Reid on the Credit of Human Testimony

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Thomas Reid is perhaps the first philosopher to call attention to "the analogy between perception, and the credit we give to human testimony"—the topic of chapter 6, section 24 of his *Inquiry into the Human Mind* (hereinafter abbreviated as *IHM*). In this essay, I explore the extent of Reid's analogy. I begin by trying to arrive at a proper understanding of the two principles he identifies as fundamental to our acquiring knowledge from the information of others—the principles of veracity and credulity. Next, I investigate the similarities Reid finds between perception and testimony considered as mechanisms of belief formation. Finally, I consider whether the analogy between perception and testimony can be extended from psychology into epistemology. In particular, I discuss whether beliefs based on testimony, no less than beliefs based on sense perception, may be regarded as epistemically basic or foundational. This is the chief issue that divides Reid from Hume in the epistemology of testimony.

I. THE PRINCIPLES OF VERACITY AND CREDULITY

Reid introduces the two key principles of his theory of testimony in the *Inquiry* in the following passage:

The wise and beneficent Author of Nature, who intended that we should be social creatures, and that we should receive the greatest and most important part of our knowledge by the information of others, hath, for these purposes, implanted in our natures two principles that tally with each other.

The first of these principles is, a propensity to speak truth, and to use the signs of language, so as to convey our real sentiments. (*IHM*, p. 193)

Another original principle implanted in us by the Supreme Being, is a disposition to confide in the veracity of others, and to believe what they tell us. This is the counter-part to the former; and as that may be called *the principle of veracity*, we shall, for want of a more proper name, call this *the principle of credulity*. (*IHM*, p. 194)

These principles are the key elements in his account of how the words of others come to be signs conveying to us things we would not have come to know on our own.

Reid's formulation of the principle of veracity immediately prompts a vital question. By "a propensity to speak truth," does Reid mean a propensity to speak what is *in fact* the truth? Or does he mean a propensity to speak what the speaker *believes* to be the truth? His unqualified use of the expression "to speak truth" in the first clause suggests the former, but his use of "to convey our real sentiments" in the second clause suggests the latter.

It is possible that Reid's 'and' connecting the clauses is an 'and' of genuine conjunction, in which case he would mean *both* things. But it is also possible that his 'and' is an 'and' of explication, in which case by 'speaking the truth' Reid would simply *mean* speaking what you believe to be true.

Our question is whether Reid's principle of veracity should be understood as affirming the first, the second, or both of the following:

- V1 (It tends to be the case that) if A says p, p is true.
- V2 (It tends to be the case that) if A says p, A believes p.

(I use 'say' in a sense that includes writing as well as speaking, as was surely Reid's intent.)

As we read the ensuing paragraphs in which the principle is developed and defended, it becomes fairly clear that V2 is what Reid intends. Immediately after formulating the principle, he goes on to contrast speaking the truth with lying:

This principle has a powerful operation, even in the greatest liars; for where they lie once, they speak truth a hundred times. Truth is always uppermost, and is the natural issue of the mind. It requires no art or training, no inducement or temptation, but only that we yield to a natural impulse. Lying, on the contrary, is doing violence to our nature; and is never practised, even by the worst men, without some temptation. (*IHM*, p. 193)

You are not a liar just because you say something false. Lying is saying what you *believe* false in an effort to deceive another, and that strongly suggests that the principle of veracity should be understood as V2: we tend to assert to others only what we believe to be true.

Further confirmation comes in the next paragraph. Reid defends his view that the tendency to speak truth is innate by arguing that moral and political considerations are insufficient to account for it. The tendency is present even in young children before such considerations can have any influence upon them. Well, moral and political considerations would not even be a *candidate* explanation for speaking the truth in the sense of *getting things right*; they could at best induce us to speak what we *believe* to be correct. So the fact that Reid sees the moral-political explanation as a rival to his own shows again that V2 is the principle he has in mind.

To clinch the point, I note these two comments that Reid makes on his principle:

By this instinct, a real connection is formed between our words and our thoughts. (IHM, p. 194)

If there were not a principle of veracity in the human mind, men's words would not be signs of their thoughts. (*IHM*, p. 197)

If what the principle of veracity brings about is a real connection or sign relation between our words and our *thoughts*, the principle must be understood as V2.

Let us turn now to the companion principle, *the principle of credulity*. Here is Reid's formulation of it again: "Another original principle implanted in us by the Supreme Being, is a disposition to confide in the veracity of others, and to believe what they tell us" (*IHM*, p. 194).

As we did with the first principle, we may distinguish two possible versions of this principle. Letting A be the speaker and B the hearer, we have

- C1. (It tends to be the case that) if A says p, B believes p.
- C2. (It tends to be the case that) if A says p, B believes that A believes p.

I let it go unstated in the antecedents of C1 and C2 that A's saying p is directed at B and that B hears his words. Which version of the principle is intended this time?

The evidence quickly mounts that C1 is the correct reading. In the very formulation of the principle, Reid speaks of a disposition to believe *what others tell us*. What they tell us is typically some fact about the wider world (that the fish are biting today or that the road through the pass is blocked), not merely an autobiographical fact to the effect that they believe this or that. A few lines later (*IHM*, p. 194, ll. 29–30), he says that this principle concerns "proposition[s] that [are] uttered in discourse," giving us further occasion to make the same point. Finally, and most tellingly, Reid observes that the principle of credulity confers enormous practical benefit on those who are regulated by it:

It is evident, that, in the matter of testimony, the balance of human judgment is by nature inclined to the side of belief; and turns to that side of itself, when there is nothing put into the opposite scale. If it was not so, no proposition that is uttered in discourse would be believed, until it was examined and tried by reason; and most men would be unable to find reason for believing the thousandth part of what is told them. Such distrust and incredulity would deprive us of the greatest benefits of society, and place us in a worse condition than that of savages. (*IHM*, p. 194)

The pragmatic advantage of credulity flows from believing what my informants report—for example, that the path to water lies in this direction. It does not flow simply from believing that they believe it themselves.¹

Our preliminary finding, then, is that the principle of veracity should be understood as V2 and the principle of credulity as C1. But that finding immediately poses a problem. Reid tells us that the two principles are meant to *tally* with each other (*IHM*, p. 193). What does he mean by that? A plausible guess is that the principles are supposed to combine with each other to imply that when

an informant says p, we tend to form true beliefs. But the combinations that yield that result are V1 with C1 and V2 with C2—not Reid's mixed combination of V2 with C1. So what is going on?

We can get at the problem in another way. One of Reid's objectives in his discussion of testimony in *Inquiry*, 6. 24 is to show how men's words come to be signs from which we gain knowledge of what they signify. He has explained earlier in 6. 21 that there are two requisites of knowledge from signs:

But there are two things necessary to our knowing things by means of signs. First, That a real connection between the sign and the thing signified be established, either by the course of nature, or by the will and appointment of men. When they are connected by the course of nature, it is a natural sign; when by human appointment, it is an artificial sign. Thus, smoke is a natural sign of fire; certain features are natural signs of anger: but our words, whether expressed by articulate sounds or by writing, are artificial signs of our thoughts and purposes.

Another requisite to our knowing things by signs is, that the appearance of the sign to the mind, be followed by the conception and belief of the thing signified. (*IHM*, p. 177)

In short, for X to be a sign on the basis of which we have knowledge of Y, (i) X must be a reliable indicator of Y, and (ii) the apprehension of X must produce in the mind of the subject a belief in Y. It seems clear that Reid intends the principles of veracity and credulity to ensure that these two requisites are satisfied in the case of human testimony: veracity brings about the reliable connection between sign and thing signified, and credulity produces our belief in the thing signified. But if veracity and credulity are to play these roles, veracity will have to be understood as V1 and credulity as C1 *or* veracity as V2 and credulity as C2. With Reid's V2–C1 mix, the principles do not tally with each other in the required way.

