1.4.1 is to say that the effects of the negative arguments do not survive the lengthy chain of reason. This is what typically occurs with such a chain, so it is not an exception as is the historical evidence case. It is true that there is a judgment that survives a lengthy chain of reason, but it is not the judgment that is the conclusion of the chain of reasoning; indeed the latter judgment, which does not survive, is the negation of the first judgment, which does. This is not the only part of this passage that is misleading. Hume describes the apparent failure of long chains of testimony to support belief as follows: “Every new probability diminishes the original conviction; and however great that conviction may be suppos’d, ’tis impossible it can subsist under such re-iterated diminutions.” (T 145, 1.3.13.5). It is extremely difficult, especially with the footnote referring us to 1.4.1, not to interpret this as an allusion to the second negative argument, as the natural interpretation does.. But as I have argued, this is almost incoherent. It may be that Hume himself is confused here.

<sup>56</sup> See section 3b) of this paper.

<sup>57</sup>In 1.4.7, Hume treats the vivacity of ideas as the property of the imagination on which “the memory, senses, and understanding are, therefore, all of them founded” (T 265, 1.4.7.3). This property is (seemingly) “trivial” and “little founded on reason”. Another, related, property of the imagination (and surely a causal consequence of the first), is the “seemingly trivial property of the fancy, by which we enter with difficulty into remote views of things, and are not able to accompany them with so sensible an impression, as we do those, which are more easy and natural.” (T 268, 1.4.7.7) Now the understanding is constituted by “the more general and more establish’d properties of the imagination”, explicitly contrasted with “all the trivial suggestions of the fancy” (T 267, 1.4.7.7). So it certainly looks here as if vivacity, and the related inability of the mind to retain vivacity through complexity, are trivial properties of the fancy or imagination, in contrast with those “general and more establish’d properties” that constitute the understanding. So the understanding, when it acts alone, cannot produce beliefs (when we reason probably, we are not “determin’d by reason”); and even if it could, such beliefs would be unstable, as the understanding would self-destruct in the face of sceptical arguments.