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TRUSTING WITH SKILL:  
TESTIMONY, RELIABILITY AND EPISTEMIC JUSTIFICATION

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DEPARTMENT OF PHILOSOPHY

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## **Abstract**

The majority of what you believe is based on the testimony of others; what your parents and teachers have taught you, what you read online or see on the news, etc. And most of the time you accept what these sources tell you without independently verifying them with your own senses or reasoning. If these beliefs (as well as all of the beliefs built upon them) are thought to be justified, then an account of testimonial justification must be detailed which can account for this justification. If such an account cannot be given, it at best becomes a mystery how those beliefs are justified, and at worse you are thrust into a new kind of skepticism since most of what you believe will fail to be knowledge. In this dissertation I examine the two main accounts of testimonial justification in the literature, show how each is inadequate, and ultimately give my own account of how beliefs based on testimony can be, and usually are, justified.

Chapters One through Four examine the two main theories of testimonial justification, reductionism and non-reductionism, and I show that both views possess fatal flaws which render them unsuitable as plausible explanations for how agents can justifiably hold testimonial-based beliefs. In Chapter Five I examine a couple of promising nonstandard accounts of testimonial justification; Jennifer Lackey's 'duelist' account and Sanford Goldberg's 'extendedness hypothesis,' and ultimately dismiss these well. Finally, Chapter Six ends the dissertation by detailing my own account of testimonial justification and shows how it can avoid the problems which plague the theories above.

## **Chapter 1: Trusting What Others Say**

The majority of what you believe is based on the testimony of others; what your parents and teachers have taught you, what you read online or see on the news, etc. And most of the time you accept what these sources tell you without independently verifying them with your own senses or reasoning. If these beliefs (as well as all of the beliefs built upon them) are thought to be justified, then an account of testimonial justification must be detailed which can account for this justification. If such an account cannot be given, it at best becomes a mystery how those beliefs are justified, and at worse you are thrust into a new kind of skepticism since most of what you believe will fail to be knowledge. In this dissertation I examine the two main accounts of testimonial justification, show how each is inadequate, and ultimately give my own account of how beliefs based on testimony can be, and usually are, justified.

The two main theories of testimonial justification are reductionism and non-reductionism. Contemporary reductionism, which I examine in Chapter Two, holds that testimonial justification (i) requires sufficiently grounded positive reasons on the part of the hearer (one needs good evidence), and that (ii) this justification reduces to the justification of other processes by which we form beliefs (i.e. sense perception, inference, and memory). However, this view has fatal flaws; the most serious of which is that human beings simply don't seem to consciously reason from this kind of complicated evidence when accepting or rejecting testimony.

Unlike what reductionism entails, testimonial belief is usually formed simply and unreflectively.

I turn to non-reductionist theories of justification in Chapters Three and Four. In contrast to reductionism, non-reductionism posits that testimony is indeed (i) a unique and irreducible source of justification all its own, and that (ii) testimonial justification does not require the presence of any positive reasons (it is enough that the hearer lacks any good reasons to reject what is said). But like reductionism, this account will also be shown to be unsuccessful. One failing of non-reductionism is that there are excellent reasons to deny that testimonial justification is unique in the way it describes. Also, allowing a hearer to be justified in believing a speaker even when they have no positive reasons to trust them is a recipe for extreme gullibility, not justification.

Both main views, then, suffer flaws intractable enough to eliminate them as plausible theories of testimonial justification. After looking at the two most common accounts and finding them lacking, I examine a couple of promising nonstandard accounts of testimonial justification in Chapter Five; Jennifer Lackey's 'duelist' account and Sanford Goldberg's 'extendedness hypothesis'. These accounts will also be ultimately dismissed as unable to properly explain how beliefs based on testimony can be justified. Having found no workable position, Chapter Six ends the dissertation with my own reductionist account; one that avoids the various pitfalls which reductionism and non-reductionism fall prey to.



The account I propose embraces the core values of standard reductionism while denying that “positive reasons” must be thought of in terms of inductive evidence. My account of testimony also accepts the main strength of non-reductionism: a more plausible noninferential modal of testimonial uptake which is consistent with how we actually accept or reject testimony most of the time (automatically and without consciously calculating the likelihood of truthfulness). And as a reductionist account my view avoids the charge of endorsing gullibility by requiring hearers to have positive reasons to think a speaker trustworthy in order to be justified in a testimonial-based belief. Unlike traditional reductionist accounts, though, I allow these ‘positive reasons’ to be noninferential rather than requiring that they be the product of any sort of reflective, inductive reasoning.

Sections 1.1.1 through 1.1.5 give an overview of the structure of the dissertation. Then in 1.2 I give a brief outline of how the dissertation employs some key concepts which are important to the issues at hand.

## **1.1 Chapter Summaries**

### *1.1.1 Chapter Two: Reductionist Theories*

The next chapter begins with a historical introduction of reductionism to provide a background for the current debate, and a sampling of influential traditional reductionist theories are presented and examined. The pedigree of reductionism can be traced back to Hume, and his account is explored in 2.1.1. Hume argues that testimonial justification is the product of a hearer noting the

connection between (a) the reports of witnesses and (b) the truth of most such reports. From this regular conjunction, a hearer can then infer that testimony is a reliable method of belief acquisition.<sup>1</sup> Though later reductionists will often have a modified account of the specific process by which hearers are to infer the reliability of testimony, this reliance on collecting inductive evidence remains commonplace.

Moving then to examples of contemporary reductionism, I turn to the accounts of Elizabeth Fricker<sup>2</sup> in 2.1.2 and Jack Lyons 2.1.3<sup>3</sup> in order to locate the common thread which unifies all reductionist theories. That thread is twofold; reductionists can be said to hold two central theses. First, testimonial justification (i) requires sufficiently grounded positive reasons on the part of the hearer; one cannot just believe what someone says without good evidence. And second, testimonial justification (ii) is not a unique, distinctive type of justification; it reduces to the justification of other processes, such as sense perception, inference, introspection and/or memory.

After this overview of reductionism, the remainder of the chapter is an examination of the three strongest criticisms which can be leveled against reductionism as well as some common reductionist replies. One problem with reductionism is that it seems unlikely that agents possess the requisite experience to independently verify the reliability of testimony in the manner that Hume advocates above. I call this the *Lack of Evidence Objection*, which is detailed in 2.2.1. The sheer volume of testimony we accept unchecked swamps the number of cases

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<sup>1</sup> Hume (1992), Section X.

<sup>2</sup> Fricker (1995).

<sup>3</sup> Lyons, (1997).

we've verified ourselves, meaning that our testimonial sampling appears too small to confirm the required generalization about the reliability of the source of such testimony. This is particularly true in the case of technical fields with which we have little experience, and in these areas (e.g. complex science or technology) most agents could not even in principle verify the reports of others.

Section 2.2.2 presents a related criticism, the *Cognitive Impossibility Objection*. It is implausible that we possess the cognitive resources to correctly calculate the likelihood of an accurate report for all of the myriad combinations of contexts one can find oneself in. It's problematic for a theory to require that a hearer must take in most of the contextual details surrounding any given statement in order to correctly determine the likelihood of accuracy. For instance, even if I know that my friend's testimony is 95% reliable in general, this knowledge doesn't justify my believing her in certain specific domains such as, say, evolutionary theory or her personal history of infidelity. The reports of people will be more or less reliable in various domains of discourse, and it seems that in order to have the proper positive reasons for justification, we would need to determine the reliability in the salient domain for any given report. This is unlikely.

Finally, 2.2.3 looks at the *Psychological Implausibility Objection*; the objection that it is psychologically implausible that we actually justify our testimonial beliefs on the basis of our other beliefs the way reductionists hold. Reductionists take inference to be an important component of testimonial justification. Traditional reductionists explicitly require inference for testimonial

justification. For example, Fricker identifies reductionism as differing from non-reductionism because in the former “it may be shown that the required step – from ‘S asserted that P’ to ‘P’ – can be made as an inference involving only familiar deductive and inductive principles, applied to empirically established premises.”<sup>4</sup>

This suggests that reductionism requires that a hearer must go through something like the following process of reasoning to ground a testimonial report  $p$ :

- (i) I have a belief that  $p$  which originates from a testimonial report.
- (ii) Beliefs originating from testimonial reports are likely to be true if conditions C obtain.
- (iii) Conditions C obtain for this report.
- (iv) Therefore, my belief that  $p$  is likely to be true.
- (v) Therefore, probably  $p$ .

On this view of testimonial justification through induction, the hearer has an unreasonable workload ahead of her to be justified in  $p$ . She must know each of the prior premises, and actively employ the premises to make the correct inference each and every time she forms a justified testimonial belief. But not only is it unlikely that we actually go through this kind of reasoning, it is unlikely that we have beliefs like (i) – (iii) under most circumstances.

The conclusion we should draw from these criticisms is that traditional reductionist theories cannot adequately account for testimonial knowledge.

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<sup>4</sup> Fricker, (1994) p.128.

Reductionists have given responses to each of these objections, and in each of the three sections these responses are analyzed and rejected. The chapter ends with these criticisms remaining undefeated, leaving reductionism ultimately undesirable as an account of testimonial justification.

### 1.1.2 *Chapter Three: Non-Reductionist Theories*

Having found reductionism problematic, I next turn to non-reductionism in Chapter Three. I first present both two influential non-reductionist accounts as an overview of standard non-reductionist accounts; Thomas Reid's in 3.1.1 and John McDowell's in 3.1.2. After this overview, the two core theses of non-reductionism are developed and examined in 3.1.3. First, testimonial justification is (i) a unique and irreducible source of justification, separate from sources such as inference, memory or sense perception, yet similarly basic. And second, testimonial justification (ii) does not require the presence of any positive reasons; it is enough that the hearer lacks any defeaters for her belief. That these two theses are straight denials of reductionism's twin theses is not accidental; historically non-reductionism arose as an alternate account of testimonial justification after Reid roundly criticized Hume's own account as hopelessly flawed.<sup>5</sup>

After giving a general outline and analysis of non-reductionism, I next turn to objections to the view. The most notable is Fricker's 'gullibility' objection,

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<sup>5</sup> Reid, (1983), Ch. 6.

which is discussed in 3.2.<sup>6</sup> Fricker argues that it is epistemically improper to believe without any positive evidence for the trustworthiness of a speaker. To show this, she gives counterexamples in which hearers successfully meet non-reductionism's criteria for justification and yet would intuitively be blamed for forming her belief, even if the speaker turned out to be trustworthy. I also present, and ultimately dismiss, some popular responses against this objection in this section.

Most objections, such as the gullibility objection, attack non-reductionism's adherence to (ii) above. Few have argued against non-reductionism by attacking (i), and so the remainder of the chapter (and the entirety of Chapter Four) is devoted to showing the implausibility of (i). In 3.3.1 I give a careful examination of what it means for testimony to be a unique and irreducible source of justification, as different writers have glossed this in different ways. In the course of doing so I also examine its contrary - the reductionist thesis that testimony does indeed reduce down to other forms of justification. After carefully analyzing these theses, I clarify and define both in the most inclusive manner possible so as to accommodate the many descriptions of testimonial uniqueness and reduction which exist in the literature.

There are a multitude of arguments for the view that testimony is unique and distinct from other sources of belief (such as perception or inference). In 3.3.2 I critique three arguments posited by Robert Audi to prove the uniqueness of

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<sup>6</sup> Fricker (1994).

testimony.<sup>7</sup> First, he argues that one can't test the reliability of other basic sources in a noncircular manner, while we can for testimony. Second, unlike the other sources of belief, there is no domain for which continued testimony is in principle needed for a significant increase of knowledge. And third, unlike other basic sources testimony requires perceptual and semantic grounding. I take each of these in turn and will ultimately conclude that these points fail to show that testimony has a unique, irreducible nature.

In 3.3.3 and 3.3.4 I present two arguments which Jennifer Lackey has given for the uniqueness of testimony.<sup>8</sup> 3.3.3 examines her argument that testimony differs from other sources of belief in respective degrees of reliability; it is much easier to be systematically wrong about one's testimonial beliefs than other types of belief – and wrong in ways in which the false beliefs are indistinguishable from their complementary true beliefs. Then in 3.3.4 I present Lackey's argument that testimonial beliefs are much more heterogeneous than beliefs from other sources, and thus testimonial beliefs require a greater discrimination to be deemed justified compared to beliefs from other sources. However, after looking at both arguments I argue that neither can provide adequate evidence that testimony is unique in the way that non-reductionism requires.

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<sup>7</sup> Audi, (2006).

<sup>8</sup> Lackey, (2008) Ch. 4.

### 1.1.3 Chapter Four: More Arguments for Uniqueness

Having addressed some of the arguments for testimonial uniqueness in Chapter Three, Chapter Four is devoted to refuting the two most popular and influential arguments for the uniqueness of testimony. First, 4.1.1 presents what is perhaps the most common feature of testimony posited in defense of the Uniqueness Principle: testimony's intentional nature. It is often said that unlike any other belief-forming process, testimony is the product of agents with their own interests, motivations and agendas. Unlike any other kinds of justification, the epistemic principles which ground testimonial-based beliefs are said to necessarily take a speaker's agency into account. Hearers have to deal with the possibility of *purposeful* deception, which is absent in the more traditional sources of belief. The intentional nature of testimony provides an additional way of producing unreliable or false beliefs compared to other belief-forming processes. While any source of belief can lead one to falsehood through incompetence, misunderstanding and the like, only testimony can lead to falsehood by way of intentional acts of deception on the part of the speaker. For agents to successfully acquire truth from the reports of others, a distinct set of epistemic principles will be needed to address this possibility of deceit.