What are we to do about this? The best thing to say in Reid's defense, I think, is that he probably believes *all four* of the principles we have distinguished. As for credulity, when we hear someone say p, we normally believe p (as C1 says), but we also take for granted that the speaker believes p (as C2 says). As for veracity, we may note that an overarching principle of Reid's epistemology combines with V2 to yield V1. The principle I have in mind is Principle 7 in Reid's list in the *Essays on the Intellectual Powers of Man (EIP)* of the first principles of contingent truths—namely, the principle that our natural faculties are not fallacious (*EIP*, p. 480). By this principle Reid means to assert that the things we believe as deliverances of our natural faculties (perception, memory, inference, and so on) tend to be true. If we add this to V2, we arrive at something very close to V1 by means of the following argument: what people say, they normally believe (V2); what they believe is normally true (Principle 7); therefore, what people say is normally true (V1).²

To conclude this section: although there is an apparent disconnect in Reid's exposition of the content and functioning of his two principles, it is correctable

given other materials he puts at our disposal. There is a good Reidian case to be made for all four of the principles we have discussed, as a result of which there are two pairs of principles that tally with each other: V1 with C1 and V2 with C2.³

II. THE ANALOGY BETWEEN PERCEPTION AND TESTIMONY

Reid announces at the beginning of *Inquiry*, 6. 24 that there is a remarkable analogy between the testimony of nature given by the senses and the testimony of our fellow human beings given in language—an analogy so great that it is natural to use the word 'testimony' in each case. He therefore undertakes to consider together the principles of the mind that are subservient to testimony of the two sorts. The analogy he sees is divided into two sets of similarities, as there are two varieties of perception and two varieties of language to be considered:

We have distinguished our perceptions into original and acquired; and language, into natural and artificial. Between acquired perception, and artificial language, there is a great analogy; but still a greater between original perception and natural language. (*IHM*, p. 190)

To appreciate the two analogies, we must first say a bit about each of the two distinctions.

Original versus acquired perception: "Our perceptions are of two kinds," Reid tells us; "some are natural and original, others acquired, and the fruit of experience" (IHM, p. 171). Our original perceptions are the perceptions we have prior to any learning. When I hold a hard, round ball in my hand, the tactile sensations I receive trigger an immediate belief in a hard, extended object. No learning is required; I am innately so constituted that on the appropriate sensory occasions, I conceive of and believe in the ball. Similarly, when a certain pattern of receptors on my retina is stimulated, I am presented with an object of a certain two-dimensional shape in a certain region of the space before me: I conceive of and believe in a square patch there. These are examples of original perception.

Others of our perceptions are acquired. By experience, I learn that a certain two-dimensional array of polygons presented to my eye will be attended by the tactile perception of a three-dimensional cube. A butcher learns that a sheep of a certain visual appearance will have a certain heft when he lifts it and places it on his scales. What was at first a matter of inductive inference or association based on accumulated experience becomes a matter of immediate, noninferential, quasi-perceptual belief: I see a cube in the pattern of lines, and the butcher sees the weight of the sheep. These are examples of acquired perception.

Natural versus artificial language: Reid first draws the distinction between natural and artificial language in *Inquiry*, 4. 2. By artificial language, he means any system of signs whose meaning is fixed by convention, or as he says, "by compact and agreement". By natural language, he means that small but indispensable

body of signs that "previous to all compact or agreement, have a meaning which every man understands by the principles of his nature" (*IHM*, p. 51). For example, a smile is a natural language sign of approval. Reid argues that unless there were natural language, artificial language could never be invented, for artificial language requires compacts, and compacts could not be instituted by creatures who did not have a language of some sort. There must therefore be natural language to get things going. One could argue in similar fashion that artificial language, once invented, could not be learned by a novice unless there were natural language signs of reinforcement and dissent.⁴

We are now in a position to delineate the two analogies—the "great" analogy between acquired perception and artificial language and the "still greater" analogy between original perception and natural language. In all four of the phenomena to be considered—original perception, natural language, acquired perception, and artificial language—there are signs and things signified, and the mind passes from an apprehension of the sign to a belief in the thing signified. The various similarities and differences Reid notes all concern the origin of the relation between sign and thing signified and the means whereby we come to know of this relation.

Original perception: "The signs in original perception are sensations"—for example, the tactile sensations that trigger in us the conception of and belief in a hard, round ball in our hands. "Nature hath established a real connection between the signs and the things signified; and nature hath also taught us the interpretation of the signs; so that, previous to experience, the sign suggests the thing signified, and creates the belief of it" (*IHM*, p. 190). In other words, it is by an innate or hardwired principle that the mind passes from apprehension of the sign to belief in the thing signified.

Natural language: "The signs in natural language are features of the face, gestures of the body, and modulations of the voice" (IHM, p. 190). The things signified are the thoughts and dispositions of another's mind. As in the case of original perception, nature has both established the connection between sign and thing signified and taught us the interpretation of the sign previous to experience. An infant knows instinctively that a smile is a sign of approval and a frown of anger. As noted earlier, Reid holds that without a basic repertoire of such instinctively understood signs, artificial language could neither be devised nor learned.

A further point of similarity between original perception and natural language is this: in both cases, the signs "have the same signification in all climates and in all nations" (*IHM*, p. 191). Certain tactile sensations indicate hardness to any human being, and certain facial expressions indicate approval in all cultures.⁵

Acquired perception: "In acquired perception, the signs are either sensations, or things which we perceive by means of sensations" (IHM, p. 191). As in the other cases considered so far, the connection between sign and thing signified is established by nature. But in this case as not in the others, we must discover the connection by experience and induction. That a red glow in an iron bar signifies

heat, or that the small size of a man on the beach signifies that he is a long way off, are things we must learn; they are not written into our constitution. Once the connection is learned, however, the sign automatically suggests the thing signified, and it is almost as though we *see* the heat of the bar or the distance of the man.

Artificial language: "In artificial language, the signs are articulate sounds, whose connection with the things signified by them is established by the will of men: and in learning our mother tongue, we discover this connection by experience" (*IHM*, p. 191). Artificial language is therefore like acquired perception in that the connection between signs and what they signify is known by experience; but it is unlike acquired perception in so far as the connection holds by convention rather than nature.

Reid notes a further respect in which acquired perception and artificial language are like one another, but different from original perception and natural language. "Our original perceptions, as well as the natural language of human features and gestures, must be resolved into particular principles of the human constitution". The emphasis here is on *particular*: it is by one particular principle that sensations of a certain sort signify hardness and by another particular principle that frowns express disapproval. By contrast, "our acquired perceptions, and the information we receive by means of artificial language, must be resolved into general principles of the human constitution" (IHM, p. 191). It may be objected that the interpretive principles we learn in the latter cases—for instance, that a red glow indicates heat, or that the word 'jaune' means yellow—are as particular as any. But Reid's point is that such particular principles are not programmed into our minds. The principles that are programmed into our minds are the general principles whereby we learn the particular principles. One of these general principles is the principle of induction; whether there are others we shall see presently.

The foregoing points of similarity and dissimilarity are summarized in Table 2.1.

