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DAVID HUME’S REDUCTIONIST
EPISTEMOLOGY OF TESTIMONY

Paul Faulkner

ABSTRACT

David Hume advances a reductionist epistemology of testimony: testimonial beliefs are justified on the basis of beliefs formed from other sources. This reduction, however, has been misunderstood. Testimonial beliefs are not justified in a manner identical to ordinary empirical beliefs; it is true, they are justified by observation of the conjunction between testimony and its truth, it is the nature of the conjunctions that has been misunderstood. The observation of these conjunctions provides us with our knowledge of *human nature* and it is this knowledge which justifies our testimonial beliefs. Hume gives a naturalistic rather than sceptical account of testimony.

Testimony is a unique source of belief. It is unique in the sense that many of our beliefs have been formed only through accepting testimony. Examples are easy to enumerate; my belief that a major ocean current flows from the Gulf of Mexico to North-West Europe and my belief that there have been two World Wars this century both depend on testimony. I have not seen the entire passage of the North Atlantic Drift. Nor do I remember the
catastrophic events that were World War One and Two. It is equally clear
that testimony is a unique source of knowledge. Again, unique in the sense
that much of our knowledge has been acquired only through accepting
testimony. Unless one is to propose a revisionary account of what it is to
know, I do not merely believe that there is a major ocean current flowing
from the Gulf of Mexico to North-West Europe but I know that there is.
Likewise, I do not merely believe that there have been two World Wars this
century, but I know that this is so.

Thus, if it is supposed that one can know that something is the case
only if one can be justified in believing that it is, then a fundamental question
confronting the epistemology of testimony is, ‘How are testimonial beliefs
justified?’ Responses to this question can be divided into two categories.
Anti-reductive responses claim that testimonial beliefs are justified, other
things being equal, simply because they were formed through accepting
testimony. As a source of knowledge testimony is comparable to perception
and memory. Reductive responses claim that testimonial beliefs are justified
only because and insofar as reasons were possessed for accepting whatever
testimony caused their formation. The justification of testimonial beliefs
thereby reduces to the justification for beliefs formed by other sources.

One can distinguish two types of theory as to how testimonial beliefs
are justified. However were it not for David Hume, there would be two types
of theory in name only: Hume is unique in holding a reductionist
epistemology of testimony.¹ Thus Hume’s position has been used as a foil in
setting up an anti-reductive epistemology of testimony.² If ‘Hume’s
reductionist theory’ is to play this role, one must be clear about what Hume’s
‘theory’ is. This is not straightforward because Hume does not give a theory
of testimony. His remarks on testimony are primarily to be found in the section ‘Of Miracles’ in *An Enquiry Concerning Human Understanding* where his concern is the impossibility of testimony supporting belief in the miraculous.

In this paper I want to sketch how I think Hume’s reductionism should be understood. A coherent position can be extracted from Hume’s remarks on miracles. But this position is very different to that which has been employed as a foil.

I shall proceed as follows. In the first section I will outline a certain reductionist epistemology of testimony, show how Hume has been interpreted in accord with this position and then illustrate why this interpretation seems wrong. In the second section I will develop what I take to be the correct account of Hume’s reductionism. In the third section I will show how this interpretation explains what Hume had to say about testimony as to miracles. Finally, in the fourth section, I will conclude with some remarks on the implications of this interpretation of Hume.

### I. Our Prior Reasons for Believing Testimony Credible.

When a speaker’s intelligible expression of a proposition is *evidence* that this proposition is probably true, then let me say that the testimony is *credible* and otherwise that it is *non-credible*. Credible testimony, therefore, *reliably* expresses true propositions. A reductionist epistemology of testimony could be characterised in terms of the following claims. First, the
mere fact that a speaker intelligibly expressed a proposition provides no reason to believe this proposition. Second, it is only insofar as an audience possesses reasons for believing that a testimony is credible that he is justified in accepting it. Thus, if reductionism is not to be a wildly revisionary proposal, then it must allow that audiences can possess reasons for believing testimony to be credible. That is, this second claim raises the question, ‘How does our experience enable us to judge whether or not a testimony is credible?’