However, I argue that this *argument from intentionality* does not provide an appreciable enough *epistemic* difference to judge testimony a unique, irreducible source of belief or justification. In 4.1.2 I argue that the deceptive intentions of others are neither unique to testimony nor essential to testimony. Non-testimonial



cases can involve the intentions or deceit of others, such as when a mischievous zookeeper presents a painted mule as a zebra in order to incite false perceptual beliefs in onlookers. And it is a metaphysically possibility for a race of intelligent, social beings to be both incapable of deceit and capable of testimony, thus providing reports for which there is no chance of deception. In 4.1.3 I argue that intentionality may necessarily affect every one of our belief-forming processes, thus dissolving the distinctiveness of this trait to testimony alone.

In 4.2.1 the second major argument for testimonial uniqueness is presented: the *Necessity Thesis*. According to the Thesis, unlike other sources of belief testimonial knowledge that *p* can only be obtained by another agent who herself knows that *p*. In the next three sections I present, critique and reject three famous counterexamples which Lackey has advanced against the Necessity Thesis.<sup>9</sup> Her CREATIONIST TEACHER, CONSISTENT LIAR and PERSISTANT BELIEVER cases are considered in 4.2.2, 4.2.3 and 4.2.4 respectively.

Finally in 4.2.5 I argue that even though the above counterexamples fail to show the Necessity Thesis false, the Thesis still cannot be used as evidence for the uniqueness of testimony. Reduced to its bare components, it states that a hearer H can have knowledge of *p* on the basis of speaker S's report only if *p* is (i) justifiably believed by S, (ii) true and (iii) sufficiently lacking in the kind of luck or nonstandard causal features representative in Gettier/fake barn cases. But each of these requirements for H's testimonially-based knowledge have direct analogies to

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<sup>9</sup> Lackey (2008), Ch. 2.

similar requirements for *non-testimonial* knowledge; requirements for perceptual, memorial and rational knowledge which are not appreciably or epistemically different than those for testimonial knowledge.

#### 1.1.4 *Chapter Five: Nonstandard Accounts*

After spending three chapters showing that both reductionism and non-reductionism have unresolved flaws which compromise their ability to accurately model the belief-forming process of testimony, I examine two accounts of testimony in Chapter Five which don't fit neatly into either category. In 5.1.1 I look at Lackey's dualist account of testimonial justification, a hybrid view which purports to take the best elements of both reductionism and non-reductionism.<sup>10</sup> Dualism combines a positive reasons requirement on hearers along with a reliability requirement on the report given, both of which must obtain in order for a testimonially-based belief to be justified. By placing requirements on both the sides of the exchange, Lackey argues that her account (i) relieves much of the justificatory burden from a hearer and thus avoids the skeptical problems reductionism faces, while still (ii) leaving enough of a burden on the hearer to avoid worries of gullibility that plague non-reductionism.<sup>11</sup> However, I will argue in 5.1.2 that dualism cannot meet the first goal; or rather, when necessary corrections are made to the criteria of justification which it demands it becomes

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<sup>10</sup> Lackey (2008), Ch. 5.

<sup>11</sup> Lackey (2008), Ch. 5 and 6.

close enough to a reductionist view that falls prey to all of the criticisms examined in Chapter Two.

Section 5.2 is devoted to Sanford Goldberg's 'extendedness hypothesis' of testimony.<sup>12</sup> Reliabilists commonly hold that whether a subject's belief is justified or not depends solely on the reliability of the cognitive processes of that subject. Goldberg challenges this assumption in the case of testimonial belief, arguing that the justification of such beliefs rely at least partly on the reliability of the cognitive processes which formed the testimony as well. After providing an outline for the rest of the chapter in 5.2.1, I present Goldberg's motivation for the extendedness hypothesis in 5.2.2. In 5.2.3 I detail and respond to his counterexample against the traditional view of testimony that he is rejecting; the view that the unreliable processes of a testifier can be explained fully in terms of background local unreliability. And then in 5.2.4 I examine and reply to Goldberg's claim that testimony cases should be treated like interpersonal analogues of memorial and inferential belief.

Finally, in 5.2.5 I argue that if an extendedness theorist accepts that processes outside of a subject's head can determine justification, it will be arbitrary to rule out non-cognitive processes from evaluation. Once one has already decided to move beyond the skin of a believer, there is no good reason to restrict oneself to processes in the skin of others, and excellent reasons not to. And if one fully

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<sup>12</sup> Goldberg (2010).

embraces this more extreme form of extended cognition, testimony will again cease to be a unique form of belief acquisition.

#### 1.1.5 *Chapter Six: A Noninferential Reductionist Account*

In Chapter Six I detail my own account of testimonial justification; one which avoids the problems of the views discussed in earlier chapters. I first look at how the lines have been drawn on the issue; perhaps because of the positions of their respective main supporters, each side takes on extraneous commitments that ultimately undermine their ultimate project. The non-reductionist camp advocates noninferential testimonial justification, and additionally holds that positive reasons aren't necessary for testimonial justification. The reductionist camp holds that such positive reasons *are* needed, and additionally demands that such reasons must be inferential. But there is no reason why a reductionist can't give an explicitly noninferential account of such positive reasons. That is the kind of view I endorse here.

The objections discussed in Chapter Three correctly show that testimonial justification requires more than just a speaker to be reliable; the hearer has to shoulder her share of epistemic burden as well. It isn't enough that the testimonially-based belief merely lack any undefeated defeaters; a hearer must have sufficient positive evidence in order to be justified. But I argue that that evidence can be noninferential and solely consist of reliable cognitive operations of the sort advocated by process reliabilism. In this way, my account incorporates the first

thesis of reductionist theories: hearers must have positive epistemic grounds or evidence for their testimonial belief to be justified.

In Chapter Three and Four I argue that testimony should not be thought of as a unique, irreducible source of justification. Parsimony demands that we not create new avenues of justification if we don't need to, and making testimony unique isn't needed for an account of its place in cognition. The classic reductionist line is that testimony reduces to other basic processes such as perception, memory, inductive inference, etc., but reductionist accounts invariably pick inference as the heavy lifter of the testimonial reduction. My account denies that testimonial justification must reduce to induction; there are other more plausible candidates to consider. Thus, my theory meets the second thesis of reductionist theories: testimonial justification is not a unique, distinctive type of justification; it reduces to the justification of other belief-forming processes. And because it does not do so in an inferential way, the account avoids the objections leveled against other reductionist theories.

## 1.2 *Terminology*

What follows is an outline of some key concepts contained in this dissertation. These should be taken as broad descriptions of how I will be using these terms rather than hard definitions or a firm commitment of terminological uses. The places where I deviate from, or include more detail, than what is described here will be indicated as needed throughout the manuscript.

*Testimony:* My focus will be on the nature of testimonial justification rather than the nature of testimony. As such, I am neutral regarding the precise definition of testimony. As a rough, provisional account we can say that a speaker *S* testifies that *p* by performing a communicative act *A* if and only if *S* (i) means that *p* by *A* and (ii) intends to convey that *p* through *A*. Communicative acts can include assertions, utterances, written statements, non-verbal gestures (such as nodding or shaking one's head) and the like. For this reason, though I will use the terms 'speaker' and 'hearer' to respectively indicate givers and recipients of testimony, testimonial communication requires neither speech nor hearing. I make no reference to *A* being intended for any specific audience; this is to allow for cases of eavesdropping or reading someone's secret diary to be genuine instances of testimony for even unintended hearers.

*Testimonial Belief-Forming Process:* The belief-forming process of testimony is the process by which a hearer forms beliefs on the basis of testimony. As I use the phrase, this process is a cognitive process internal to the agent like other belief-forming processes such as perception, reason and memory.<sup>13</sup> In the same way that the perceptual belief-forming process takes the external objects of perception as its inputs to produce perceptual beliefs as outputs, the testimonial belief-forming process takes the testimony of speakers as inputs to produce testimonial beliefs as outputs.

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<sup>13</sup> This use of the phrase is compatible with the cognitive process being either (i) a distinctive belief-forming process or (ii) reducing to other belief-forming processes, though I argue against (i) in Chapters Three and Four. I consider the possibility that this process is not internal to hearers in Chapter Five.

*Testimonial Justification and Warrant:* The term ‘justification’ will be used to denote either an internalist or externalist account of justification or warrant as appropriate in the context. In the literature the term is commonly used in either way, depending on the writer in question, and so I rely on the context to make it clear which description applies at any given time. For instance, because all of the traditional reductionist accounts of testimony I examine use an internalist account of testimonial justification, I do so as well in those sections. I similarly follow the majority of non-reductionists in using ‘justification’ to denote a more externalist conception of warrant when discussing non-reductionism. When there is any question how the term is being used in someone’s account, I am explicit about the usage.

*Testimonial Justification and Knowledge:* The literature on testimony is also divided amongst writers who focus on testimonial justification and those who focus on testimonial knowledge. Much of time, talk of testimonial knowledge can be used interchangeably with testimonial justification for my purposes. My focus is on justification, and if a writer speaks instead in terms of knowledge it will often make no difference to my objectives. I note when the difference is substantive.

*Reductionism and Non-Reductionism:* Reductionist and non-reductionist accounts of testimony are manifold, taking many different forms and variants. However, all reductionist theories are unified by two core requirements or principles; this is true of non-reductionist theories as well. Reductionism is defined by an adherence to the (i) *Positive Reasons Principle* and (ii) *Reduction Principle*,

while non-reductionism is defined by an adherence to the (iii) *Default Justification Principle* and (iv) *Uniqueness Principle*. These four principles are analyzed at length in 3.1.3 and 3.3.1, and sketched below.

*Positive Reasons Principle:* For every speaker S and hearer H, H is justified in believing that  $p$  on the basis of S's testimony only if H has sufficiently good positive reasons to think that the piece of testimony is reliable. Though it need not be, 'reasons' is usually cashed out in the literature as reflective, evidential reasons sufficient for internalist justification.

*Reduction Principle:* Testimonial justification reduces to other, more traditional forms of justification. The justifiers for testimonial beliefs will just be the same sorts of things that justify the beliefs that we acquire from sense perception, memory, reason, and/or introspection. There are no unique justifiers particular to testimony; no justifiers distinct from those of other sources of belief. On most reductionist accounts, for instance, to be justified in accepting  $p$  on the basis of testimony means being justified in a certain inductive inference that the piece of testimony in question is reliable.

*Default Justification Principle:* A denial of the Positive Reasons Principle. By this principle, an agent can be justified in a testimonial belief even if she lacks positive reasons that the piece of testimony in question is reliable. Justification is the 'default' state for hearers; unless one possesses defeaters for the reliability of a piece of testimony that  $p$  (or defeaters for  $p$  itself), one is justified in believing  $p$ .



*Uniqueness Principle:* A denial of the Reduction Principle. By this principle, testimonial justification is unique and distinctive from the more traditional sources of justification.<sup>14</sup> Writers have variously cashed out this distinctiveness in terms of testimony either (i) having unique justifiers or (ii) being a unique source of belief. Note that (ii) entails (i): if testimony is a unique, distinctive source of belief, then it will have its own justifiers in the same way as perception is distinct from memory, and so has its own justifiers distinct from the justifiers of memory (which are in turn distinct from the justifiers of reason, etc.). So both (i) and (ii) will be denials of the Reduction Principle.

Having given an overview of my project as a whole, the next chapter is devoted to a detailed analysis of reductionist theories of testimonial justification.

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<sup>14</sup> When discussing the Uniqueness Principle, I will variously describe testimonial justification as putatively (i) unique, (ii) distinctive or (iii) irreducible. This is a stylistic choice; for my purposes the three descriptors amount to the same thing.

## **Chapter 2: Reductionist Accounts**

In this chapter I examine one of the two main justificatory accounts of testimonially-based belief: reductionism. On such accounts, a hearer must possess positive reasons that a speaker is trustworthy if she is to be justified in a belief formed on the basis of his report. Also, testimonial justification is said to *reduce* to other, more traditional forms of justification rather than belonging to its own unique category. Most reductionist theories identify inductive reasoning as the source of a hearer's justification for a testimonial-based belief; she must correctly infer that the testifier is both (i) likely to be competent to speak on the subject in question, and is (ii) likely to be speaking sincerely. In the first three sections I outline three reductionist accounts; Hume's account, from which reductionism can plausibly be said to originate, and two more contemporary accounts from Elizabeth Fricker and Jack Lyon. I then examine three objections to reductionism as well as a variety of replies to each.

### **2.1 Traditional Reductionist Accounts**

#### **2.1.1 *Reductionist Accounts: Hume***

The origin of reductionism can be traced back to David Hume, who was sufficiently insightful to take testimonially-based belief seriously and give an account of how such beliefs are justified. This was part of a larger framework to show that belief in miracles is never justified; since such a belief is typically grounded in the testimony of another (most often through the reading of religious

texts), Hume first addresses how testimony can justify belief. He then uses that framework to show that forming a belief in the miraculous from the reports of others won't meet the requirements for justification. For our purposes, I will focus on his account of testimonial justification while setting aside what he takes to be the implications for belief in miracles.