The table enables us to see at a glance in what respects the analogy between original perception and natural language is greater than the analogy between acquired perception and artificial language. In the first two columns, all four rows are filled in the same way, whereas in the second two columns, only two of the four rows are filled in the same way. Of course, in so far as the universal versus variable difference in row three is a corollary of the nature versus convention difference in row one, one may wish to say that at root there is only one difference in the right two columns. Nonetheless, the overall analogy is still not as great in the right columns as in the left.

We saw in Section I that Reid's formulation of the principle of veracity contains an ambiguity about the thing signified—is it the fact that p, or the speaker's belief in p? We must note now another blurred distinction that threatens to confuse his exposition. This time it is an ambiguity about the sign rather than the thing signified. What are the signs that figure in knowledge from testimony?

Table 2.1. Two Analogies.

	Greater analogy		Lesser analogy	
	OP	NL	AP	AL
How is the connection between sign and thing signified <i>established</i> —by nature or convention?	Nature	Nature	Nature	Convention
How is the connection between sign and thing signified <i>known</i> —innately or by experience?	Innately	Innately	By experience	By experience
Are the principles of signification universal or variable across cultures?	Universal	Universal	Universal	Variable
Are the principles of our constitution particular principles of signification or general principles enabling us to learn the particular principles?	Particular	Particular	General	General

Normally, they are signs belonging to artificial language,⁶ and these, Reid tells us, are "articulate sounds" (or written signs, as he adds in another place). Are the signs to be construed simply as not-yet-interpreted sounds issuing from the mouths of our fellows? Or are they to be construed as sounds already interpreted as giving voice to propositions? Let me use in tandem the variables 'S' and 'p' in the following way: 'S' for a sentence, such as 'it is raining today' or 'il pleut aujourd'hui', and 'p' for a proposition expressed by that sentence, such as the proposition *it is raining today*. Then our question may be put thus: are the signs of concern to Reid in *Inquiry*, 6. 24 signs of the sort *A utters S* or signs of the sort *A says p*? I fear that the answer is sometimes one and sometimes the other, and that Reid does not mark the difference.⁷

Why do I say that Reid glosses over this distinction? In brief, it is because when he is discussing the principles of veracity and credulity, the signs he is concerned with must be assertions of propositions—items of the sort *A says p*. But when he is discussing the analogy between artificial language and acquired perception, the signs can only be utterances of words—items of the sort *A utters S*.

As noted above, Reid thinks there are two requisites for knowledge by signs—there must be a regular connection between the sign and the thing signified, and the appearance of the sign must induce a belief in the thing signified. It is always a matter of interest to Reid to ascertain how, in various cases of knowledge by signs, these requisites are satisfied. Is the sign conjoined with the thing signified by nature or by convention? Does the appearance of the sign produce belief in the thing signified by innate knowledge or by experience? In *Inquiry*, 6. 24, he advances the principles of veracity and credulity, two principles "implanted in our natures," as providing the answers to these questions in the

case of testimony: by virtue of veracity there is a reliable connection between the sign and the thing signified, and by virtue of credulity we believe in the thing signified when we apprehend the sign. For these claims to be true, the signs must be assertions of propositions rather than utterings of words. There are no principles "implanted in our natures" whereby mere words signify a certain state of affairs or induce us to believe in it.

But now go back and look at the table delineating the various features Reid attributes to the sign-thing signified relation in artificial language. The connection holds by convention; it is known by experience; it varies from culture to culture. Here, obviously, the signs must be utterances of sentences, not assertions of propositions.

As far as I can see, the unmarked ambiguity in what counts as a sign causes only one mistake in what Reid tells us. In Reid's own order of exposition, the analogy between perception and language precedes his discussion of the principles of veracity and credulity. From the way in which Reid frames his discussion of these principles (beginning at lines 12–13 of *IHM*, p. 192 and closing at lines 35–7 of IHM, p. 195), it is clear that they are the principles he regards as "the general principles of the human mind which fit us for receiving information from our fellow-creatures". He then goes on (IHM, pp. 195–7) to consider "the general principles which fit us for receiving the information of nature by our acquired perceptions," which turn out to be the uniformity of nature and the inductive principle. In other words, he is suggesting that uniformity and induction are the general principles referred to in row four of our table under the heading 'acquired perception', while veracity and credulity are the general principles referred to under the heading 'artificial language'. But that is a mistake. If the signification of words is what is at issue, then induction is the relevant principle under both headings. It is induction that teaches me that a red glow signifies hotness, and it is also induction that teaches me what mama means by 'milk'.8

To summarize, Reid's exposition in *Inquiry*, 6. 24 of how signs signify what they do is clouded by two unmarked ambiguities. One is an ambiguity about the thing signified—is it a worldly fact or a fact about the speaker's state of mind? The other is an ambiguity about the sign—is it the utterance of a string of words or the assertion of a proposition? Fortunately, the ambiguities do not invalidate any of Reid's key contentions. Nearly everything he wants to say can still be said, but we need to take greater care in stating it. We can present the entire picture as shown in Fig. 2.1.

If we take *A says p* as the sign and *p* as the thing signified, the first requisite of knowledge by signs (reliable connection between sign and thing signified) is ensured by veracity principle V1 and the second requisite (belief in the thing signified upon belief in the sign) is ensured by credulity principle C1. If we take *A says p* as the sign and *A believes p* as the thing signified, the first requisite is ensured by V2 and the second by C2. If we take *A utters S* as the sign, things get more complicated, for there is now in effect an intermediate sign, *A says p*, signified

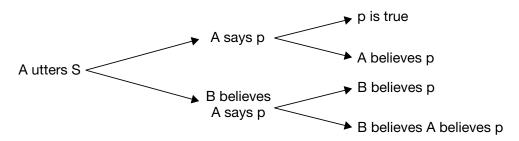


Figure 2.1. From Signs to Knowledge of what they signify.

by A utters S and signifying in turn either p or A believes p. When we consider A utters S as sign and A says p as (intermediate) thing signified, the first requisite is ensured by convention and the second by induction. When we consider A utters S as sign and p as (ultimate) thing signified, the first requisite is ensured by the logical product of convention and V1, the second by the product of induction and C1. Finally, when we consider A utters S as sign and A believes p as (ultimate) thing signified, the first requisite is ensured by convention and V2, the second by induction and C2. (The reader may wish to label the arrows in Fig. 2.1. On the left, the upper arrow should be labeled 'convention' and the lower arrow 'induction'. On the right, the arrows from top to bottom should be labeled as 'V1', 'V2', 'C1', and 'C2'.)

III. EXTENDING THE ANALOGY: ARE TESTIMONIAL BELIEFS EPISTEMICALLY BASIC?

The preceding sections have dealt mainly with Reid's views on the psychology of testimony—with the principles whereby we come to believe what we do when our fellows utter certain things. I turn now to matters more properly epistemological. What makes a belief acquired on the basis of testimony justified? What makes it knowledge?

It is not always clear in Reid where psychology stops and epistemology begins. When we have certain sensory experiences, Reid tells us, we instinctively and immediately believe in external objects, without any need of reasoning. Very well, his readers may ask, but is that just a piece of descriptive psychology (with which Hume could agree), or is it meant as normative epistemology?