The following answer is possible. First, we can judge that any given testimony \( t \) belongs to a certain type of testimony. We clearly distinguish between different types of testimony; doctors, for instance, are trusted more than apothecaries. Second, we can judge whether or not types of testimony are credible. Our experience enables us to form this judgement because, for a certain type of testimony \( T \), we can observe the correlation between expressions of type \( T \) testimony and the states of affairs which make the proposition expressed in each case true. Third, we can directly infer the credibility of testimony \( t \) from these generalisations. Thus justification is conferred by the following syllogism: testimony \( t \) is testimony of type \( T \); type \( T \) testimony has been established to be credible; therefore testimony \( t \) is credible. Thus the reductionist could claim that our experience supplies us with prior reasons for judging testimony to be credible and it is on the basis of these reasons that our testimonial beliefs are justified.\(^3\)

Hume’s reductionist epistemology of testimony has been interpreted in these terms.

“David Hume”, according to C.A.J. Coady, “is one of the few
philosophers who has offered anything like a sustained account of testimony and if any view has a claim to the title of the ‘received view’ it is his.” Coady’s interpretation of Hume’s ‘sustained account’ concentrates on the following two passages taken from ‘Of Miracles’:

(1) 
[Our trust in testimony derives from] no other principle than our observation of the veracity of human testimony, and of the usual conformity of facts to the reports of witnesses. It being a general maxim, that no objects have any discoverable connexion together, and that all the inferences, which we can draw from one to another, are founded merely on our experience of their constant and regular conjunction; it is evident, that we ought not to make an exception to this maxim in favour of human testimony, whose connexion with any event seems, in itself, as little necessary as any other.  

(2) And as the evidence, derived from witnesses and human testimony, is founded on experience so it varies with the experience and is regarded either as a proof or a probability according as the conjunction between any particular kind of report and any kind of object has been found to be constant or variable.

From these two quotes Coady interprets Hume as follows. (1) suggests that we are justified in believing testimony only because we have observed past conjunctions between reports and reported facts. (2) suggests that the conjunctions we observe are between types of testimony and the truth of instances of these types. With this I concur.

Coady proceeds to interpret (1) and (2) on the model of prior reasons. That is, our past observations of the conjunctions between testimony and the testified facts establish certain types of testimony to be credible and
allow us thereby to infer the credibility of any such testimony. However Hume does not state that we infer the credibility of testimony from our past observations of the conjunctions between testimony and the testified facts but that we judge there will be such a conjunction because we observe the veracity of testimony. That is, we can make a direct, rather than inferential, judgement of the credibility of testimony. How could we make such a judgement? Hume continues:

had not men commonly an inclination to truth and a principle of probity; were they not sensible to shame, when detected in falsehood: Were not these, I say, discovered by experience to be qualities inherent in human nature, we should never repose the least confidence in human testimony.

Our experience of human nature includes our experience of the “usual conformity of the facts to the reports of witnesses”. This experience allows us to directly judge the credibility of testimony, to “observe its veracity”. Thus it seems that Hume possesses a different conception of our reasons for believing testimony credible. In the next section I shall attempt to provide an interpretation of this conception.

II. Testimony Judged by the Principles of Human Nature

Testimonial beliefs are formed on the basis of causal reasoning. It is custom which allows the system of ideas of one individual to be connected to those in another.
For finding with this system of perceptions, there is another connected by custom, or if you will, by the relation of cause and effect, it proceeds to the consideration of their ideas. ... The first of these systems is the object of the memory and senses; the second of the judgement. 'Tis this latter principle which peoples the world, and brings us acquainted with such existences as by their removal in time and place lie beyond the reach of the senses and memory.  

This permutation of custom is highly fortuitous: without it the world would not be peopled. In fact, “there is no species of reasoning more common, more useful, and even necessary to human life, than that which is derived from the testimony of men”.  

No weakness of human nature is more universal and conspicuous than what we commonly call CREDULITY, or a too easy faith in the testimony of others, and this weakness is also very naturally accounted for from the influence of resemblance.  