In his analysis of the role testimony plays in forming our beliefs, Hume underscores its importance, noting that “we may observe, that 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.”<sup>15</sup> After drawing attention to the great importance and ubiquitous nature of testimony, Hume goes on to describe what justifies such beliefs:

A wise man, therefore, proportions his belief to the evidence. . . . (O)ur 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. . . . And as the evidence, derived from witnesses and human testimony, is founded on past 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. There are a number of circumstances to be taken into consideration in all judgements of this kind; and the ultimate standard, by which we determine all disputes, that may arise concerning them, is always derived from experience and observation.

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<sup>15</sup> Hume (1992), s. 88 p. 111.

<sup>16</sup> Hume (1992), s. 87-8 pp. 110-2.

For Hume, one is justified in one's belief exactly as much as the evidence warrants. In the passage above he also considers and rejects the possibility that the justification of testimonially-based belief B might derive from a different source. For one to be justified in B, one must have observed the connection between of the reports of others and the facts. Once one has done this and thus knows the reliability of such reports, one uses this evidence to draw an inference about the reliability of B.

There are two important features of this account to note. First, Hume holds that one must have positive reasons to be justified in a testimonially-based belief. It isn't enough that the testimony be reliable, the hearer must have reason to think that the testimony is reliable. Second, these reasons are inferential. Hume further stresses this point, arguing that "the reason why we place any credit in witnesses and historians, is not derived from any *connexion*, which we perceive *à priori*, between testimony and reality, but because we are accustomed to find a conformity between them."<sup>17</sup> And this is not merely a psychological claim about how hearers in fact ground testimonial beliefs in observations of past conformity; Hume is making a normative claim about how such beliefs *ought* to be grounded, how the "wise man" reasons. We must use our prior experience of the accuracy and sincerity of reports to properly gauge whether particular future instances of testimony are credible or not. Testimony is explicitly not a unique source of justification; rather, the justification of testimony *reduces* to the justification of other sources, notably inferential reasoning with perceptual and memorial inputs

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<sup>17</sup> Hume (1992), s. 89 p. 113.

providing the premises. For example, if I am to be justified in believing  $p$  when  $S$  tells me “ $p$ ,” I have to have positive evidence that  $S$  is likely accurate and truthful in her telling, and this evidence comes by way of past experience of correlations between tellings and facts. From this evidence, if I infer that it is probable that the testimony is true, only then will I be justified in believing  $p$ .

### 2.1.2 *Reductionist Accounts: Fricker*

Two criteria for testimonial justification can be extracted from Hume’s account. First, one must have positive reasons to think a piece of testimony is reliable to be justified in believing it. And second, testimonial justifiers reduce fully to the justifiers of another standard source of belief (inference); the properties which epistemically ground testimonial belief are not unique to testimony.<sup>18</sup> These two criteria have become the two central theses of contemporary reductionist accounts. Having looked at the historical account which serves as the paradigm reductionist account, I now turn to outline two contemporary accounts, starting with perhaps the first and most famous defender of such an account in the past two decades: Elizabeth Fricker.<sup>19</sup>

Fricker defends both of the above theses, arguing that “our epistemic right to believe what others tell us must be exhibitable as grounded in other epistemic

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<sup>18</sup> These principles will be designated as the Positive Reasons Principle and the Reductionism Principle, respectively. A closer look at the details of these principles will be put off until 3.1.3 and 3.3.1, where they will be compared with non-reductionism’s twin principles.

<sup>19</sup> Or more accurately, her reductionist account from (1994) and (1995). She has since changed her views on the subject, but her original account laid the groundwork for much of the contemporary literature on the subject, and so I address it here.

resources and principles - perception, memory and inference.”<sup>20</sup> How does she reach this conclusion? First, she notes that belief-forming processes (such as memory and sight), have specific validity conditions such that the truth of deliverances of testimony will be correlated with these conditions successfully obtaining. She then argues that there are V-conditions for testimony as well, saying that “[f]or testimony, they are that the speaker is sincere in her utterance, i.e. she believes what she asserts, and that her own asserted belief is true.”<sup>21</sup>

Having determined the proper V-conditions for testimony, Fricker then canvases the possible positions that one can take:

“There are two broad options for epistemology here. It may be held that acceptance of the deliverances of the link-belief that . . . what one is told is so is only ever knowledge if it is supported by independent knowledge, in turn empirically based, that the V-conditions of the link are fulfilled on that occasion. . . . Or it may be held that a subject of the link has a presumptive right to believe its deliverances as such, in effect assuming that its V-conditions are fulfilled, but without any need to think about whether they are so, nor to possess evidence that they are. . . . We may say that knowledge gained through a link is inferential (since it must be backed by a substantial justification) in the first case, and direct (since no non-trivial justification for it is needed) in the second.”<sup>22</sup>

Fricker calls the claim that subjects indeed have a presumptive right to believe testimony without positive evidence (assuming there exist no undefeated defeaters) the *PR-thesis*.

The line is thus drawn for Fricker; and “the menu in epistemologies of testimony seems, then, confined to this exhaustive dichotomy: accept or reject the

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<sup>20</sup> Fricker (1995), p. 394.

<sup>21</sup> Fricker (1995), p. 398.

<sup>22</sup> Fricker (1995), p. 398.

PR thesis.”<sup>23</sup> Given that these are the only two options, Fricker notes the intuitive distaste we should feel towards the accepting the PR thesis:

(D)oes not mere logic, plus our commonsense knowledge of what kind of act an assertion is, and what other people are like, entail that we should not just believe whatever we are told, without critically assessing the speaker for trustworthiness? We know too much about human nature to want to trust anyone, let alone everyone, uncritically. As Hume emphasizes in his celebrated discussion of miracles, and even Thomas Reid acknowledges, we know too well how, and how easily, what we are told may fail to be true. How can the PR principle be an acceptable norm to guide us in our doxastic response to what others tell us? How can we embrace the non-reductive position?<sup>24</sup>

The argument seems to be the following: we have two options regarding testimonial justification: reductionism or non-reductionism. Both require that a piece of testimony be reliable as a criterion for justification, but reductionism *additionally* requires that one have empirically-based, independent knowledge derived through inference that the testimony is reliable. In contrast, non-reductionism has no such requirement; one has a presumptive right to believe without doing any such cognitive work. But given all the ways we know the formation of such beliefs can go wrong (deception, error and the like), trusting others uncritically is a bad epistemic norm; certainly not one which can result in justification. Therefore, we should reject non-reductionism in favor of reductionism.

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<sup>23</sup> Fricker (1995), p. 399.

<sup>24</sup> Fricker (1995), p. 400.

### 2.1.3 *Reductionist Accounts: Lyons*

I will have more to say about the implications of this argument for non-reductionism in 3.2, and I will call into question the assumptions behind it in 6.2, but for now let's move on to one more reductionist account which has been influential in the literature. As presented in 2.1.1 Hume argues that in order to be justified in believing a piece of testimony, one must correctly determine that the testimony is reliable by checking past instances of testimony against the facts; it is from this fact-checking that one inductively determine the probability that the present piece of testimony is accurate. But is the matching up of facts with reports the only source of inductive support for testimonial beliefs? Jack Lyons has given an alternative account which seeks to expand the inductive base from which an agent can acquire evidence for testimonial reliability, allowing folk psychological beliefs to be used as proper grounding:

The problem with Hume's treatment of testimonial belief is that it assumes that our evidence for the reliability of testimony must come in the form of personally experiencing a correlation between reports and facts. . . . All that is sought here is a simple correlation between utterances and the world, without any attempt to get inside the minds of the testifiers. However . . . (w)e, as epistemic agents, also have at our disposal a wide range of folk psychological beliefs that we can use to support statistical generalizations that are relevant to our belief in the reliability of testimony.<sup>25</sup>

For Lyons, the psychological beliefs most important to determining the likelihood of a piece of testimony are (i) “that people generally try to tell the truth”, which he

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<sup>25</sup> Lyons (1997), p. 171.



calls the Sincerity Principle, and (ii) “that people are generally competent with respect to believing the truth,” or the Competence Principle.<sup>26</sup>

If it is possible to inferentially justify these two principles, a reductionist account won’t have to rely exclusively on knowledge of fact-report correlations such as Hume describes. This would provide a broader scope of evidence for hearers to draw from, allowing for more flexibility when properly assessing a report for reliability. With this goal in mind, Lyons looks to Simulation Theory, a promising theory of the origin of our folk psychological beliefs:

According to the simulation theory . . . we form beliefs about the mental states of others by using the mechanisms by which we form the corresponding states in ourselves. We simply imagine ourselves in the other's position, and see what states are produced; that is, we take our own mental state production mechanisms 'offline', feed in the relevant perceptual and other inputs, and simply introspect the appropriate output.<sup>27</sup>

For example, if I want to know how someone will react to my cutting in front of them in line, I run a simulation in my head of someone cutting in front of me; I would become upset, and so I can correctly predict that they would become upset as well.

How does this help a reductionist justify the Competence and Sincerity Principles? Lyon presents the following example to show that both can be justified by beliefs formed by simulation:

(S)ay I want to know whether Smith believes that there is a rhinoceros in my living room. According to the simulation theory, I simply imagine myself in Smith's position (sitting on my living room couch), feed the relevant perceptual inputs into my (now off-line) mental state production mechanisms, and introspect whether these mechanisms produce an ersatz

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<sup>26</sup> Lyons (1997), p. 171.

<sup>27</sup> Lyons (1997), p. 172.

belief that there is a rhinoceros in the room. Since they do not, I conclude that Smith would not have this belief. . . . Now since I am justified in believing that Smith believes there is not a rhinoceros in the room (on the basis of simulation), and I am justified in thinking that it is *true* that there is not one in the room (on the basis of perception), I am justified in believing that at least one person has at least one true belief. I perform many such simulations with different people, and end up with a number of beliefs that support the inductive generalization that people are generally competent in forming beliefs.<sup>28</sup>

The Competence Principle can thus be justified. And given that I am sincere most of the time in my dealings with others, similar simulations provide me with evidence to make an inductive generalization that people are also generally truthful in their dealings with others, grounding the Sincerity Principle as well.<sup>29</sup>

In addition to justifying my belief in the general reliability of testimony, I can also determine the reliability of narrower reference classes. For instance, if I would be tempted to lie if asked personal question Q were I were in my friend's shoes, this gives me evidence that she would be similarly tempted when asked Q. If I think that I would be extremely competent in the field of F if I spent four years studying it, simulation theory now provides me with reason to think that my friend is extremely competent in F, given that I know she has spent four years studying it.

In this way, Lyons' account allows for two different ways to justify the belief that most instances of testimony are reliable. An agent can (i) engage in the traditional Humean fact-checking and personally check the number of cases where a piece of testimony ended up conforming to a true state of affairs and discover that the percentage of correct reports is high, and an agent can additionally (ii) use

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<sup>28</sup> Lyons (1997), p. 173.

<sup>29</sup> Lyons (1997), pp.173-4.

simulation to collect evidence that other people are both competent and sincere in their reports. This inductive evidence is then used in turn to provide the positive reasons necessary to justify our various testimonial beliefs.

## **2.2 Objections to Reductionism**

### *2.2.1 Objections: Lack of Evidence*

Having looked at Hume's original reductionist account as well as two more recent influential accounts, the next three sections will examine possible criticisms leveled against reductionism. As we have seen, in order to be justified in a testimonially-based belief B, reductionism requires that one have positive reasons to believe that B is reliable, and that these reasons do not constitute a unique source of testimonial justification, but rather stem from more common sources such as memory, perception and inference. Reductionist theories also invariably cash out these positive reasons as the outputs of an inferential reasoning process, the outputs delivered through induction.<sup>30</sup> But is it plausible that an agent can gather enough evidence to ground such beliefs, or employ it in the kind of complex calculations which would seem to be necessary? There is good reason to think that agents cannot; Laurence Bonjour describes the problem thusly:

The potential scope of this sort of [reductionist] justification is severely limited in ways that make it clear that it cannot even begin to provide a general justification for testimonial beliefs. There are far too many people (and other sources) whose testimony I rely on in various ways for all or even very many of them to be certified as reliable via this sort of argument. Moreover, I receive information via testimony on a very wide range of

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<sup>30</sup> This sub-criterion is so omnipresent that I include it here, though in 6.2 I scrutinize this requirement in great detail.

subjects: it would be practically impossible for me to check firsthand concerning very many of these, and quite a few matters that I am unable to check even in principle.<sup>31</sup>

I will call this the *Lack of Evidence Objection*. Suppose I take my car for a turn up, and the mechanic tells me that I need to replace a front tire or risk an imminent flat. On a traditional reductionist model, I am only justified in believing her if I have experienced a strong track record of reports of that general type turning out true.<sup>32</sup> The question for reductionism, then, is how do I collect the required evidence for the reliability of such reports?

Personally knowing little about tires, I wouldn't know if (say) past mechanics who told me my car had a problem were correct or not; I have no direct way to tell if past assessments were false positives or duplicitous attempts to get more business from me. And this point is clearly generalizable to whole swathes of domains in which I have no expertise. Further, in practice one very common source of confirmation about the reliability of an individual's reports is through testimony itself; by asking others, reading the studies of those in the same field, doing research and reading reviews from websites that specialize in the evaluation of others (i.e. [consumerreports.org](http://consumerreports.org), [cnet.com](http://cnet.com), [polifact.com](http://polifact.com)), and so forth. This simply pushes the problem one step back, however, so the same worries about how to collect evidence for the reliability of the new testifier crop up again.