In the case of sense perception, I believe it is meant as both. I shall take for granted here an interpretation of Reid's perceptual epistemology I have defended elsewhere (Van Cleve 1999). According to that interpretation, beliefs in physical objects prompted by sensory experiences are not only *psychologically immediate* (that is, triggered directly by the experiences without any reasoning or reliance on background information), but also *epistemically basic* (that is, justified without depending for their justification on any other justified beliefs). Beliefs about the

observable features of things in our environment function as *first principles*—we appeal to them in justification of other things, but they are justified themselves without appeal to anything further. "First principles" may sound like too grand a name for such humble deliverances of perception as *there is a tree over there*, but Reid makes it clear that such propositions play the same role in our empirical knowledge as do axioms in mathematics (*IHM*, p. 172).

Can we extend Reid's analogy between the testimony of our fellows and the testimony of our senses one step further, maintaining that beliefs based on human testimony are like beliefs based on sense perception in being epistemically basic? In other words, can the mere fact that someone tells you p make you *prima facie* justified in believing p and (if p is true and there are no defeaters for your justification) thereby give you knowledge of p? On this question, Hume says no, but Reid says yes.

That Reid accords positive epistemic status, and perhaps even basic status, to testimonial beliefs can be argued on the basis of his discussion of testimony in the *Essays on the Intellectual Powers of Man*. His chapter on first principles includes the following principle relating to testimony: "Another first principle appears to me to be, That there is a certain regard due to human testimony in matters of fact, and even to human authority in matters of opinion" (EIP: 487). I reproduce here several of the sentences he offers in explanation of this principle, accompanying each with my own gloss.

"Before we are capable of reasoning about testimony or authority, there are many things which it concerns us to know, for which we can have no other evidence." "No *other* evidence:" so testimony is a source of evidence. This is confirmed in the chapter on probability (EIP: 557–58), where Reid discusses testimony as a species of probable evidence.

"The wise Author of nature hath planted in the human mind a propensity to rely upon this evidence before we can give a reason for doing so." That someone has usually told us the truth in the past would be a reason for believing what he says, but his say-so confers evidence even before I am capable of having this reason. Testimonial beliefs are evident even in the absence of reasons.

"If children were so framed, as to pay no regard to testimony or to authority, they must, in the literal sense, perish for lack of knowledge." This sentence reaffirms the immense practical advantage of credulity Reid had emphasized in the *Inquiry*. It also carries the further implication that what testimony bequeaths to children is *knowledge*.

When we put these three points together, it emerges that Reid regards testimony as a source not merely of belief, but also of evident belief or knowledge. Moreover, it plays this role even if the believer has no reason for his belief. Testimony-based beliefs therefore qualify for Reid as epistemically basic.⁹

Standing opposed to Reid on this question is Hume. Here is a well-known passage from his essay on miracles (section X of the *Enquiry Concerning Human Understanding*):

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, and the reports of eye-witnesses and spectators. This species of reasoning, perhaps, one may deny to be founded on the relation of cause and effect. I shall not dispute about a word. It will be sufficient to observe, that our assurance in any argument of this kind is derived 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. (Hume 1977: 74)

The reason, why we place any credit in witnesses and historians, is not derived from any *connexion*, which we perceive *a priori*, between testimony and reality, but because we are accustomed to find a conformity between them. (Hume 1977: 75)

Hume is nowadays regarded as the prototypical *reductionist* about the epistemological status of testimony. Reductionists hold that when B believes p because A says p, B's belief in p is justified only if B is justified in believing two further things: (i) that A did say p, and (ii) that most of the things said by A (or by the individuals in some wider relevant class of which A is a member) are true. Item (i) may be factored into the information that A produced certain signs and that these signs should be interpreted in a certain way. Item (ii) is what Hume refers to as the "usual conformity of facts to the reports of witnesses." It is clear that the reductionist position denies that beliefs based on testimony are epistemically basic—although they may be psychologically noninferential or immediate, they owe their justification to other justified beliefs B has about what A has said on this occasion and about his track record (or that of his cohort) in the past.¹⁰

Who is right—Reid or Hume? To answer this question, I shall set out the most formidable argument I know of against testimonial fundamentalism (as I shall call the anti-reductionist position, following Coady)¹¹ and then consider whether any good response to the argument is available to Reid.

The argument I have in mind consists of two premises and a conclusion:

Premise A: If a source S is a source of epistemically basic beliefs, then it must be an *a priori* matter that deliverances of S are *prima facie* warranted or likely to be true.¹²

Premise B: It is not an *a priori* matter that testimonial beliefs are *prima facie* warranted or likely to be true.

Conclusion: Testimony is not a source of epistemically basic beliefs.

Let me henceforth abbreviate 'it is *a priori* that deliverances of S are *prima facie* warranted or likely to be true' to 'S is an *a priori* source' and 'S is a source of epistemically basic beliefs' to 'S is a foundational source'. Then the argument can be put briefly as follows: a foundational source must be an *a priori* source, and testimony is not an *a priori* source.¹³ But why should we accept the premises?

For premise A, there is a rationale that many traditional epistemologists would find compelling. This rationale is nicely laid out in the opening chapter of Pollock's *Knowledge and Justification* (Pollock 1974). Pollock begins by noting that basic beliefs about a given subject matter typically have a distinctive source. Beliefs about physical objects have perception as their source; beliefs about the past have memory as their source; beliefs about the future or the unobserved have induction as their source, and so on. It is part of Pollock's idea of a source that it is a way of knowing about its subject matter on which all other ways of knowing about that subject matter depend (Pollock 1974: 6). We can have knowledge of the physical world by means other than perception, such as memories and photographs, but if we couldn't have knowledge about the physical world through perception, we couldn't have it in these other ways, either. We might say that for Pollock, a source of basic beliefs is both autonomous (it gives knowledge or justification in its sphere without the help of other sources) and ultimate (no other sources give knowledge or justification about that subject matter without the help of it).

With this much assumed about sources, Pollock's argument may be set out (with some compression) as follows:

- 1. A putative source of knowledge is not a genuine source unless we can establish a connection between the source and the facts it is supposed to deliver.
- 2. Such a connection can be established only if (a) it can be established inductively, by showing that there is a reliable correlation between a belief's being delivered by the source and its being true, or (b) the connection holds *a priori*.
- 3. Since foundational sources are ultimate, alternative (a) is ruled out. We could establish the reliability of a foundational source only by relying on that very source and thus reasoning in a circle.
- 4. Therefore, a foundational source of knowledge must be an *a priori* source: if its deliverances are epistemically basic, it must be an *a priori* matter that its deliverances are warranted or likely to be true.

That, as I said, is a defense of premise A that many traditional epistemologists would find compelling.

Let us turn now to premise B, which tells us that there is no *a priori* connection between testimonial reports (or beliefs based thereon) and their truth or warrant. Why believe that? One reason would be that *a priori* connections must hold necessarily, ¹⁴ yet there seems to be no discernible necessary connection between a testimonial report and the truth or warrant of what is reported. That, indeed, was part of Hume's case for his stance on testimony as quoted above: he notes that the connection between human testimony and the event attested to "seems, in itself, as little necessary as any other."

In Pollock's scheme of things, there is an additional reason for denying an *a priori* connection between testimony and its deliverances. Pollock holds that an

a priori connection "must arise from the meanings of the concepts or statements involved in the knowledge claims." Traditionally, this demand led to reductive analyses: for example, phenomenalist analyses of the truth conditions of external world statements in terms of the patterns of experience that serve as evidence for them. Pollock offers an alternative to the reductive tradition in which the meaning of a statement is given not by its truth conditions, but by its justification conditions. On his account, it is part of the meaning of 'x is red' that x's looking a certain way is a justification condition for it: one's understanding of what it is for something to be red is constituted in part by knowing that something's looking that way justifies you in believing it to be red. If we applied this strategy in the case of testimonial belief, we would say that one understands the meaning of a statement 'p' partly by knowing that 'A says p' is a justification condition for it. But 'A says p' has 'p' embedded within it! It is therefore out of the question that we understand 'p' in terms of 'A says p', since we can understand the latter only if we already understand the former. It is no accident that Pollock's book, which devotes a chapter to each of the traditional sources of justification, contains no chapter on testimony. His program of exhibiting the justification conditions of a statement as constitutive of its meaning cannot be carried out when the justification condition is a testimonial report.