The cause of our credulity lies in the resemblance between the proposition expressed by the speaker and the fact which the audience envisages would make this proposition true. The world is stated to be such and so and in the very act of understanding how the world is so stated to be we conceive of it so being and the mind hereby moves too easily from the comprehension of what another says to a belief in what is said.  

The words or discourses of others have ... a connexion with the facts or objects, which they represent. This ... connexion is generally much over-rated, and commands our assent beyond what experience will justify ... Other effects only point out their causes in an oblique manner; but the
testimony of men does it directly, and is to be consider'd as an image as well as an effect. No wonder, therefore, we are so rash in drawing our inferences from it.\(^{12}\)

Our propensity to be credulous is unreflective; “belief is more properly an act of the sensitive, than of the cognitive part of our natures”.\(^{13}\) Presented with intelligible testimony to \(p\) we unreflectively infer a resembling cause (that \(p\)).

How, then, are testimonial beliefs justified? Section XV of the Treatise is entitled ‘Rules by which to judge of causes and effects’, by these Rules “we ought to regulate our judgement concerning causes and effects; and these rules are form’d on the nature of our understanding.”\(^{14}\) Thus,

In every judgement which we can form concerning probability, as well as concerning knowledge, we ought always to correct the first judgement, deriv’d from the nature of the object, by another judgement, deriv’d from the nature of the understanding.\(^{15}\)

Our “first judgement” derives from the nature of testimony: it represents the world as being a certain way and by the principle of resemblance we are led into a “too easy faith in its truth”. Testimonial beliefs are justified only if this first judgement is “corrected”. The passage, “No weakness of human nature...”, continues:

When we receive any matter of fact upon human testimony, our faith arises from the very same origin as our inferences from causes to effects, and from effects to causes; \textit{nor is there anything but our experience of the governing principles of human nature, which gives us any assurance of the}
How could this experience of “the governing principles of human nature” yield the understanding necessary to “correct” our credulity?

Testimonial beliefs are formed on the basis of causal reasoning. Testimony is an effect and our experience supplies us with knowledge of its past causes. Causes and effects are discovered only by experience which reveals no more than the constant conjunction of what we take to be causes and what we take to be effects. Experience provides a “proof” for a proposition where it does reveal a constant conjunction, for instance our belief that the sun will rise tomorrow. Experience makes a proposition probable when there is “an opposition of experiments and observations, where the one side is found to overbalance the other and [in which case experience] produce[s] a degree of evidence, proportioned to the superiority”. In this manner our experience shows it probable that June will be hotter than April. Thus the criterion of justification for empirical knowledge is constancy of conjunction between the belief and its evidence. The more constant the past conjunction of two events the greater the degree of justification the present impression of one conjunct provides for inferring the existence of the other. Thus the belief that this testimony is credible is justified by our observation of the constancy of the conjunction between this type of testimony and the testified event being its cause. ‘This type’ is defined by our judgement of the speaker’s nature.

Thus we can judge that the “inclination to truth” is dominant in some speakers on some occasions. Conversely our experience of human nature demonstrates that the testified event need not be the cause of testimony. Thus
we should be sceptical in accepting testimony, for instance, were the speaker, of a doubtful character; when they have an interest in what they affirm; when they deliver their testimony with hesitation, or on the contrary with too violent asseverations. There are many other particulars of the same kind, which may diminish or destroy the force of any argument derived from human testimony.\textsuperscript{19}

Given any testimony we can “observe its veracity” because we can judge the nature of testifier. We can thereby judge whether the testimony is similar to those whose cause were the testified fact.

Once we have judged the credibility of testimony we weigh it against our judgement of the prior probability of the proposition expressed. Alongside our judgement of the credibility of testimony we consider the plausibility of the proposition it expresses. This consideration is informed by such things as “the opposition of contrary testimony” and whether “the fact attested is such a one as has seldom fallen under our observation”.\textsuperscript{20} The Indian Prince was wise to be sceptical of reports that water freezes when he had no experience of water freezing: “it naturally required very strong testimony to engage his assent”.\textsuperscript{21} Once this judgement is formed the given piece of testimony can be “regarded either as a \textit{proof} or a \textit{probability}”.\textsuperscript{22}

This is essentially what I take to be Hume’s account of testimony. In the next section I will show how this interpretation remains in accord with Hume's contention that testimony cannot support belief in the miraculous.
III. The Evidence of Miracles

Hume’s remarks on testimony are primarily to be found in the section ‘Of Miracles’ in *An Enquiry Concerning Human Understanding*. Testimony, Hume contends, cannot support belief in the miraculous. Why is this the case?