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<sup>31</sup> BonJour (2002) p. 172. See also Coady (1992) pp. 80-4, Lackey (2008), pp. 178-80, and Webb (1993) p. 263.

<sup>32</sup> Some have interpreted Hume as requiring evidence that testimony as an entire *category* be reliable (for instance, Coady 1992 p. 82), and thus justified inductively, but regardless of whether Hume had such strict criteria, most contemporary reductionists do not, and so my focus here is solely on the more plausible requirement that only individual instances of testimony must be judged to be reliable. This will only require judgments about the reliability of the particular category of the report belongs to, whatever that may be.

This problem isn't restricted to expert knowledge. Even in the domains I have access to and can check track records for myself, I have only experienced and verified a vanishingly small proportion of cases; not nearly enough to act as a proper sample size to generalize from. Suppose I am a fanatical traveler, always on the road and never shy about asking directions, and have personally verified dozens (or perhaps hundreds) of instances where believing a report of where a particular landmark was located successfully led me to the destination in question. That number is miniscule in comparison to the number of possible instances of such reports, which would have to take into account the number of potential testifiers, coupled with the perceived current psychological state of the speaker coupled with the obscurity of the landmark in question, etc. Even if the domain is narrowed further, say, (a) New Yorkers who (b) look generally friendly and who are reporting on (c) the location of a famous, popular building, the sample size of such reports that I have personally verified will be a tiny fraction of all reports of that type; too small to justifiably infer the reliability of that type.

How might a reductionist respond to this objection? We've seen one such response; Lyon's reliance on simulation theory is motivated by this very kind of objection. The flaw of a more classic reductionist account, according to Lyons, is "that it presumes that whatever inductive evidence we might have for the general reliability of testimony must be acquired by checking reports against facts (e.g., perceiving that *S* says that *p* and perceiving that *p*)."<sup>33</sup> This opens the door to the Lack of Evidence Objection. However, simulation theory provides an account

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<sup>33</sup> Lyons (1997), p. 170.

which doesn't require a hearer to engage in reasoning from established correlations between reports and facts, instead allowing justifying inferences to be made from the outputs of running mental simulations of what one would do if in the position of the testifier. These simulations gradually add up into a robust body of inductive evidence for the beliefs that a testifier is likely competent and sincere; robust enough to provide a powerful supplement to the more standard fact-checking of reports and properly ground testimonially-based beliefs.

I will argue that these simulations won't provide the extra evidence needed for an adequate inductive sample size, however. In fact, inferences from this source are even more vulnerable this objection. Let's reexamine Lyon's rhinoceros example from the last section, which he uses to show how evidence from simulation can accumulate for the belief that people are competent believers. First, I reason that if I were in Smith's current perceptual position, sitting on that couch with his particular line of sight (etc.), I would believe that there wasn't a rhinoceros in the room. Therefore, I'm justified in believing that Smith believes that there isn't a rhinoceros in the room. And since I also justifiably believe that there is *in fact* no rhinoceros in the room on the basis of my own perception, I have successfully reasoned that Smith has a true belief. And as I continue engaging in this process, I continue to build up my evidence in the competency of others.

There are a couple of worries about this process of justification. First, in order for a statistical sample to be viable for a proper generalization, it must not only be of an adequate size, but the samples must be sufficiently random and wide-

ranging to ensure that each is independent from each other. The latter requirement is not met in Lyon's case; all of the evidence stems indirectly from my own capabilities, in this case, for instance, my own visual capabilities. One consequence of this is that whatever possible visual biases, flaws or personal priming triggers I have are at strong risk of bleeding through to my assessment of how others see the world on any given occasion.

Vision is a (relatively) simple enough process for me to simulate the standpoint of others, but even it can give us trouble when we move away from beliefs about large, oddly-placed animals. Is Smith likely to see, and thus believe, that there is a small coffee stain on the carpet? To answer that, I need to have information about his visual acuity, attention to detail, distaste of stains, present level of distraction, and similar background information which I may well not have. I will most likely substitute in my own traits into my simulation of him unless I am very careful. Even if I am aware of these subconscious tendencies of Smith's it is unclear that agents are capable of adequately simulating traits they do not themselves possess, particularly given that multiple such traits will likely need to be simulated for any given prediction. And these issues will only get more complicated when we move from perception to areas which are harder to make predictions about, such as motives to deceive, competencies in skills one doesn't personally possess, when psychological biases are most likely to come into effect, etc.

A second worry is that even discounting these various differences in believers, this dependence on my own perceptual verification makes the whole enterprise suspect. While it may be that simulation can justify particular beliefs I have about the beliefs of others, the move from this to reasoning about the reliability of others is vicious bootstrapping, as the next couple of examples will show:

Vision Check Case: Smith and I are sitting on the same couch, and I want to determine the reliability of Smith's visual beliefs in this context. I simulate being in his position and make a checklist of things I think I would see if I were sitting where he is. I then verify which of the things on this list are indeed in the room by looking around, happily concluding that Smith's vision is quite reliable; the lists are identical (or perhaps nearly so). I note this high visual competence for my future evaluations of his eyewitness reports, making it more likely than before I ran this the test that I will trust such reports in the future.

Party Dog Case: While at a party, I see a large dog run through the room. Trusting in my senses but looking for corroborating evidence, I simulate being in the position of every other person in the room and conclude that given their positioning and powers of sight, they would have seen the bounding dog as well. I now have a justified belief that ten other people believed that a dog ran through the room, which reassures me that the event genuinely occurred. I also use this test to add to my body of evidence regarding the accuracy of the beliefs of others, which I consequently now have slightly more trust in.<sup>34</sup>

The above cases are examples of bad reasoning, and they rely on the same kind of bootstrapping that a reliance on simulation does. And my objections generalize to collecting evidence of the sincerity of others through simulation as well. Perhaps I can be justified in believing that my friend is being sincere about what she had for breakfast that morning by reasoning that if I were in her position I would be truthful, but intuitively I shouldn't be able to add this prediction of her

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<sup>34</sup> If needed, we can also add that my circle of friends is unflappable in the face of canines and would not react in any observable way to such an event, a fact which I know.



presumed sincerity to my body of evidence that people are likely sincere in this kind of context. Simulation theory, then, cannot provide a proper grounding for testimonially-based beliefs in this way.

A second response some reductionists have made to the Lack of Evidence Objection has been to deny that the typical body of evidence drawn from fact-checking reports must constitute a robust sample size at all. James Van Cleve explains the point in the following way:

[The] myriad instances in which I have been able to check on the veracity of testimony firsthand are . . . only a minuscule fraction of all the instances in which I have believed things on the basis of testimony. But . . . what matters is not the proportion of testimonial beliefs I have checked, but the checks undertaken that have had positive results. I have seen only a tiny fraction of the world's crows, but the one's I have seen are overwhelmingly black, and that is enough to support my belief that nearly all crows are black.<sup>35</sup>

Demanding stricter requirements on the size of our evidential set leads to skepticism for induction across the board. This isn't a feature unique to testimony, Van Cleve argues; cases of inductive inference allow for tiny samplings to justify the proper generalizations.

Two points can be made against this reply. First, even if the point holds for many domains we care about, it doesn't address how agents can be justified in believing reports in domains where even this minimalist degree of personal fact-checking cannot be met. This includes any area of expert or technical knowledge that an agent isn't trained in, and even areas which she *does* have the proper training, if she hasn't gone ahead and done the actual legwork; the mere potential to

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<sup>35</sup> Van Cleve (2006), p. 68. Lyons makes a similar reply in (1997), pp. 168-70.

collect the evidence isn't sufficient. And that cuts through a wide swath of beliefs that we typically think agents can be justified in.

A large benefit of having an epistemic division of labor is so that different members and groups in society can devote the time and effort studying in an area of specialization and disseminate their findings to the rest of the community who didn't specialize in that area. Different community members train to learn the truths of different bodies of knowledge, and we all get to reap the epistemic benefits (if desired) through the subsequent reports. But if an agent can't verify the track record of such reports through any means other than further testimony, and thus in a viciously circular way, then even if outright skepticism doesn't result our epistemic world becomes a lot more insular than we previously imagined.

Secondly, we shouldn't think that the Lack of Evidence Objection is merely part of a larger worry about induction; the domain of testimony is especially vulnerable to this criticism. This is because in all but the most trivial or mundane cases where a reasoner inductively generalizes from a few cases, they will be implicitly relying on the testimony of others to provide their sample size. To take a paradigm example, generalizing that that "all emeralds are green" (hereafter G) is made more plausible by the fact that the reasoner is almost certainly getting many of her emerald reports from others. Perhaps more importantly, such a reasoner is relying on the lack of conflicting reports; if there were any non-green emeralds, she likely would have heard about it. But to allow that such additional evidence is available would be begging the question when it is testimony itself under review.

Again, reliance on these external reports (or lack of readily assessable undercutting reports) will only be justified if a similar fact-checking can be done on these new testifiers or silent collaborators, pushing the problem back. And inductive generalization becomes a more shaky foundation without this external support. If, like most people, I can count the number of emeralds that I have personally viewed on my fingers, it is implausible that this is enough to ground a proper generalization. The same can be said for the average person's experience with the conductivity of copper, the blackness of ravens, and most other traditional examples of inductive generalization. For this reason the Lack of Evidence Objection will not generalize from testimony to all cases of induction in the way Van Cleve describes; using induction in the domain of testimony is especially problematic due to the extra restriction placed on one's sample size compared to using induction in other domains.

Of course, there is another way that basing testimonial justification on inductive inference can be said to generalize to most other cases of induction. If most of our inductive inferences ultimately depend on testimony for their inductive base (as described above), then whatever epistemic problems beset testimony will also, ultimately, beset other instances of inductive inference. So if inferring that G requires some degree of testimonial support that "all observed emeralds have been green" (and a lack of reports to the contrary) in order to have a proper sample size, then if those emerald reports are not *themselves* adequately grounded the inference that G will itself not be adequately grounded. But this is not a criticism of the Lack

of Evidence Objection, but rather a further problem with reductionism. If an account of testimonial justification requires that one make inductive inferences which prove impossible for agents to make, then not only will our testimonial beliefs be unjustified, so will most of our inductive beliefs. The opponent of reductionism can point to this as yet another reason for embracing a less strict account of testimony.

### 2.2.2 *Objections: Cognitively Impossible*

We have examined the objection that agents lack the requisite evidence in the reliability of testimony that reductionism requires to justify such beliefs. I turn now to a second objection: even were agents to have both access to and possession of this evidence, the cognitive burden of successfully employing it in the ways demanded by reductionism seems excessive; too excessive to reliably yield accurate results. I will call this the *Cognitive Impossibility Objection*. The potential problems begin even before any probabilistic reasoning comes into play. When an agent is preparing to calculate the likelihood that a given piece of testimony is reliable, she must first determine which reference class the report belongs to.

Revising the tire replacement case of the last section, suppose that this time when I go the mechanic who tells me I need new tires, I have a decent amount of salient background knowledge: I know a fair amount about tires, about the general practices and training of mechanics, about commercial business practices, and so forth. Before utilizing any of this information, however, I must first correctly

determine what category her report that “you need new tires” belongs to. Do I put the report under the category of testimony from ‘auto mechanics,’ or ‘tire enthusiasts,’ or ‘Wal-Mart employees with kind eyes,’ etc?<sup>36</sup> This issue isn’t likely unique to just testimonial justification, however, and plausibly applies to all inductive inferences, so I won’t focus on the point here. However, I do think that even if restricting ourselves to determinations of competence, properly determining the most accurate category for tokens of testimony is particularly difficult. Each such category will most likely be a two place relation involving both the (i) type of report (biology, perceptual beliefs, etc.) and (ii) the type of reporter (physician of ten years, the moderately near-sighted, etc.), and a hearer will need to determine which narrow category of each is salient in order to make a prediction of likelihood with any chance of reliability.

Setting aside the proper determination of the relevant domain, we can ask whether agents are capable of calculating the likelihoods of a piece of testimony from inductive evidence. Is such inferential reasoning usually possible, let alone a common practice? One telling piece of evidence against this being the case is our own reflective beliefs about our abilities to gauge such likelihoods. When forced to consciously consider the matter, I’m not able to say what the reliability of an average person’s eyesight is during dusk at 100 feet away, or how accurate the typical mathematical belief involving the multiplication of two digit numbers is, or the accuracy of memorial beliefs about meals consumed a week ago, or a whole

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<sup>36</sup> Coady raises this as an objection to Humean reductionism in (1992) pp. 83-4.

host of other fairly mundane categories. Reductionism doesn't require agents to pinpoint the numeric probabilities, of course, but I don't seem to have even a somewhat rough estimate. If an agent needs to have even an admittedly rough idea of such likelihoods before even starting the process of inferential reasoning, it is hard to see how we can be justified in the majority of our beliefs.

Also, so far I have only considered calculations of competence, but both the competence and the sincerity of a testifier must be taken into account to render an accurate determination of the reliability of a given report. The more obvious point is that the same sorts of calculations as described above will have to be made regarding how trustworthy a speaker is in the relevant context. This is often noted<sup>37</sup>, but what is rarely discussed is how this makes the calculation of likelihoods much more complicated. It isn't enough to describe the context of a report as an instance within a single domain. Every context of testimony falls under two separate and overlapping domains which must then be entered into a further calculation. The type of report will be the same in this new calculation, but a hearer will need to place the reporter in a new category more salient to her capacity and tendency to deceive than the context related to her competency.