Such, then, is the case against taking testimony as a foundational source: a source of basic beliefs must be an *a priori* source, and testimony is not an *a priori* source. How might a testimonial fundamentalist defend his position against this two-pronged attack? I shall discuss two strategies. One denies the first premise, invoking a reliability theory of justification to argue that a source of basic beliefs need not be an *a priori* source. The other denies the second premise, mobilizing some of the ideas in Wittgenstein's Private Language Argument to maintain that testimony is, after all, an *a priori* source. I discuss the second strategy first.

That testimony should qualify as an *a priori* source may seem surprising, but precisely that is an implication of some versions of the Private Language Argument. I focus on a version that was prevalent before considerations about rule-following took center stage. (I am indebted in what follows to Saunders and Henze 1967, especially ch. II.)

For present purposes, let a private language be a language whose terms refer to "private" data—to tickles and twinges and other inner states, regarded as having no conceptual ties to any manifestations in outward behavior. The argument to be reviewed maintains that a private language in this sense is impossible, because no one could know that he was employing its terms consistently and correctly.

Suppose I take myself to be using a term T to refer to the same type of private state that I have applied it to in the past. Since the referent of T is private, no one else can be in a position to correct or corroborate my use of T. I will have nothing but my own memory impressions to vouch for the fact that I am using T in the same way as before. But I am entitled to trust my memory impressions, it is insisted, only if there is some way other than memory of checking up on

them. (Corroborating one memory by reference to another is disallowed on the alleged ground that it would be like buying two copies of the morning paper to verify that what it says is true [Wittgenstein 1953: para. 265].) The required independent check *is* available to speakers of a public language, for they may rely upon the testimony of their fellows that they are using T in the same way as before. The speaker of a private language, by contrast, cannot avail himself of any independent checks. His companions, having no outer criteria of his inner states, can provide no correction or corroboration. He can only be under the impression that he is following some semantic rule in the same way as before, but to *think* that you are obeying a rule is not the same thing as obeying it. You cannot obey a rule privately (Wittgenstein 1953: para. 202).

To the Private Language Argument in this incarnation, the traditionalist has a ready reply. He can say that his opponent's requirements would keep *anyone* from knowing he is using his terms correctly. For what entitles the speaker of a public language to rely upon the testimony of his fellows in corroboration of his memory impressions? In order for one to be justified in accepting something on someone else's say-so, one must know that the other person's testimony has been reliable in the past, and the only way one could know that is through reliance on one's own memory impressions. If the Wittgensteinian insists that memory can be relied upon only if backed up by testimony, he lands us in a vicious circle, because testimony in its turn can be relied upon only if backed up by memory.

It should be manifest that what the traditionalist's reply invokes is precisely a Humean reductionist position on testimony. In the next step in the dialectic—the crucial one for our purposes—the Wittgensteinian repudiates Hume. He says that it is a conceptual truth, knowable *a priori*, that an utterance by one of my fellows of a past-tense sentence that I would use to say p confers initial probability on p.¹⁵ Thus there is no need to underwrite the deliverances of testimony by induction and memory, for such deliverances have their warrant *a priori*. QED.

The argument just given is, in effect, a transcendental argument for testimony as an *a priori* source. It proceeds from the premise that we know we are using the terms in our language correctly and argues it to be a necessary condition of this knowledge that the corroborative reports of our fellows have their evidential force *a priori*.

What verdict shall we pass on the argument? In my opinion, the argument can succeed in establishing the *a priori* credentials of one source of knowledge (testimony) only at the cost of destroying or downgrading the credentials of another (memory). If we allow that memory is an autonomous source of knowledge, capable of delivering knowledge and justified belief without corroboration by other sources, we can sidestep the argument entirely. I believe that memory is such an autonomous source, and I believe Reid would agree. For Reid, memory takes its place alongside perception as a source of first principles or basic beliefs. When we seem to perceive that there is a tree over there, we automatically believe there is a tree over there and are *prima facie* justified in so believing. Likewise, when

we seem to remember some past event, we automatically believe that the event occurred and are *prima facie* justified in so believing (see EIP, pp. 253–5 and 474). One can gather what Reid's attitude would have been toward the thesis that memory stands in need of independent corroboration from the following remark: "When I remember a thing distinctly, I disdain equally to hear reasons for or against it" (EIP, p. 476). For better or for worse, then, Reid keeps the Private Language Argument from getting off the ground. The anti-fundamentalist premise that testimony is not an *a priori* source still stands.¹⁶

Let us turn, then, to the other strategy for avoiding the anti-fundamentalist's one-two punch. In this strategy we deny that a source of basic beliefs must be an *a priori* source. One basis for doing so is provided by the reliability theory of justification, which has come to prominence only in recent years, but which is sometimes discerned in the writings of Reid himself.

The tenets of the reliability theory may be set down in the following way, which is due to Goldman (1979). First, we distinguish two kinds of belief-forming processes: belief-independent processes, such as perception, which do not take other beliefs as inputs, and belief-dependent processes, such as reasoning, which do take other beliefs as inputs. Next, we say that a process of the first sort is reliable iff it tends to produce only true beliefs as outputs (this is "unconditional reliability"), and we say that a process of the second sort is reliable iff it tends to produce only true beliefs as outputs when it is given true beliefs as inputs (this is "conditional reliability"). Finally, we offer a recursive account of justification as follows: a belief is justified iff either (i) it results from an unconditionally reliable belief-independent process or (ii) it results from justified beliefs by way of a conditionally reliable belief-dependent process.

A reliability theory along these lines lets us counter the one-two punch in two ways. First, it undermines the case for premise A. The argument for that premise relied crucially on the following assumption: a putative source of knowledge is not a genuine source unless we can establish a connection between the source and the facts it is supposed to deliver. "Establishing" a connection in this context means knowing or verifying that it obtains. That is precisely what is *not* necessary according to the reliability theory: if the theory is correct, there need only *be* a connection, whether anyone knows it obtains or not. For the reliability theory, the mere fact that a belief has been formed by a reliable process is *sufficient* to make that belief justified. That implies that no knowledge by the subject or anyone else that the process is reliable is *necessary*. So the key assumption is false: a source is a source just so long as there *is* an appropriate connection between the source and its deliverances, whether anyone can establish it or not.

Second, the reliability theory not only undermines the case for premise A, but it also enables us to see directly that that premise is false. Suppose that when we hear others attest to some fact p, we automatically believe p. There is no drawing of inferences or weighing of reasons—we simply believe p. That, of course, is what Reid's principle C1 says. It implies that beliefs generated by the testimony

of others are psychologically immediate, not based on reasons.¹⁷ Suppose next that it is a contingent and *a posteriori* fact, but a fact nonetheless, that the things others attest tend to be true. That, of course, is what Reid's principle V1 says. It implies that believing what others say is a reliable method of belief formation, and thus that beliefs formed by this method are (by reliabilist standards) justified. Putting this all together, testimonial beliefs are immediate (by C1) and justified (by V1 and the reliability theory); therefore, they are justified immediate beliefs, which is another way of saying they are epistemically basic. So testimony is a source of epistemically basic beliefs, even though the fact that such beliefs are generally true is knowable only *a posteriori*.¹⁸

Could Reid avail himself of this way of avoiding the anti-fundamentalist argument? That depends on whether he is a reliabilist. The best case I know of for interpreting Reid as a reliabilist has been presented in a book by Philip de Bary (2002), whose main features I now sketch.