Testimonial beliefs are formed on the basis of causal reasoning. Testimony is an effect and we are justified in believing a proposition expressed by testimony if and only if we are justified in believing that the states of affairs which the proposition represents were the cause of the testimony.

Thus we believe that CAESAR was kill’d in the senate house on the *ides of March*; and that because this fact is establish’d on the unanimous testimony of historians, ... and these ideas were either in the minds of such as were immediately present at that action ... or they were derived from the testimony of others, and that again from another testimony ... ‘till we arrive at those who were eye-witnesses and spectators of the event. ‘Tis obvious all this chain of argument or connexion of causes and effects, is at first founded on those characters or letters, which are seen or remember’d and without the authority either of the memory or senses our whole reasoning wou’d be chimerical and without foundation.  

Let \( p \) refer to the proposition that Caesar was killed in the Senate House on the Ides of March. We are justified in believing that \( p \) if only if we judge that the testimony presenting that \( p \) is the kind that has the attested fact as its cause. Our justification for believing that the attested fact were the cause of
testimony depends on the constancy of the past conjunctions we have observed between this type of testimony and the attested facts. Types of testimony, I claimed, are identified by our judgement of the nature of the testifier. “Our experience of the governing principles of human nature” allows us to “observe the veracity of testimony”. We can judge of each testimony whether it is the type which possesses the attested fact as its cause. Thus in believing that $p$ we believe there is a chain of testimony connecting us to the original eye-witnesses.\textsuperscript{24}

The causal relation holds between two distinct events such the former necessitates the latter. A belief in any such connection cannot be supported by ‘demonstrative reasoning’: one can conceive of an effect beginning to exist separately of conceiving of a cause of the effects beginning to exist.\textsuperscript{25} Causes and effects and discovered by experience. Thus the inference to a cause (or effect) equally cannot be supported by ‘demonstrative reasoning’ for it depends upon the supposition that the past conjunctions (between two events taken to be cause and effect) discovered by experience give good reason to presently infer a cause (or effect). That is it depends upon the supposition that “the course of nature continues always uniformly the same.”\textsuperscript{26}

Knowledge of matters of fact depends upon the supposition that nature is uniform. Testimonial knowledge depends on the correlative but subordinate supposition that human nature is uniform. Only given this supposition could our experience reveal the governing principles of human nature. Only given the assumption that the course of human nature continues always uniformly the same could we judge of each testimony whether it is the type which possesses the attested fact as its cause. It is for this reason that Hume claims,
we may establish it as a maxim, that no human testimony can have such
force as to prove a miracle, and make it a just foundation for any such
system of religion.  

The qualifier “and make it a just foundation ...” is relevant, Hume continues:

I beg the limitations here made may be remarked, when I say, that a miracle
can never be proved, so as to be the foundation of a system of religion. For
I own, that otherwise, there may possibly be miracles, or violations of the
usual course of nature, of such a kind as to admit of proof from human
testimony.  

Hume is aware that our knowledge of the laws of nature is imperfect and we
ordinarily improve this knowledge through observing what we take to be
violations of these laws. However given the supposition that nature is
uniform these falsifying observations simply prompt the formulation of more
sophisticated laws which explain both old and new observations. Thus Hume
supposes that testimony could establish that “from the first of January 1600,
there was total darkness over the whole earth for eight days”.  

It could not
establish a miracle defined as “a transgression of a law of nature by a
particular volition of the Deity”.  