In the above case, in addition to the type of report (such as 'tire conditions') there is a domain of reporters salient to competence (such as 'car mechanics'), and there is also a domain salient to sincerity (such as 'people standing to gain a modest amount of cash by lying but with a moderate risk of censure if found out'). This

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<sup>37</sup> As we have seen from both Fricker's and Lyon's account.

means that two separate initial likelihoods must be reasoned from the background evidence, which then plug into a new calculation to arrive at a final assessment of the report's accuracy.<sup>38</sup> Both initial numbers will be under a probability of 1, and after multiplication the product of the two numbers will be the final likelihood of the report being true.<sup>39</sup>

Again, I'm not suggesting that reductionism requires, or need require, agents to actually calculate numeric figures, but something like this conscious calculation must take place, and it is implausible that agents can consistently draw inferences of this kind in even a rough and somewhat sketchy sense.<sup>40</sup> This makes the requirement of grounding an agent's testimonial justification in this kind of inductive reasoning even harder than it is often described. For these reasons, the kind of calculations of likelihoods reductionist accounts would require from hearers in order to justify a testimonially-based belief is too strong to be met, thus threatening widespread skepticism.

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<sup>38</sup> This required dual assessment is often concealed by the way we phrase the contexts we think are salient. A critic could claim, for example, that when my friend confesses to me that she saw Bob steal a cookie from the cookie jar, the only salient context needed to consider is 'the recent perceptual beliefs of a friend.' But this is not a single context; the description smuggles in both (i) perceptual accuracy and (ii) sincerity of one who is a friend. Even seemingly simple descriptions of contexts will be subtle conjunctions such as this.

<sup>39</sup> Ignoring the rare fluke case where an insincere statement accidentally results in a truth. A subject won't always be able to ignore such a possibility, though. In contexts where both values are extremely low, such as the statements of the intensely inept compulsive liar, the numbers may actually work out such that a report is likely to be true.

<sup>40</sup> In 6.4 I argue that agents are indeed capable of making exactly these kinds of calculations regarding likelihoods of sincerity and competence, but only through *subpersonal* processes rather than inference.

### 2.2.3 *Objections: Psychologically Implausible*

I turn now to a closely related objection: even if we could successfully and consistently reason in this matter, it is implausible that humans actually do so. I will call this the *Psychological Implausibility Objection*. For instance, Coady argues that "[i]n our ordinary dealings with others we gather information without this concern for inferring the acceptability of communications from premisses about the honesty, reliability, etc., of our communicants,"<sup>41</sup> and Webb notes that "In only the rarest instances do we reason at all before forming a belief based on what someone has told me. In the vast majority of cases we simply believe them, or else not."<sup>42</sup> One reason to doubt that we engage in inferential reasoning when forming beliefs on the basis of testimony is the fact that in the vast majority of cases we are not consciously aware of any such reasoning occurring when confronted with reports. If my colleague tells me that she had a good time at the conference last week, I have no awareness of thinking about anything like the likelihood that she is (i) competent at judging and remembering introspective states and (ii) honest about those states to colleagues, both to an acceptable veridical threshold. I just believe her. And even afterwards when scrutinizing the exchange more carefully, I have no self-awareness that any such reasoning took place in me.

Similarly, as discussed agents aren't very good at giving even fairly rough estimates of the likelihoods of various reports being made competently or sincerely when asked. I could not say with any confidence what the general probability is

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<sup>41</sup> Coady (1992), p.143.

<sup>42</sup> Webb (1993), p. 262.



that an agent's one-week-old memorial beliefs about her emotional state will be accurate, or the probability that a casual acquaintance will be honest about such a state, and I am even less confident of the percentage of cases in which both of those conditions obtain. Even if I do come up with some rough likelihoods, it seems to take far more time spent in reflection than is spent before I form a belief in my friend's assertion in actual practice. In fact, just consciously going through this process of reasoning feels strange; I am unaccustomed to reasoning in such a manner. This suggests that agents do not in fact ground their testimonial beliefs through such a process, at least not in the great majority of cases.

The force of these objections rests on the reductionist requirement for hearers to ground instances of testimonial justification in the possession of positive evidence derived from inductive calculations of the sorts described above. But must a reductionist account require that such calculations be the result of this kind of conscious reflection? Fricker has denied this; the following is a description of how speaker sincerity can be evaluated:

In claiming that a hearer is required to assess a speaker for trustworthiness, I do not mean to insist, absurdly, that she is required to conduct an extensive piece of M15-type "vetting" of any speaker before she may accept anything he says as true. . . . My insistence is much weaker: that the hearer should be discriminating in her attitude to the speaker, in that she should be continually evaluating him for trustworthiness throughout their exchange, in the light of the evidence, or cues, available to her. This will be partly be a matter of her being disposed to deploy background knowledge which is relevant, partly a matter of her monitoring the speaker for any tell-tale signs revealing likely untrustworthiness. This latter consists in it being true

throughout of the hearer that if there were signs of untrustworthiness, she would register them, and respond appropriately.<sup>43</sup>

How does this help the reductionist? Fricker describes this monitoring process as “typically conducted at a non-conscious level,” and the judgment outputs of such monitoring “will often be registered and processed at an irretrievably sub-personal level.”<sup>44</sup> These outputs are compatible with an inferential justificationist account of knowledge as long as the following requirements are met: “the subject’s beliefs must not be opaque to her, in that she must be able to defend the judgment which is the upshot of this capacity with the knowledge precisely that she indeed has such a capacity.”<sup>45</sup> If a hearer can do this, the process can justify her newly formed belief without having to go through the laborious reasoning process undermined by the pair of objections in this section.

However, this ‘monitoring’ account fails to provide what a justificationist account requires for knowledge, and so will not save reductionist models as long as they ground justification in inferential reasoning. Fricker’s monitoring system is supposed to unconsciously contribute to the formation of an assessment of sincerity by deploying relevant background knowledge and scanning for cues of insincerity, but there isn’t enough evidence that such an inferential process in fact exists and is engaged behind the scenes producing these kinds of beliefs. It might be thought that certain verbal responses that can be elicited by a hearer who has received a report provides just this sort of evidence for such a sub-personal reasoning process.

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<sup>43</sup> Fricker (1995), p. 828. A similar process is possible for the evaluation of speaker competence as well.

<sup>44</sup> Fricker (1995), pp. 828-9.

<sup>45</sup> Fricker (1995), p. 829.

For instance, Fricker notes out that the results of such subconscious beliefs can generally be fished up into the consciousness and expressed, albeit roughly, in words,” and that if asked why I trusted that stranger, I can respond “He had a trusting face” or “He seemed normal.”<sup>46</sup>

The problem with using this as evidence for the existence of unconscious beliefs about the various salient qualities of a testifier is that there is a plausible alternate explanation for a hearer’s tendency to give responses like those above. Such possible elicited remarks from a hearer about a speaker’s demeanor, facial expressions and the like are at least as indicative of a mere *disposition* to believe these things, and the possession of a disposition to believe a certain thing must be distinguished from an actual subconscious belief of that thing.<sup>47</sup> To take an example outside of the topic of speakers, if asked why I prefer koala bears to kangaroos during a conversation about Australian wildlife, I might answer that koalas are both smaller and gentler than kangaroos, even though I have never consciously formed this particular belief. But this needn’t indicate that I had possessed any such unconscious belief; it’s more likely that my particular predilections simply mean that I have the disposition to give such an explanation if prompted.

Similarly, it may well be that I merely have a disposition to form certain beliefs about how a speaker presented herself while making her report, which then prompt certain conscious beliefs if questioned after the fact about how I came to

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<sup>46</sup> Fricker (1995), p. 829.

<sup>47</sup> For a good discussion on this general topic, see Audi (1994), 419-434.

my decision to trust or distrust. This would seem to be a simpler explanation than positing the existence of a host of hidden beliefs about likelihoods, and is important because agents can only make inferences from beliefs. It isn't sufficient to ground an inference in a disposition to believe, because evidence is only useful if it actually is used and this requires it to currently exist and be considered.

Apart from the question of whether it is plausible that these reasoning processes exist at the sub-personal level, the monitoring account doesn't seem to help with the main problem it was meant to; the "vetting" process of determining the likelihood that a report is trustworthy. On this account, the system is still considering background evidence and inputting perceived cues of dishonesty to calculate these likelihoods; the difference is that the work is done beneath our awareness. Fricker does allow for the following heuristic: "[O]ne is justified in taking a speaker to be sincere, unless one observes (and one must be alert for them) signs of duplicity."<sup>48</sup>

If 'signs' in this context is restricted to perceptual cues such as body language, tone of voice and the like, this doesn't seem enough to avoid gullibility. Signs of deceit are not the only indicators that a testifier may be insincere, it is just the more obvious evidence. Actual perceived indicators of dishonesty belong to a small subset of the factors that can be taken under consideration, such as one's relationship with the speaker, the benefits of lying in the present context, the chances and consequences of being caught, the speaker's past track record, the

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<sup>48</sup> Fricker (1995), p. 829.

subject of the report. This means that even if a hearer is properly attentive to the perceptual cues a speaker gives off, this form of “deceit-detection” monitoring contains large gaps which will result in failures of discrimination. If Jan receives an unlisted phone call from someone purporting to work at her bank asking for her identification information in order to correct a problem with her account, she should adopt an attitude of mistrust even if he has the most sincere voice that she has ever heard. There are other important factors at play, such as the incentive to lie and the lack of accountability which the anonymous nature of the call affords.

On the other hand, if ‘signs’ *does* include considering the background evidence for warning flags indicating that the speaker falls under risky reference sets, then just as much cognitive work will be required for monitoring as a more traditional reductionist account and the problem of psychological implausibility returns. And none of this has yet considered simultaneously employing similar reasoning for competence, and then calculating a final likelihood from the results of both. A consideration of this amount of background evidence is untenable if agents are to consciously do so, and the process must be conscious if monitoring is to fit into a reductionist account. Thus, including this type of monitoring to the account doesn’t save reductionism from the objections.

This chapter has examined three variations of reductionist accounts, and then examined three objections to reductionism, considering and rejecting a number of replies in the literature. The objections against reductionism are powerful, and it may look unlikely that the view can be salvaged from the criticisms shown above.

In the next chapter, I examine whether non-reductionism can provide a better model of testimonial justification.

### **Chapter 3: Non-Reductionist Accounts**

As we saw in the last chapter, reductionist justificatory accounts of testimonially-based belief have deep and potentially insurmountable flaws. In this chapter I examine the primary alternative: non-reductionism. The two main tenets of such accounts are that (i) testimony is a unique and irreducible source of belief or justification which is separate from any other source of belief or justification such as inference, memory or sense perception, and that (ii) testimonial justification is the default state for hearers, requiring only that she have no undefeated defeaters for the reliability of the report. In 3.1.1 and 3.1.2 I examine two historically influential and paradigmatic non-reductionist accounts. I begin with a look at Thomas Reid, who is often cited as the author of the seminal works which, in response to Hume's account of testimony, present and defend what has since become known as non-reductionism. I also consider John McDowell's influential contemporary account.

In 3.2 I present what has become the most popular criticism of non-reductionism. The objection is that because (ii) allows hearers to be justified in a testimonially-based belief without requiring her to have any positive evidence for the report's reliability, non-reductionism is a license for indiscriminating epistemic practices and outright gullibility. Finally, in 3.3 I begin to build my case against (i) by examining and countering a variety of arguments which have been advanced in defense of the claim that testimony is a distinctive and unique source of belief, justification or knowledge. This criticism against testimonial uniqueness will then

continue through Chapter Four as well. After having countered a fairly exhaustive list of such arguments, I will be in a better position to give my positive reasons for why we should think that testimony does indeed reduce to one or more traditional belief-forming processes, which will be the focus in Chapter Six.

### **3.1 Classic Non-Reductionist Accounts**

#### *3.1.1 Non-Reductionist Accounts: Reid*

In the history of philosophy, Thomas Reid is one of the few writers who shared Hume's insight that testimony was a crucially important and ubiquitous source of beliefs, deserving of its own account regarding its nature and epistemic grounding. But in comparison to Hume's account, on Reid's model of testimony reason plays a substantially weaker role in the formation, and justification, of our testimonially-based beliefs. In Chapter Six of *An Inquiry into the Human Mind*, Reid discusses the role perception plays in grounding our beliefs about the external world. In response to any skeptical demands for him to provide reasons for his belief that any given object of sense actually exists, he counters that the "belief is not the effect of argumentation and reasoning; it is the immediate effect of my Constitution," and that he simply "took it upon trust and without suspicion."<sup>49</sup>

Far from this being an irrational practice, Reid argues that without this natural, automatic credulity to believe what his senses report to him, he would have "perished by a thousand accidents" and would "have been no wiser now than when

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<sup>49</sup> Reid (1983), p. 84.



I was born.”<sup>50</sup> In further defense of this credulous policy for perceptual beliefs, he notes an analogy between it and the way he formed beliefs from the reports of others as a child:

In all this I deal with the Author of my being no otherwise than I thought it reasonable to deal with my parents and tutors. I believed by instinct whatever they 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 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.<sup>51</sup>

Reid argues that children can acquire properly grounded beliefs from testimony even if they lack the ability to justify those beliefs with reason.