According to de Bary, when Reid draws up his list of first principles, he is in the first instance simply formulating psychological laws about human belief formation—laws specifying what sorts of things people instinctively believe in various circumstances. When I perceive a tree or a star, that is enough to make me believe one is there; when I remember walking on the beach yesterday, I believe that I did so; and when a friend or stranger tells me a tree has blocked the road, I believe forthwith that the road is indeed blocked. If Reid went no further than this, his list of first principles would "lack any epistemological bite" (de Bary 2002: 65). But Reid does go further (according to de Bary), embedding his principles in a framework of reliabilism. Reid believes that "the instinctive beliefs of healthy people ... tend towards the truth" (de Bary 2002: 83) and further, that such a tendency towards truth (given a reliabilist view like Goldman's) is sufficient (in the absence of special reasons for doubting them) for their being justified and amounting to knowledge when true. So the various classes of belief marked out in Reid's list of first principles are not only psychologically immediate, but epistemically basic. When true, they are items of basic knowledge, and that goes for beliefs based on testimony just as much as for beliefs based on perception and memory.

I am not convinced that de Bary's interpretation of Reid is right. It is plausible, I admit, but I think there are alternatives at least equally plausible. I have sketched one such in "Reid on the First Principles of Contingent Truths" (Van Cleve 1999). According to my alternative, when Reid enunciates his first principles, he is giving generalizations that are epistemological principles as they stand, not just psychological laws that acquire epistemological significance only when supplemented with facts about reliability and the tenets of the reliability theory. They are principles according to which the deliverances of introspection, perception, memory, and credulity (if I may so name the "faculty" through which we believe testimony) are *prima facie* justified, regardless of whether they are true or false on a given occasion and possibly even regardless of whether they generally tend to be

true.¹⁹ On this interpretation, Reid's epistemology is more like Chisholm's than Goldman's. Chisholm provides a list of epistemic principles according to which the deliverances of introspection, perception, and memory have one or another positive epistemic status just in virtue of having those sources, not in virtue of any connection with truth (Chisholm 1977: ch. 4).

If Reid is taken in this way, he could perhaps still hold that testimony-based beliefs are epistemically basic. However, he would lack de Bary's reason for so regarding them: they would not be justified simply in virtue of their reliability, no matter how great that reliability is. They would be justified instead in virtue of ... what?

Here I think Reid would have no good answer. I do not think it entirely out of the question that perception and memory are *a priori* sources of justified belief,²⁰ but testimony just does not look to me like an *a priori* source, any more than the readings of a barometer do. If testimonial beliefs are not epistemically basic because they are deliverances of an *a priori* source, nor because they are deliverances of a reliable belief-independent source, then how they can they be epistemically basic at all? This question pushes me strongly in the direction of testimonial reductionism. I shall therefore conclude this essay by defending reductionism against what I take to be the most formidable objection to it. I shall also offer a sketch of what Reid's epistemology of testimony would look like if he were to join the reductionist camp.

The objection I have in mind is at least intimated if not explicitly articulated by several writers, including Anscombe (1979), BonJour (2002), Coady (1992), and Wolterstorff (2001). The key premise in it is that the vast majority (or perhaps even the totality) of what passes for corroboration of testimony *itself relies on other* testimony. "The guidebook was right," I say, "there is such a place as Piccadilly Circus"—but in so saying I rely on the street signs that someone has posted at the site. I cannot construct an inductive argument for the reliability of testimony because "the cases that I can investigate firsthand [without relying on further testimony to corroborate them] amount to only a vanishingly small proportion of either the persons and other sources that provide testimony or the subject matters to which such testimony pertains" (BonJour 2002: 172–3). An implausibly strong version of this argument would say that there is in principle no case in which I can corroborate testimony without relying on further testimony—in other words, that testimony is an ultimate source. A more plausible version would say that the proportion of cases I can corroborate firsthand is "vanishingly small," so that any inductive argument based on them must be "extremely weak" (Bon-Jour 2002: 173). The first conclusion to be drawn from these premises would be that if reductionism is correct, I know little or nothing on the basis of testimony. The second conclusion would be that since I *do* know a great deal on the basis of testimony, reductionism is untenable—another transcendental argument.

In my opinion, this argument is far from decisive. To begin with, there is no plausibility at all in the strong version's contention that *any* corroboration of

testimony must rely on further testimony. For many years of my life, I believed there were such wonders as the Grand Canyon and the Taj Mahal solely on the basis of books and postcards. Now I have verified the existence of those things with my own eyes. (More accurately: I have verified with my own eyes the existence of *such* things, that is, structures matching a certain general description, for I admittedly relied on the testimony of the locals to know that building is the Taj Mahal.) To these dramatic episodes of confirmation may be added thousands of more quotidian occurrences of finding beer in the fridge or a restroom down the hall on the right after being told where to look. To be sure, these myriad instances in which I have been able to check on the veracity of testimony firsthand are (as the weak version rightly points out) only a minuscule fraction of all the instances in which I have believed things on the basis of testimony. But does it follow that any inductive justification I have for believing testimony must be "extremely weak"? Not at all, for what matters is not the proportion of testimonial beliefs I have checked, but the proportion of checks undertaken that have had positive results. I have seen only a tiny fraction of the world's crows, but the ones I have seen have been overwhelmingly black, and that is enough to support my belief that nearly all crows are black. (Of course, the ratio of testimonies checked to testimonies that have proved true varies with different classes of testimony; I have found geography textbooks to be more reliable than presidential press conferences.²¹)

How much of what Reid has to say about testimony can we still accept if we move into the reductionist camp? We can accept nearly everything he says about the psychology of testimonial belief, especially as regards the principle of credulity. We may also agree with what he says about the immense practical advantage of credulity. A viable reductionism had better not take the form of saying: believe no one whose track record you have not checked out for yourself. Children (fortunately for them and fortunately for all who were once children ourselves) go through a credulous phase during which they believe without reason nearly everything they are told. As reductionists, however, we must hold that these beliefs are justified only in a pragmatic sense, not in an epistemic sense. If they qualify as knowledge, it must be a kind of knowledge that does not require justification, but only a reliable connection with the truth, as in what Sosa calls "animal knowledge" (Sosa 1997; compare the view ascribed to Audi in n. 13).