If a Deity violates a law of nature, it is
not our knowledge of the uniformities of nature that is proved lacking but the
supposition that nature is uniform that is defeated. Such a miracle would be
needed to be the foundation of a system of religion but its occurrence could
never be established by testimony because it implies defeat of the supposition
that nature is uniform. Insofar as whatever epistemic force testimony
possesses derives from the supposition that human nature is uniform it cannot
endeavour to establish that nature, and a fortiori human nature, is not
uniform. To believe a testimony as to the miraculous would be to tantamount to believing that one had no reason to believe testimony.\textsuperscript{31}

Of course this argument assumes that one cannot deny that nature is uniform and yet suppose that human nature is uniform. Couldn’t one’s faith in a speaker’s ‘human nature’ be unshaken by his testimony? Maybe it could but this would be a merely psychological fact: it would not be reasonable to have an unshakeable faith in a speaker’s nature.

**IV. Conclusion: Discriminating the Normative and the Descriptive**

Testimony is a unique source of knowledge. If it is supposed that one can know that something is the case only if one can be justified in believing that it is, then in order to provide an account of testimony as a source of knowledge an account is needed as to how testimonial beliefs are justified. According to a reductionist account testimonial beliefs are justified by whatever reason our experience provides for believing the presenting testimony to be credible. One way in which our experience provides us with such reasons is that it enables us to formulate hypotheses about the credibility of certain types of testimony. On encountering such a credible type we can then make the direct inference that it too is credible.

Hume, I argued, suggests another way in which our experience provides us with reasons for believing testimony to be credible. Types of testimony are *demonstratively* identified in terms of contextual particulars
rather than identified descriptively prior to encountering testimony. These particulars allow the audience to observe the veracity of the testimony. It is as if audiences reasoned in terms of the abbreviated syllogism: *this type* of testimony is the type which has the attested fact as its cause; therefore this testimony is credible. I should like to conclude with three comments on this account of how testimonial beliefs are justified.

First, as a description of how testimonial beliefs are formed Hume’s epistemology is defensible. Consider the following illustration. A tourist in a foreign land approaches a passer-by to ask for directions to the cathedral. The tourist might possess a belief about the probable truth of ‘testimony as to local directions’ but it seems that his reasons for believing the passer-by will consist less in his reasons for this belief and more in his perception of the context. That is, he responds to his perception of the passer-by’s appearance and demeanour, her air of confidence and seeming familiarity with her environs. He judges that she was not hurrying and that when they communicated she seemed well disposed towards him, repeating her directions and parting with a smile. As an epistemological representation of the tourist’s reasoning the abbreviated syllogism noted in the last paragraph seems descriptively accurate.

Second, Hume does not clearly distinguish descriptive from normative matters. How should our understanding of a speaker’s nature “correct” our natural credulity? Should it *replace* this credulity? Or should it *temper* this credulity? Clearly it should replace our credulity: a testimonial belief fixed only by credulity is not justified. A testimonial belief is justified only insofar as it is based on our experience of the governing principles of human nature. As such Hume should state those particulars which support
belief in testimony. Particulars like those illustrated by the passer-by such as ‘seeming well disposed’, ‘not being in a hurry’ and so on. However Hume only lists particulars which “destroy the force of any argument derived from human testimony”.

Third, this lack of clarity seems to be a consequence of the fact that Hume is decidedly non-sceptical of testimony. In allowing that testimony could constitute a proof for a matter of fact belief Hume allows testimony to provide the “highest certainty” one may possess for an empirical belief. This gives considerable credit to our ability to judge the nature of others. Hume believes that

Even characters, which are peculiar to each individual, have a uniformity in their influence, ... [such that] the most irregular and unexpected resolutions of men may frequently be accounted for.\textsuperscript{33}

Thus it is not his scepticism but his optimism towards the possibility of a science of human nature which Hume demonstrates in writing on testimony. This optimism he expresses at the beginning of his *Treatise on Human Nature* where he states his intention to “explain the principles of human nature” and thereby “propose a compleat system of the sciences”.\textsuperscript{34}

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\textsuperscript{1} The terms ‘reductionism’ and ‘anti-reductionism’ come originally from Coady (1973). Anti-reductionism is by far the most common epistemological position. For instance see


3 Of course the reductionist is offering no psychological description of our actual reasoning. What is offered is an epistemological account of our actual ability to discriminate credible testimony; that is, an answer to the question, ‘How does our experience enable us to judge whether or not a speaker’s testimony is credible?’