In this way, Reid segues into the topic of testimony. The question then arises: how we can trust the reports of others when we know that people can be mistaken or deceitful? Reason cannot seem to answer this, and even if it could now, it certainly couldn't during childhood. It seems to Reid that there exists “in the human mind an early anticipation, neither derived from experience, nor from reason, nor from any compact or promise,” but rather “an original principle of the human constitution”<sup>52</sup> which is innate in us, granted by God to facilitate smooth information sharing:

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,

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<sup>50</sup> Reid (1983), p. 86.

<sup>51</sup> Reid (1983), p. 87.

<sup>52</sup> Reid (1983), p. 93. Interestingly, the passage quoted above contains separate arguments against the possibility of grounding testimonial justification in either (i) one's reasoning or (ii) in the promises and assurances of others, thus not only attacking reductionism, but also “Interpersonal” views of testimony, such as held by Moran (2006) pp. 272–306, Angus Ross (1986) pp. 69–88, and Hinchman (2005) pp. 562–87.

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 . . . . 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*.<sup>53</sup>

Humans are credulous by nature, their default state is to believe what they are told.

This is also an effective way to get at the truth because humans are also naturally inclined to speak the truth; even “the greatest liars” are such that “where they lie once they speak the truth a hundred times.”<sup>54</sup>

Reid is not intending to merely point out a psychological fact about our belief-formation processes; he is making the normative claim in the passage above that we achieve *knowledge* (and thus justification) in this manner. However, this natural default trust can be rightly overridden if an agent has reasons to do so; in the maturation process from childhood “she learns to suspect testimony in some cases, and to disbelieve it in others,”<sup>55</sup> which adds a ‘no undefeated defeater’ clause to the account. As long as there are no such reasons to disbelieve, the agent has a default justification to believe a piece of testimony even without any positive reasons to believe. The principle of veracity insures the reliability of most testifiers,<sup>56</sup> and absent any overriding reasons for mistrust, the subsequent belief of the hearer is justified.

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<sup>53</sup> Reid (1983), pp. 93-95.

<sup>54</sup> Reid (1983), p. 94.

<sup>55</sup> Reid (1983), p. 96.

<sup>56</sup> There is the worry here that Reid only argues for widespread sincerity from this principle when his position also needs to account for speaker competency.

To sum up, Reid denies the Humean position that testimonial justification reduces to the justification of some other, more common form(s) of belief-forming process. Instead, testimony has its own unique belief-formation process which is similar in many ways to perception. To be justified in a testimonially-based belief, a hearer need only lack any reasons to doubt the report; the general reliability of speakers takes care of the epistemic heavy lifting. Testimonial justification does not depend on any kind of positive reasons. This is worth noting because sometimes discussions of the “no positive reasons required” principle of non-reductionist theories become heavily focused on *inferential* positive reasons, but as seen here the default justification non-reductionism endorses makes no such distinction. I discuss this point in full in Chapter Six.

### 3.1.2 *Non-Reductionist Accounts: McDowell*

Having examined Reid’s account of testimonial justification, I turn now to a more recent, yet still influential early contemporary non-reductionist account which has helped shape the current literature. In “Knowledge by Hearsay,” John McDowell is motivated by what is seen as reductionism’s implausible requirement for testimonial justification: that a hearer must have positive evidence that a speaker is reliable. Like Reid, McDowell denies that any such condition need be present for justification or knowledge. He presents a now famous illustration of what he takes to be a non-controversial case of successful knowledge acquisition by testimony: a tourist in an unfamiliar city asks a passer-by for the location of a

cathedral, who truthfully and competently tells him. Intuitively, the tourist now knows where the cathedral is.<sup>57</sup>

If the justification for this belief must come from the sort of inferential reasoning that reductionists like Hume require, however, such justification seems hopeless:

This involves appealing to ancillary premises on these lines: the informant is competent (at least on the present topic) and trustworthy (at least on the present occasion). But can we really say the tourist knows those things, in such a way that they are available to him as starting-points in an argument that could certify, without question-begging, his standing with respect to the whereabouts of the cathedral?<sup>58</sup>

McDowell considers a possible reply that a reductionist could make: perhaps all that the hearer need use are more readily available premises, such as the fact that the passer-by is moving confidently, doesn't appear to be engaged in a practical joke, and so forth. But if the premises are weakened in this manner "it becomes an urgent question how the argument can be good enough for possessing it to constitute an epistemic position that can count as knowledge."<sup>59</sup> Given this, a proper account of testimonial knowledge will eschew any such inferential reasoning on the part of a hearer.

McDowell is sensitive to the objection that his view seems to divorce testimonial-based beliefs from any kind of reason on the part of a hearer, which is undesirable (an objection more fully examined in the next section). He preempts such a reply, arguing that "[a]cquiring knowledge by testimony is not a mindless

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<sup>57</sup> McDowell (1998), p. 417.

<sup>58</sup> McDowell (1998), pp. 417-8.

<sup>59</sup> McDowell (1998), p. 419.

reception of something that has nothing to do with rationality” and saying that “[w]e can protect that idea by insisting that the knowledge is available to be picked up only by someone whose taking the speaker’s word for it is not doxastically irresponsible.”<sup>60</sup> But once again, this is described as the non-reductionist requirement that a hearer possess no reasons to actively disbelieve the testimony, or no undefeated defeaters to it:

Although it is obviously doxastically irresponsible to believe someone about whom one has positive reason to believe he is not trustworthy, or not likely to be informed on the subject matter of the conversation, doxastic responsibility need not require positive reasons to believe that an apparent informant is informed and speaking his mind.”<sup>61</sup>

In the context of this passage, by “positive reason” McDowell means “inferential reason.” This rejection of a need for positive reasons does not by itself eliminate the possibility that a hearer must meet some other condition in order to be justified in a testimonial belief.

This possibility of needing an additional condition on testimonial justification is closed later, however, and the lack of necessary active cognitive work on the part of the hearer is emphasized:

If we are not to explain the fact that having heard from someone that things are thus and so is an epistemic standing by appealing to the strength of an argument that things are that way . . . do we need some other account of it? I would be tempted to maintain that we do not. The idea of knowledge by testimony is that if a knower gives intelligible expression to his knowledge, he puts it into the public domain, where it can be picked up by those who can understand the expression, as long as the opportunity is not closed to them because it would be doxastically irresponsible to believe the speaker.<sup>62</sup>

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<sup>60</sup> McDowell (1998), p. 434.

<sup>61</sup> McDowell (1998), p. 435.

<sup>62</sup> McDowell (1998), pp. 437-8.

As long as the speaker herself possesses knowledge of the piece of testimony and no undefeated defeaters are present, all of the required epistemic work has been done. McDowell goes on to reject other possible necessary justifiers besides inferential reasons on the part of the hearer, such as the presence of reliable processes for receiving testimony. Not only does he deny that hearers must possess positive inferential reasons for a speaker's trustworthiness in order to be justified in believing a report, he denies that there should be any non-inferential reliabilist condition as well, explicitly rejecting reliabilism.<sup>63</sup>

One final point about the account: for McDowell the acquisition of testimonial knowledge is analogous to but *separate* from other belief-forming processes, saying that "[t]he epistemic position, having heard from someone that things are thus and so, is a standing in the space of reasons in its own right," and that this holds "[s]imilarly with the other epistemic positions: seeing that things are thus and so, remembering that they are, or were, thus and so, and so forth."<sup>64</sup> On his view, testimony is a unique source of justification similar to but distinct from other sources.

### 3.1.3 *Non-Reductionist Accounts: Core Features*

The two non-reductionist accounts of the preceding sections provide examples of what have become the standard principles for non-reductionism. For present purposes the salient detail is that they are defined by two core principles;

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<sup>63</sup> McDowell (1998), pp. 425-6, footnote 33.

<sup>64</sup> McDowell (1998), p. 440.

denials of the two principles of reductionism described last chapter. We saw there that reductionist theories are unified by two separate requirements on testimonial justification. The first requirement is the Positive Reasons Principle: one must have positive reasons to think a piece of testimony is reliable to be justified in believing it. The second requirement is the Reduction Principle: testimonial justifiers reduce fully to the justifiers of another more traditional source of belief; with inductive reasoning as the common candidate providing the justification. Non-reductionism in its present-day form is heavily influenced by its origin as an attack on and replacement for the reductionist view of testimony, with Reid proposing his account in response to what he saw as Hume's deeply flawed model.

This history informs what have become the twin principles which define non-reductionism. First, testimony is unique in some way which makes testimonial justification irreducible and distinct from the justification garnered by the more traditional sources of belief such as inference, memory or sense perception. This will be referred to as the *Uniqueness Principle*. Second, testimonial justification is the default state for hearers, requiring only that she have no undefeated defeaters for the reliability of the report; this will be referred to as the *Default Justification Principle*.<sup>65</sup> The details of exactly how these two principles get spelled out vary from account to account, but the cleanest definition of each should be such that each pair of opposing principles of reductionism and non-reductionism should

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<sup>65</sup> Reductionism shares this “no undefeated defeater” clause as well, so I will not focus on it here; my aim is to compare the differences between the two views.

exhaustively cover the dialectical landscape. Lackey, for instance, describes the relationship between the four principles in the following manner:

There will be two central questions at issue . . . first, are positive reasons necessary for acquiring testimonially based knowledge and, second, are the epistemic properties of such knowledge—such as justification and warrant—ultimately reducible to the epistemic properties of purportedly more basic sources, such as sense perception, memory, and inductive inference? Reductionists answer affirmatively, while non-reductionists respond negatively, to both of these questions.<sup>66</sup>

The Reduction Principle and Uniqueness Principle are denials of one another, as are the Positive Reasons and Default Justification Principle.

The remainder of the chapter is devoted to objections to non-reductionism. Rather than presenting criticisms against any specific non-reductionist accounts such as Reid's or McDowell's, I focus on more general criticisms which can be foisted against any standard non-reductionist view. To this end, the objections examined will have as their target one of the two core non-reductionist principles above; thus serving to potentially compromise any form of non-reductionism. In doing so I will show that non-reductionism is too problematic to be accepted as a plausible account of testimonial justification. A lengthy analysis of the Uniqueness Principle will be given in 3.3.1, and the next section criticizes the Default Justification Principle.

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<sup>66</sup> Lackey. (2008), p. 141.



### 3.2 *The Gullibility Objection*

In the last chapter we looked at the many objections against reductionism's requirement that hearers possess positive reasons for the reliability of a piece of testimony. Given the strength of these criticisms, why would any account of testimonial justification saddle itself with such a burden, given the easy alternative of simply denying this restriction? The common reductionist answer is that without it, hearers lack the requisite discriminatory powers for justification. To allow hearers the sort of presumptive right to believe without some kind of positive reasons is, as Fricker puts it, "an epistemic charter for the gullible and indiscriminating."<sup>67</sup> We've seen her reasons for holding this in 2.1.2, but I repeat the core of her argument here:

(D)oes not mere logic, plus our commonsense knowledge of what kind of act an assertion is, and what other people are like, entail that we should not just believe whatever we are told, without critically assessing the speaker for trustworthiness? We know too much about human nature to want to trust anyone, let alone everyone, uncritically.<sup>68</sup>

For a theory to allow a hearer to be justified merely if she lacks defeaters is epistemically reckless given the many ways we know that testimony can go wrong due to speaker incompetence, deception, miscommunication, etc. A similar sentiment is summed up nicely by Paul Faulkner:

Our psychological disposition is to accept testimony only given suitable supporting background beliefs about the testimony's credibility and truth. Given that a speaker's intentions in communicating need not be informative and given the relevance of these intentions to the acquisition of testimonial knowledge, I take this psychological disposition to be rational. It is

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<sup>67</sup> Fricker (1994), p. 126.

<sup>68</sup> Fricker (1995), p. 400.

doxastically irresponsible to accept testimony without some background belief in the testimony's credibility or truth.<sup>69</sup>

And later in the same article:

[T]he antireductionist would assert that a belief formed through credulous acceptance could be warranted *merely* because it is a testimonial belief. The judgment that a testimony is credible or that the proposition it expresses is true is thereby *fundamentally irrelevant* to the warrant of the associated testimonial belief. . . . With respect to the supposition that mere intelligibility provides a reason for belief, it may be that there is some basic connection between intelligibility and truth, but it is matter of concern for us whether or not this connection holds between any given utterance and its truth. Again, we know that speakers can be undependable and artful. It seems plainly gullible just to accept something merely because it is intelligible.<sup>70</sup>

Given the myriad of pitfalls which can result in a false belief from testimony, and especially given that we are *aware* of these many pitfalls, it seems to go against the very notion of “justification” to blindly believe any given report without any positive evidence that it is okay to do so. And, as these quotes suggest, this intuition is not restricted to any particular account of justification; both internalists like Fricker and externalists like Faulkner can find fault with non-reductionism’s denial of the Positive Reasons Principle.

In order to try and provide an answer to the Gullibility Objection, we must get clear on why it seems improper to form testimonial beliefs without possessing positive reasons for trust. If the problem of gullibility, for instance, is a problem with hearers forming beliefs in an *unreliable* way, one can try to address this criticism by adding in a reliability clause to ensure that hearers only count as justified if the report came from a reliable speaker. In this way, speaker reliability

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<sup>69</sup> Faulkner (2000), p. 587.

<sup>70</sup> Faulkner (2000), pp. 592-3.

will confer added justification upon the hearer, thus making up for any *prima facie* gullibility of the hearer.