As children grow into adulthood, their credulity diminishes and their ability to give inductive reasons for what they accept from others grows. As Reid notes,

[Credulity] will be strongest in childhood, and limited and restrained by experience. . . . When brought to maturity by proper culture, [reason] begins to feel her own strength, and leans less upon the reason of others; she learns to suspect testimony in some cases, and to disbelieve it in others; and sets bound to that authority to which she was at first entirely subject. But still, to the end of life, she finds a necessity of borrowing light from testimony, where she has none within herself, and of leaning in some degree upon the reason of others. . . . (*IHM*, p. 195)

In another passage, he tells us that adults are in a position to believe on the basis of experience and reflection things they originally believed only on instinct:

I believed by instinct whatever [my parents and tutors] told me, long before I had the idea of a lie, or thought of the possibility of their deceiving me. Afterwards, upon reflection, I found that they had acted like fair and honest people who wished me well. I found, that if I had not believed what they told me, before I could give a reason of my belief, I had to this day been little better than a changeling. And although this natural credulity hath sometimes occasioned my being imposed upon by deceivers, yet it hath been of infinite advantage to me upon the whole; therefore I consider it as another good gift of Nature. And I continue to give that credit, from reflection, to those of whose integrity and veracity I have had experience, which before I gave from instinct. (*IHM*, p. 170–1)

Things we accepted originally as a gift of nature we can give reasons for as we grow older. In this way, animal knowledge is replaced by reflective knowledge, and beliefs that were formerly justified only in a pragmatic or external sense become justified reflectively.²²

My view, in conclusion, is that testimony gives us justified belief and reflective knowledge not because it shines by its own light, but because it has often enough been revealed true by our other lights. On this point, I find myself uncharacteristically on the side of Hume rather than Reid.

REFERENCES

Anscombe, Elizabeth (1979), 'What Is It to Believe Someone?', in C. F. Delaney (ed.), *Rationality and Religious Belief* (Notre Dame: University of Notre Dame Press), 141–51.

Audi, Robert (1997), 'The Place of Testimony in the Fabric of Knowledge and Justification', *American Philosophical Quarterly*, 34: 405–22.

BonJour, Laurence (2002), *Epistemology: Classic Problems and Contemporary Responses* (Lanham, Md: Rowman and Littlefield).

Burge, Tyler (1993), 'Content Preservation', *Philosophical Review*, 102: 457–88.

Chisholm, Roderick M. (1977), *Theory of Knowledge* (Englewood Cliffs, NJ: Prentice-Hall, 2nd edn.).

Coady, C. A. J. (1992), *Testimony: A Philosophical Study* (Oxford: Clarendon Press).

de Bary, Philip (2002), *Thomas Reid and Scepticism: His Reliabilist Response* (London: Routledge).

Ekman, Paul, Sorenson, E. Richard, and Friesen, Wallace V. (1969), 'Pan-Cultural Elements in Facial Displays of Emotion', *Science*, NS 164: 86–8.

Gilbert, Daniel T. (1993), 'The Assent of Man: Mental Representation and the Control of Belief', in Daniel M. Wegner and James W. Pennebaker (eds.), *Handbook of Mental Control* (Englewood Cliffs, NJ: Prentice-Hall), 57–87.

Goldman, Alvin (1979), 'What is Justified Belief?', in George S. Pappas (ed.), *Justification and Knowledge* (Dordrecht, Holland: D. Reidel), 1–23.

Hume, David (1977), *An Enquiry Concerning Human Understanding*, ed. Eric Steinberg (Indianapolis: Hackett) (first published in 1748).

- Plantinga, Alvin (1993), Warrant and Proper Function (New York: Oxford University Press).
- Pollock, John L. (1974), *Knowledge and Justification* (Princeton: Princeton University Press).
- Reid, Thomas (1997), An Inquiry into the Human Mind on the Principles of Common Sense, ed. Derek R. Brookes (Edinburgh: Edinburgh University Press) (first published in 1764). It is abbreviated in the text as IHM, with '6. 24' indicating chapter 6, section 24.
- —— (2002), Essays on the Intellectual Powers of Man, ed. Derek R. Brookes (University Park, Pa: Pennsylvania State University Press) (first published in 1785). It is abbreviated in the text as EIP.
- Saunders, John Turk, and Henze, Donald F. (1967), *The Private Language Problem: A Philosophical Dialogue* (New York: Random House).
- Shoemaker, Sydney (1963), Self-Knowledge and Self-Identity (Ithaca, NY: Cornell University Press).
- Sosa, Ernest (1997), 'Reflective Knowledge in the Best Circles', *Journal of Philosophy*, 94: 410–30.
- Van Cleve, James (1999), 'Reid on the First Principles of Contingent Truths', *Reid Studies*, 3: 3–30.
- (2004), 'Reid's Theory of Perception', in Rene van Woudenberg and Terence Cuneo (eds.), *The Cambridge Companion to Reid* (Cambridge: Cambridge University Press), 101–33.
- Wittgenstein, Ludwig (1953), *Philosophical Investigations*, trans. G. E. M. Anscombe (Oxford: Blackwell).
- Wolterstorff, Nicholas (2001), *Thomas Reid and the Story of Epistemology* (Cambridge: Cambridge University Press).

NOTES

- 1. Interpreted as C1, the principle of credulity finds confirmation in the work of some contemporary cognitive psychologists. See Gilbert (1993) for descriptions of experiments in which the mere hearing or reading of a proposition tends to induce belief in it.
- 2. There is also a route leading from C2 to C1. Suppose B hears A say p; in accordance with C2, B thereupon believes that A believes p; drawing on Principle 7, he then draws the inference that p is probably true; in light of that, he commences believing p, just as C1 says. But this account would falsify what Reid regards as the psychology of the situation. C1 is meant to describe a mechanism whereby we forms beliefs immediately, not as the result of any reasoning
- 3. I am indebted in this section to Nicholas Wolterstorff's discussion of Reid's account of testimony in Wolterstorff (2001). Wolterstorff notes that Reid blurs the distinction between the consequents of the principles I have labeled C1 and C2 (2001: 172). He also observes that what Reid really needs by way of a veracity principle is V1—the disposition to assert only what one believes must be coupled with a tendency to get things right (2001: 176).

4. It may be helpful to relate Reid's discussion of natural language in IHM 4. 2 to his discussion of natural signs in IHM 5. 3. In the latter section, he distinguishes three classes of natural signs. The first class comprises signs "whose connection with the thing signified is established by nature, but discovered only by experience" (IHM, p. 59). For example, smoke is a class I natural sign of fire. The second class "is that wherein the connection between the sign and thing signified, is not only established by nature, but discovered to us by a natural principle, without reasoning or experience" (IHM, p. 60). For example, a smile is a class II natural sign of approval. The third class comprises those signs "which, though we never before had any notion or conception of the things signified, do suggest it, or conjure it up, as it were, by a natural kind of magic, and at once give us a conception, and create a belief of it" (IHM, p. 60). For example, certain tactile sensations are class III natural signs of hardness in bodies. The key difference between class II and class III natural signs is that although in both cases the *connection* between our apprehension of the sign and our conception of the thing signified is hardwired or innate, in the third class alone is our *conception* of the thing signified also innate.

What Reid calls "natural language" comprises natural signs of the second class. What he calls "artificial language" comprises signs whose connection with the thing signified is established by convention rather than nature and which therefore belong to none of the three classes of natural signs. His usage is obviously different from our own, as he would classify English as an artificial language rather than a natural language.