4 Coady ibid., 79.


6 Enquiries §88, 112. Quoted in Coady ibid., 82.

7 See Coady “Testimony and Observation” American Philosophical Quarterly 10 (1973) pp. 149-55. Reprinted with minor alterations as Ch. 4 Coady op. cit.
Enquiries §88, 112.


Enquiries, §88, 111.

Treatise, §1.3.9, 112-3. Hume distinguishes between “the principles which are permanent, irresistible, and universal; such as the customary transition from causes to effects, and from effects to causes: And the principles, which are changeable, weak, and irregular. ... the former are received by philosophy, and the latter rejected.” Ibid., §1.4.4, 225. The “latter principles” which Hume rejects are those of resemblance and contiguity, along with cause and effect (or the principle of custom) these are the “only three principles of connexion among ideas”. Ibid., 225. However, matter of fact beliefs are justified only if they derive from the operation of custom; it is through being guided by the principle of resemblance that we are “seduc’d” into holding a “false opinion”, ibid., 209.

Ibid., §1.3.9, 113.

Ibid., §1.4.1, 183.

Ibid., §1.3.13, 149.

Ibid., §1.4.1, 181-2.

Ibid., §1.3.9, 113. My italics.

Enquiries, §87, 111.

19 *Enquiries*, §89, 113.


22 *Ibid.*, §88, 112. Owen “Hume versus Price on Miracles and Prior Probabilities” *The Philosophical Quarterly* 37 (1987) pp. 187-202 claims this balancing of evidence can be represented in terms of the probability calculus. Let e stand for the occurrence of an event and let T stand for the testimony that e occurred; then, Owen suggests,

\[
\text{prob.}(e/T) = \frac{\text{[prob.}(e) \times \text{prob.}(T/e)]}{\text{[prob.}(e) \times \text{prob.}(T/e)] + \text{[prob.}(\neg e) \times \text{prob.}(e/\neg T)]}
\]

23 *Enquiries*, §34, 83.

24 This interpretation of the passage concerning Caesar differs notably from that offered by Anscombe “Hume and Julius Caesar” reprinted in *Collected Papers Volume I* (Oxford: Basil Blackwell; 1981); 86-92. Anscombe interprets this passage normatively. We must infer the existence of a chain of testimony if we are to be justified in believing that \( p \). She contests that we are more certain that \( p \) is true than we are that there is such a chain of testimony. Thus if our belief that \( p \) depends for its justification on an inference to there being such a chain of testimony, historical scepticism results. I have interpreted this passage part normatively and part descriptively. It is not that we must infer that there is a chain of testimony in order to be justified in believing that \( p \). But that in order to be justified in believing that \( p \) we must judge that the testimony presenting \( p \) is the kind that
has the attested fact as its cause and, if we make this judgement, then we will believe that there is a chain of testimony.

25 “When we reason a priori, and consider merely any object or cause, as it appears to the mind, independent of all observation, it never could suggest to us the notion of any distinct object such as its effect; much less, show us the inseparable and inviolable connexion between them.” Enquiries, §27, 31.

26 Treatise, §1.3.6, 89.

27 Enquiries §98, 127.

28 Ibid., §99, 127.

29 Ibid., §99, 127.

30 Ibid., §90 n. 1, 115.

31 This account of why testimony cannot support belief in the miraculous is essentially similar to Root “Miracles and the Uniformity of Nature” American Philosophical Quarterly 26 (1989) 333-42. The key difference is my emphasis on the uniformity of human nature rather than simply nature. That there should be this emphasis is a consequence, I think, of Hume’s ‘theory’ of testimony.

32 Similarly Traiger “Humean Testimony” Pacific Philosophical Quarterly 74 (1993) pp. 135-149 at p.137 notes that it is difficult to distinguish Hume’s theory of the formation of testimonial beliefs from his theory of the justification of testimonial beliefs.

33 Enquiries, §67, 86 and §68, 88.
34 *Treatise*, introduction, xvi.