One way to advance this point would be to endorse a simple version of reliabilism, according to which an agent is justified in her belief just as long as the belief is reliable. On this simple account, there is no condition that the reliability has to stem from the agent's cognitive processes; the reliability of the belief may be caused by an epistemically fortuitous environment completely outside of the hearer's control or abilities. For instance, one could hold that just as long as Jill gets her beliefs about physics from Stephen Hawking (an extremely reliable source of information on that topic), her beliefs formed on the basis of his reports will be justified (as long as she lacks any reasons to distrust him). When he tells her "an object at rest stays at rest," his competence and sincerity in the domain of physics accounts for the high reliability that the belief will be true; this reliability can hold regardless of whether Jill is a careful and discriminating listener or a careless and credulous one.

Unfortunately for the proponent of non-reductionism, there is good reason to think that mere speaker reliability will not be enough for a hearer to be justified. The following case will serve as a counterexample to the view that speaker reliability can provide a hearer with the justification needed to counter any worries of gullibility: Sara is a trusting soul who believes whatever she reads from any newspaper placed in front of her. She picks up a copy of the *New York Times* from a nearby coffee table and on the basis of the front page forms the true belief that the

president has been caught in a sex scandal. Intuitively her belief lacks proper justification, even if the *New York Times* is a reputable, reliable source of news because she would have believed any report that was in any paper, such as the *National Enquirer*.

Moreover, even if we grant that the reliability of speaker *can* serve to increase the justification of a testimonially-based belief, this increase will do nothing to allay the charge of gullibility. If one is already moved by the Gullibility Objection and has the intuition that a proper account should deny testimonial justification to indiscriminating believers like Sara, adding a speaker reliability clause will fail to protect non-reductionism against the objection because it fails to address the underlying problem behind the criticism of Sara's epistemic state.

This is because Sara is not being criticized merely because her testimonial beliefs will typically be unreliable; she is being criticized specifically for the *way* she forms her beliefs. Adding a speaker reliability condition to a non-reductionist view is unsuccessful against the objection because the added reliability stems entirely from outside the agent rather than as a result of her own practices or cognitive processes, and for this reason fails to fend off the charge of licensing gullibility.<sup>71</sup> It isn't enough that Sara's belief is reliable if the reliability is merely due to properties about the source, the locus of her testimonial reliability intuitively should be grounded by properties appropriately internal to her.

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<sup>71</sup> For this reason, the objection works equally well even if it turns out to be the *piece of testimony* rather than the belief of the testifier that needs to be reliable, such as Lackey endorses in (2008), ch. 3. This is just as external a source from a hearer, and thus if a non-reductionist were to ground hearer justification on this kind of reliability alone will be problematic for the same reason.

This being the case, it might be thought that a more promising reply to the objection lies in placing a reliability requirement on the *hearer's* internal faculties which process testimony; I explore this possibility at length in 6.1. For now, though, the Gullibility Objection stands as a persuasive criticism against the Default Justification Principle, and thus non-reductionism. Leaving the present topic of whether positive reasons are required for justification or not, I next turn the Uniqueness Principle, non-reductionism's other core principle which states that testimony is in some sense *irreducible*, *distinctive* or *unique*.

### **3.3 The Uniqueness Principle**

#### *3.3.1 The Epistemic Uniqueness of Testimony*

Most attacks on non-reductionism focus on the Default Justification Principle, but the remainder of the chapter is devoted to an examination of the Uniqueness Principle, which has not been given much attention in the literature. First, we need to clarify what it means to say that testimony is in some way epistemically unique or irreducible. This vague statement can be interpreted in a variety of ways, and if a fair critique of the principle is to be offered we need to determine the proper object of analysis. A change of perspective will be helpful here, and so I briefly digress from the topic of the Uniqueness Principle.

We will be in the best position to give a precise formulation of the principle by first determining what it denies about reductionism: namely the Reduction Principle. The Reduction Principle roughly states that testimonial justification

reduces to other, more traditional forms of justification; that the justifiers for testimonial beliefs will just be the same sorts of things that justify our beliefs from sense perception, memory, reason, and/or introspection.<sup>72</sup> We looked at several examples of this in 2.1. For instance, Hume frames the issue of testimony in terms of what *evidence* grounds testimonial beliefs.<sup>73</sup> Similarly, the topic of discussion for Fricker is “our epistemic right to believe what others tell us,” which for her must be “grounded in other epistemic resources and principles - perception, memory and inference.”<sup>74</sup>

“Epistemic right” in this context means justification. And Lyons’ account employs simulation theory specifically to show how testimonial *justification* can be explained in terms of a special kind of inductive inference.<sup>75</sup> As additional examples for this, Goldberg describes reductionism as denying that “[t]he justification of beliefs through testimony implicates epistemic principles unique to testimony cases”<sup>76</sup> and Lackey says that, for the reductionist, “justification or warrant is said to *reduce* to that provided by more basic sources, such as sense perception, memory, and reason.”<sup>77</sup> Holding to this description, the Reductionist Principle will say that the epistemic principles which justify testimonially-based

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<sup>72</sup> Though this reduction of justification receives the most discussion, one can also find talk of testimonial *knowledge* reducing to knowledge of other kinds. But for our purposes, it is enough to focus solely on testimonial justification. Since justification is part of knowledge, if testimonial justification fails to reduce completely, testimonial knowledge will also fail to reduce completely. Any version of the Uniqueness Principle which is a denial of testimonial reduction will also be a denial of testimonial knowledge.

<sup>73</sup> Hume, (1992), s. 88 p. 112. Discussed in 2.1.1.

<sup>74</sup> Fricker (1995), p. 394. Discussed in 2.1.2.

<sup>75</sup> That justification is the thing being reduced is perhaps most clear in Lyons (1997), p. 173. Discussed in 2.1.3.

<sup>76</sup> Goldberg (2006), p. 127. More accurately, he presents the thesis as one which reductionists deny.

<sup>77</sup> Lackey (2008), p. 5.

beliefs are the same epistemic principles which produce justification in beliefs from other, more standard sources.

For example, on a simplistic Humean model the justification an agent has for a testimonial belief *just is* the justification she has in a certain act of inductive reasoning; the two values will be identical. This would suffice for a rough sketch, but a more accurate model should account for the fact that this inductive act takes as inputs the various perceptual experiences which make up her sampling of fact-checking report verifications, which she will have to recall from memory. Thus, her justification in holding both those perceptual beliefs and those memorial beliefs should be factored into the calculation as well. One way to represent this would be to say that the degree of justification one has in the testimonial belief is exactly equal to the degree of justification one has in that act in inductive reasoning (J2), where J2 will include in its calculation (i) the degree of justification one has in that inductive calculation, (ii) the degree of justification one has in the perceptual beliefs that make up the pool of experience which is employed as the sample of data to reason from, and (iii) the degree of justification one has in holding the memorial beliefs of those experiences.

The final calculated justification will involve all three probabilities in some sort of complex mathematical formula, because if any former step in the process was unjustified, this will intuitively ruin the entire justificatory enterprise. For instance, I can inductively reason that my faraway brother is trustworthy when he claims over the phone that he is healthy because I seem to remember that whenever

he has reported about his health in the past he's turned out right. But if, due to wishful thinking, I am misremembering all of the times he has lied and said he was fine when he wasn't, intuitively I am not justified in my current belief "he is healthy" even if my inductive use of the faulty memories is flawless.<sup>78</sup>

Exactly which justificatory processes should be used in the calculation will vary depending on the specific reductionist theory in question. The salient point here is that the Reduction Principle entails that one's degree of testimonial justification will be wholly determined by the degree of justification of more traditional belief-forming processes by something like the following formula:

$$TJ = F(PJ, MJ, RJ \text{ and } IJ)$$

Testimonial justification supervenes on the justification from all of the salient traditional belief-forming processes which apply (perception, memory, reason and introspection), where F is a potentially complex function.

Turning back to the Uniqueness Principle, we are now in a position to define it as the denial of the above formula. The principle will state that an agent's degree of testimonial justification will *not* be wholly derived (however that derivation ends up being calculated) by her degree of justification from the other salient sources of belief. There are many ways in which this denial could obtain, which is useful since the literature contains different explanations for how

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<sup>78</sup> If one doesn't hold the intuition that the justification of past steps of the process can adversely affect the justification of the final step (the inductive calculation), then testimonial justification on this Humean view will simply equal the justification of the inductive process, excluding any need to include considerations of perceptual and memorial justification.



testimony is unique. But we can lump almost all such explanations into the following two groups:

(U1) The source(s) of testimonial justification are unique or distinctive from other, more standard sources of justification (perception, memory, reason and introspection).

(U2) The belief-forming process of testimony is itself epistemically unique or distinctive from the other, more standard belief-forming processes.

If (U1) is true, then it won't be the case that an agent's degree of testimonial justification can be derived solely from inputs consisting of the degree of justification from traditional justificatory sources. If testimonial justification *could* be derived solely from these traditional sources, then there would be no place for any unique sources at work; they would either be nonexistent or epistemically inert. And if unique justificatory principles are at work, the respective degrees of justification on either side of the formula will not match since those unique sources will be playing a non-superfluous role in the justificatory process.

If (U2) is true, then beliefs formed by testimony will be evaluated in terms of their own special justificatory norms pertaining to this unique process rather than following (merely) the justificatory norms pertaining to the more traditional processes.<sup>79</sup> This is no different than when, say, beliefs formed on the basis of

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<sup>79</sup> I frame the Uniqueness Principle as the denial of the Reduction Principle because of the way the dialectic has played out historically, with Hume making the first claim to testimonial reduction, followed by Reid and others denying Hume's account. However, one may wish to instead define the Uniqueness Principle first (as either (U1) or (U2)), and then define the Reduction Principle as being

perception have different justificatory norms than beliefs formed on the basis of memory, or beliefs formed on the basis of reason, or introspection. For simplicity this assumes that any beliefs formed by testimony are continued to be held on that testimonial basis. This sets aside more complex cases where a subject forms a belief on the basis of testimony but later grounds it through other processes. For instance, one could irrationally form the belief that it is raining from a friend's say-so, even though others have told him it's not, and then the testimonially-formed belief could acquire perceptual justification after she goes to the window and sees rain. But the possibility of a different process providing justification than the initial belief is not restricted to testimony, so I leave such complications out of the discussion.<sup>80</sup>

It is non-reductionism's denial of the Reduction Principle, and thus its defense of the Uniqueness Principle, that I will criticize for the remainder of this chapter and for the entirety of Chapter Four. Because they are claiming that the process of testimonial justification or belief is unique, the burden of proof is on the adherent of the Uniqueness Principle to provide reasons for us to think that testimony is in some way distinctive. My strategy will for this reason be a negative one; I will examine and undercut the reasons one might have for thinking that testimony is unique and distinctive. While not often explicitly produced as reasons

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the denial of *that*. My ultimate rejection of the Uniqueness Principle in this dissertation can easily accommodate this alternative definition, as my attack on the Uniqueness Principle in the subsequent sections is through by way of attacking the grounds for (U1) and (U2).

<sup>80</sup> If it were the case that *every* testimonial-based belief was justified by traditional sources of justification, then (U2) wouldn't be inconsistent with the Reduction Principle, and so (U2) would fail to be a useful defense of the Uniqueness Principle (insofar as those two principles are thought to be at odds).

to hold the principle, many who deny reductionism in the literature have argued that testimony is epistemically special, distinctive or unusual in some way compared to the more traditional sources. If these various arguments are dismissed then the Uniqueness Principle loses its force, making non-reductionism a less attractive candidate overall.

### 3.3.2 *Evidence for Uniqueness: Externally Testable, Nonessential and Symbolic*

Why might we be tempted to think that testimony is in some way epistemically distinctive compared to the more traditional sources of belief? The last section of Robert Audi's "Testimony, Credulity and Veracity" is an excellent compilation of many such possible reasons, three of which I will examine in this section.<sup>81</sup> One difference offered is in an agent's ability to test the reliability of testimony as a general source of truth through non-circular means, unlike the other basic sources of perception, memory, reason and introspection:

[W]e cannot test the reliability of one of these basic sources or even confirm a deliverance of it without relying on that very source. . . . With perception, for instance, quite apart from any question of its overall reliability . . . one must, in a given case of mistrust, look again (or otherwise rely on perception). With memory, in order to overcome mistrust of a particular deliverance, one must remember the original belief being examined, lest the target of confirmation be lost from view. With testimony, one can, in principle, check reliability using any of the standard basic sources.<sup>82</sup>

Audi is careful to include the phrase "in principle" to head off the objection that some instances of testimony, particularly those regarding "technical matters," are in

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<sup>81</sup> I examine the remaining two reasons he presents there in 4.1 and 4.2, respectively.

<sup>82</sup> Audi (2006), p. 39.

practice impossible for one to actually check on for oneself<sup>83</sup> (a point made in the previous chapter). I agree with Audi that we check our testimonially-based beliefs with other non-testimonial sources, but disagree that the other sources of belief are not so open to cross checking.

First, note that if this argument is used to defend (U2) and show that testimony is indeed an irreducible source of belief,<sup>84</sup> then the proponent of the Uniqueness Principle cannot assume from the onset that testimonial beliefs are not a mere subset of beliefs from another more traditional source or sources. And if it *is* a mere subset, its ability to be tested non-circularly should be compared to other subsets. To take one example, suppose for the sake of argument that testimony is, say, a sub-domain of perception in much the same way that vision, hearing and touch are. It is indeed possible to check other perceptual sub-domains non-circularly, for instance, through the use of one of the other perceptual processes. For example, I can check that a chair I see really is in *that* location and *that* size and shape through touch, and using the “in principle” clause Audi allows for, through hearing (the way the blind can learn echolocation).