- 5. A smile's a smile the world around. That certain facial expressions are universal in their signification has been confirmed by contemporary research such as that of Ekman et al. (1969).
- 6. There are exceptions. Reid tells us that "two savages who have no common artificial language" (*IHM*, p. 52) could communicate with each other exclusively in the natural language of gesture, facial expression, and tone of voice. Presumably, they could exchange testimony.
- 7. I gloss over a further distinction myself. A speaker may utter a sentence S that means p without thereby saying p in the sense of asserting it (as contrasted with carrying out a speech act with some other illocutionary force). By 'saying p' I mean asserting p. For A's uttering S to amount to his saying p in this sense, it is required not only that S means p, but also that in uttering something that means p, A is asserting p (rather than reciting a line in a play, for instance). I ignore this second aspect of the difference between uttering S and saying p. It is discussed in Burge (1993) and Wolterstorff (2001).
- 8. Of course, once the language of one's elders has been learned, induction is no longer necessary; one simply hears S as saying *p*, attending to the sense rather than the sounds. Here is another similarity that Reid might have remarked between artificial language and acquired perception.
- 9. Here I am in agreement with Coady (1992: 23 and 123). It may also be the view of Plantinga (1993) that testimonial beliefs are epistemically basic for Reid.
- 10. Reductionism is so-called because it holds that testimonial knowledge can be "reduced to" or accounted for in terms of knowledge exclusively from other sources: B knows p because he knows by perception that A has said p, by memory that A

has said such-and-such other things in the past, by memory and a variety of other apposite sources that these things were true, and by induction based on the foregoing that A is probably right in what he says on the present occasion. I dislike the name 'reductionism' because of its misleading associations with "reductive" doctrines such as phenomenalism and behaviorism, in which there is a reduction not of one way of knowing to others, but of the subject matter known to facts belonging to some other class. Nonetheless, the label has become well entrenched, so I shall stick with it here.

11. Coady proposes 'fundamentalism' as a name for the view that testimony is a source of basic or foundational beliefs on a par with perception and memory (Coady 1992: 23).

Reductionism and the fundamentalism I ascribe to Reid do not exhaust the options, as Peter Graham makes clear (Chapter 4 in this volume). One of the other options is the position that Graham defends under the label 'weak fundamentalism'. In this view, a belief based on testimony is not thereby prima facie justified, that is, justified enough to qualify as knowledge if the belief is true and there are no defeaters. Instead, it is only pro tanto justified, that is, possessed of a modicum of justification, but not necessarily enough to qualify as knowledge. Coherence with other justified beliefs may be required to bring the justification of the belief up to the level required for knowledge. Graham's view about testimonial knowledge is thus analogous to C. I. Lewis's view about memory knowledge: ostensible memories have an initial level of justification or credibility just in virtue of being memory reports; this initial level can be brought up to the level required for knowledge through the coherence of the reports with one another and with other beliefs. I believe weak fundamentalism is a more plausible position than the strong fundamentalism I attribute to Reid. Nonetheless, I think the argument I am about to present, if cogent at all, would apply to weak fundamentalism as well as to strong. That would be so, at any rate, if pro tanto justification (no less than prima facie justification) must flow from an *a priori* source.

- 12. This is not to say, of course, that the deliverances themselves are *a priori*. What is *a priori* is the conditional: if a belief is delivered by S, then the belief is warranted or likely to be true.
- 13. I might have been tempted to abbreviate 'S is a source of epistemically basic beliefs' to 'S is a basic source', except that to do so would have been to ride roughshod over the nice set of distinctions developed by Robert Audi (1997). Audi distinguishes between 'source of basic X' and 'basic source of X', where X can be any of the commodities belief, knowledge, or justification. Roughly, S is a basic source of {belief, knowledge, justification} without the cooperation of another source of the relevant commodity. S is a source of basic {belief, knowledge, justification} iff S is a source of {beliefs not based on other beliefs, knowledge not derived from other knowledge, justification not dependent on other justified propositions}. In Audi's view, testimony is not a basic source of any of the three commodities. It is, however, a source of basic belief and a source of basic knowledge, though not a source of basic justification.

How is it possible for testimony to be a source of basic knowledge without being a source of basic justification? The answer is that Audi does not define basic knowledge

- as true belief with basic justification; in fact, he does not define knowledge as requiring justification at all. Reliably formed belief can count as knowledge for him, but reliability does not suffice for justification.
- 14. Kripkean reasons for believing that some propositions are both *a priori* and contingent are plainly not in play here.
- 15. In the exposition of the argument by Saunders and Henze, the thesis I have just mentioned is derived from two other theses, the Utterance Thesis and the Testimony Thesis. According to the Utterance Thesis, it is *a priori* that an utterance by A of a past-tense statement 'p' confers initial likelihood on the proposition that A is making a memory claim that p. According to the Testimony Thesis, it is *a priori* that A's testifying as to what he remembers (and thus his making the memory claim that p) confers initial probability on p. Saunders and Henze attribute versions of both theses to Shoemaker (1963).

Shoemaker maintains (1963: 249–50) that we do not make an inductive inference from *A uttered 'p'* to *A said p*. I suspect that in holding this, he is primarily concerned with the difference between uttering and the illocutionary act of saying. He seems to have lost sight of the need for induction that is surely involved in learning what 'p' means in the language of one's society.

- 16. I should acknowledge that Wittgensteinian worries about private languages are not the only reasons for regarding testimony as an *a priori* source. Tyler Burge advances the following as an *a priori* principle: "A person is entitled to accept as true something that is presented [by another person] as true and that is intelligible to him, unless there are stronger reasons not to do so." Burge argues for this principle by deriving it from two subsidiary principles, each of which he considers to be *a priori*: there is *prima facie* reason to regard a message one finds intelligible as coming from a rational source, and there is *prima facie* reason to regard a rational source as a source of truth. I lack the space to discuss Burge's case for the subsidiary principles here, but the interested reader may consult Burge (1993).
- 17. The following issue needs to be discussed: is believing testimony really a beliefindependent process? When I believe a piece of testimony, I come to the belief only because I have heard (or otherwise perceived) someone say something. Audi points out that this indicates a dependency of testimonial belief on *perception*, but not necessarily a dependence on other *beliefs*, since I need not form the belief that A said p. For Reid, however, things may be otherwise. He sometimes (though not invariably) seems to define perception as involving belief, so that hearing A say p would include as an ingredient believing that A said p. (For discussion, see Van Cleve 2004: sect. III.) If that is so, believing what you hear others say would turn out to be a belief-dependent process rather than a belief-independent process. But I am going to assume for the sake of discussion here that testimonial beliefs for Reid are psychologically immediate, i.e., dependent on no other beliefs.
- 18. In Goldman's terms, any belief formed by a process that is both belief-independent and reliable is an epistemically basic belief, and testimonial beliefs are so formed.
- 19. It is these deliverances—particular propositions believed on the basis of perception, memory, and the like—that are the first principles on my interpretation, not the generalizations that single them out.

- 20. I have characterized an *a priori* source as a source S such that it is *a priori* that the deliverances of S are *prima facie* warranted or likely to be true. 'Likely to be true' is a statistical notion, implying that most of the deliverances of S are true. I cannot see that it is *a priori* that most deliverances of perception are likely to be true. However, '*prima facie* warranted' is a normative notion, not implying any statistics. Just conceivably, it is *a priori* that deliverances of perception are *prima facie* warranted.
- 21. Though skeptical about an inductive justification of testimony, BonJour notes the possibility of a coherentist justification of testimony, appealing to the agreement among one another of various authorities on matters I am unable to check on firsthand (2002: 173–7). I think such coherence can indeed boost the epistemic standing of testimony-based belief, but only provided there is some initial reason to believe the authorities. I also think such initial reason would have to derive from induction over some sample of authorities that I *have* been able to check on for myself. I do not, therefore, see a coherentist justification of testimony as an independent alternative to an inductivist justification.
- 22. As P. D. Magnus has pointed out to me, the view I am now recommending for Reid has the consequence that children's perceptual beliefs qualify as genuine knowledge, whereas their testimonial beliefs qualify only as animal knowledge. I am not altogether happy with this invidious distinction, but I think it may be pressed upon us *if* perception is an *a priori* source and testimony is not.