In this way, it will be possible to consistently hold that testimony both (i) reduces to perception and (ii) can have its reliability checked in a non-circular manner. If such “cross-checking” between perceptual processes is still thought to be ultimately circular on the grounds of using perception to check perception, then testimony won’t be able to be checked non-circularly, since by hypothesis it falls

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<sup>83</sup> Audi (2006), p. 39.

<sup>84</sup> Though Audi himself doesn’t explicitly use it for this purpose.

under the heading of perception, and checking an instance of testimony always involves using perception in some way. But in this case, testimony will lack the distinctive trait Audi describes above, since it will be impossible to check *any* belief-forming process non-circularly. Either way, testimony loses its distinctive quality.

But perhaps testimonial beliefs are produced by a combination traditional belief-forming sources rather than a single one. For instance, instead of being a subset of perception, testimony might be thought to be a subset of inductive reasoning which employs certain perceptual and memorial beliefs as grounds for the probabilistic inference. Even so, the same kind of response to Audi's argument can be made as above, and we can test the deliverances of testimony with non-testimonial inductive reasoning. Indeed, this is what Hume's project is in *On Miracles*. He uses beliefs about human psychology (grounded in perception and memory) to argue *inductively* that reports of the miraculous are unreliable. Since he holds that testimonial belief just is inductive belief grounded by perception and memory, this gives us an classic example of how the reliability of testimonial belief (qua inductive belief grounded by perceptual and memorial belief) could be in principle checked by induction (grounded by perception and memory). So a consistent story can be told by one who denies the uniqueness of testimony in which instances of testimonial belief are equally capable, or incapable, of being checked as other sources.

Second, regardless of whether or not testimony reduces, all of the outputs of the other sources of belief except perception (introspection, memory and reason) can be checked *by testimony*. If I remember eating sardines for lunch with you yesterday, I can check the accuracy of this belief by simply by asking you, and at least in the moment you answer I will have my answer. Even though memory is needed to string these kinds of reports together, and thus compile a track record, I can also ask someone who knows me well (and whom I've often voiced my thoughts aloud to) whether they believe my memory has a reliable track record. If they say yes, at that time-slice I have a successful non-circular check for my memory.<sup>85</sup>

I can work out a difficult logic problem through reason and then check the answer with a colleague. I can introspect my current emotional state, and ask for corroboration from my old friend who has known me since childhood and has been around me all day, and can often gauge my emotions from my body language with greater accuracy than even I can. Note that this kind of cross-checking is possible even if the outputs of testimonial reception reduce to the outputs of another process, as long as the process checked isn't the one(s) testimony reduces to. But given this, a non-reductionist can't consistently hold that (i) testimonial beliefs are irreducible and (ii) beliefs from introspection, memory and reason are impossible to be checked non-circularly.

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<sup>85</sup> This assumes that testimonial justification doesn't require that a believer ground the belief in premises about the trustworthiness of the speaker which might arguably require the use of memory. This assumption holds for most non-reductionist accounts, as well as the kind of noninferential reductionist account I advocate in Chapter Six. This is enough to show that a consistent story can be told in which testimony can indeed be used to check the outputs of the traditional sources of belief.

The second way that testimony is unique compared to other sources of justification or knowledge, according to Audi, involves the indispensability of the other sources for certain domains of belief, or for the general truth-seeking enterprise as a whole, when compared to testimony:

Memory is central, in a way testimony is not, for both our retaining and our extending our knowledge at any moment. . . . Reason in some minimal form is indispensable to possessing any knowledge . . . and certainly to inferential extension of our knowledge, which depends on our being at least implicitly guided by deductive or inductive logic. Consciousness and perception are essential for development of new knowledge in their domains. There is, however, no domain (except possibly that of other minds) for which continued testimony is *in principle* needed for significant increase of knowledge. Similar (but not entirely parallel) points hold for justification.<sup>86</sup>

The idea is that the other sources of belief are fairly crucial for knowledge or justification either generally or at least in quite important domains.<sup>87</sup> But testimony is neither important for an agent's possession of knowledge in general (like memory or reason) or in a domain not otherwise accessible (like perception or introspection).

However, consciousness or introspection is placed alongside the other traditional belief-forming processes in this way because it is indispensable for significant knowledge in the domain of one's own inner mind, the fact that testimony is indispensable for significant knowledge domain of other minds is at least as noteworthy. If consciousness makes the cut but testimony doesn't, the implication seems to be that the domain of other minds is not thought to be as

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<sup>86</sup> Audi (2006), pp. 39-40.

<sup>87</sup> Although both testimonial justification and knowledge are referenced here, I interpret the subject being diagnosed as unique is the belief-forming process itself rather than any token instances of justification or knowledge. For this reason, the argument is a variant of (U2).

valuable, crucial to the general enterprise of knowledge acquisition, etc. But it is unlikely that knowledge of one's own mental states is of less importance than knowledge of the mental states of others just because they're *yours*. Nor is it plausible that knowledge of one's own mental states is more valuable because introspective beliefs make it more likely to hold knowledge in other domains (perhaps because introspection allows individuals to more accurately filter the beliefs from their other process). Due to a society's epistemic division of labor, testimony allows one to hold an exponentially greater amount, and range, of knowledge, as discussed in the last chapter. And even if it were the case that knowledge of one's own mental states is more valuable than knowledge of others', it doesn't seem plausible that the importance of a process allowing internal access to a single mind wouldn't be swamped by a process which allows access to, in principle, billions.

Additionally, even if it turned out that testimony isn't crucial for the general practice of knowledge acquisition, this particular 'distinctive' trait of testimony is actually better explained on an account where testimony is merely a species of a larger source or sources of knowledge. On such a reductionist explanation testimony is no longer the odd man out; plenty of subcategories of knowledge lack any central importance in the ways a fuller source of knowledge does. It is useful to have an olfactory sense, or a sensitivity to one's own emotions, or a memory for faces, but none of these sources of knowledge is central for either an agent's capacity for knowledge in general or for a particularly important domain. If true,



this distinguishing mark of testimony actually serves as evidence against non-reductionism in the greater dialectic.

Having set aside this second putative distinction, I end this section with an examination of one last trait of testimonial justification (thus bolstering (U1)) that Audi defends as rendering it unique:

A fourth point of contrast between testimony and the standard basic sources. . . . concerns the need for grounds for the semantic construal of what is said on the basis of which it is taken to be *that p*. This is not a justificatory or epistemic burden intrinsic to the standard basic sources.<sup>88</sup>

Typically this will be true since most acts of testimony employ linguistic content. However, not all testimonial acts share this trait; Audi considers the possibility of testimony without employing semantics, such as many forms of non-verbal testimony, but still holds that “[i]f this is possible, it would surely require at least a *symbolic* vehicle, such as an image produced in my mind that I can see to come from some other mind.”<sup>89</sup>

My first response is to note how weak this distinction is even if true. Audi concedes that beliefs produced by other sources may require a semantic or symbolic grounding, but it is still not necessary for *all* of the beliefs from that source, unlike testimony. Insofar as we are beings who seem to organize most of our conscious thoughts by some kind of semantic or symbolic filter, it is plausible that perhaps most of the belief outputs from both reason and introspection will in practice rely on this grounding as well, making this a small difference at most.

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<sup>88</sup> Audi (2006), p. 42.

<sup>89</sup> Audi (2006), p. 42.

Also, the level of symbolic interpretation can be quite low for many instances of testimony, bolstering the point. For instance, while I won't advocate a specific view about the necessary and sufficient conditions for something to be testimony, it is at least plausible that if while chasing an individual down, if I ask a passerby "which way did he go?" and she points down one road rather than the other (and purposefully does so with the intention of conveying the salient information), the subsequent belief I form is a result of testimony. Yet there is so little symbolic interpretation required (and even less in simpler cases like nodding or shaking one's head to indicate 'yes' or 'no') that this minimal level of interpretation, the interpretation of a single sign for a single simple idea, may well be necessarily employed when forming reason-based beliefs.

More importantly, though, this unique trait of testimony is compatible with testimony reducing to one of the traditional sources of belief (or combination of subprocesses from multiple sources), just as the Reduction Principle predicts. Testimony could be thought to be an instance of, say, induction; specifically induction in the domain of the reports of others. And if it is thought of in this way, it becomes unproblematic that it necessarily must involve semantics or symbols because it is simply *defined* as the part of induction which deals with language. Given this, the symbolic nature of testimony cannot be used to defend the Uniqueness Principle.

### 3.3.3 *Evidence for Uniqueness: Reliability*

Having addressed three potential distinctive traits of testimony, I now move on to a different sort of possible distinction. While Lackey's Dualist account of testimony embraces the Positive Reasons Principle of reductionism, she also holds that testimonial justification is irreducible, and thus endorses the Uniqueness Principle.<sup>90</sup> She also presents "three salient ways in which testimony differs epistemically from other sources of belief."<sup>91</sup> Her motivation for presenting these differences isn't to explicitly defend the distinctiveness of testimony, but if Lackey is correct that testimony is different in the ways she describes then the case for the uniqueness thesis will be strengthened. For this reason, I devote some time here to address her arguments.

I examine two of Lackey's arguments in this section and the next.<sup>92</sup> The first argument points to differences in the respective reliability of testimony in comparison to other sources of belief:

[One] difference between testimony and other epistemic sources concerns the varying degrees of likelihood that such sources are unreliable. For instance, the possible worlds in which most of my perceptual beliefs are indistinguishably false—for instance, worlds in which I am unknowingly a brain-in-a-vat or the victim of an evil demon—are quite distant from the actual world. Indeed, even possible worlds in which *many* of my perceptual beliefs are indistinguishably false are rather far away—worlds, for instance, where my perceptual faculties frequently malfunction and yet I do not suspect they do. In contrast, the possible worlds in which most of my

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<sup>90</sup> Lackey (2008), p. 2. Strictly speaking, she advocates these two principles with respect to testimonial *knowledge*, saying that "positive reasons are necessary for testimonial knowledge, but testimony itself is an irreducible source of knowledge." Her dualist account will be examined in detail in Chapter Five.

<sup>91</sup> Lackey (2008), p. 189.

<sup>92</sup> The third argument of Lackey's is that testimony is unique because, unlike other sources of belief, it necessarily involves the possibility of intentional perception. I detail this argument in 4.1.1.

testimonial beliefs are indistinguishably false—for instance, worlds in which I was raised by parents who belong to a cult, or worlds in which my government is highly corrupt, or worlds in which my society is highly superstitious—are much closer. Indeed, for many people, this is true in the *actual* world.<sup>93</sup>

This argument could be thought to either be making a claim about the epistemic principles which justify testimonial beliefs (U1), or making a claim about testimony as a source of belief (U2). I will look at both possibilities and argue that neither interpretation can be used to successfully defend the Uniqueness Principle.

We can dismiss the (U1) interpretation more quickly, as it will be compatible with the Reductionist Principle: it can both be the case that (i) testimonial justification merely reduces to justification from traditional sources and (ii) testimonial justification is particularly (and indistinguishably) unreliable. An agent's justification in certain domains will be more or less reliable than the general reliability of that process or processes: it might turn out that one's olfactory beliefs are particularly (indistinguishably) unreliable in comparison to the reliability of their sense perception in general, or that one's inductive inferences are particularly unreliable in comparison to the reliability of reason in general. And similarly, it could be the case that testimony is particularly unreliable in comparison to the general reliability of whatever process or processes it belongs to if the Reduction Principle is true.

Suppose instead that we interpret Lackey's argument as defending (U2) and making a claim about a distinctive property of testimony *qua* belief-forming

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<sup>93</sup> Lackey (2008), p. 190.

process. According to the argument, testimony is especially prone to not only being unreliable compared to the traditional belief-forming processes, but specifically unreliable in ways which agents will lack the ability to distinguish truth from falsehood. Perceptual beliefs that are indistinguishably false will be harder to come by than indistinguishably false testimonial beliefs, and for an agent to hold a large number of such falsehoods an elaborate story must be given on par with those featured in traditional skeptical scenarios. In contrast, holding a large number of indistinguishably false testimonial beliefs only requires being raised in a (perhaps isolated) community of false speakers; a far more common state of affairs. This leads Lackey to argue that while there are close possible worlds where *most* of one's testimonial beliefs are indistinguishably false, there are not close possible worlds where even *many* of her perceptual beliefs are. This would be a salient distinction for testimony as a source of belief, thus bolstering the view that testimony is special in an epistemically salient way. However, there are several reasons to doubt this claim.

First, I deny the existence of close worlds where we are so categorically false about our testimonial beliefs in the way Lackey describes. In the examples above (cultist parents, corrupt government, and superstitious society) only a small subset of one's total testimonial beliefs will be affected, perhaps in the areas of metaphysics, major world events, and scientific explanations. Historical beliefs could likely be affected, but only in fairly specialized domains (origin of the country or the world, the actions of governments or supernatural entities, etc.) The

vast majority of day to day reports are both mundane and local; reports about banal near future intentions, nearby medium-sized objects, what one has eaten, misplaced, saw, or talked to that day. It is possible that the beliefs of the more specialized domains such as religion and metaphysics, science and politics are somehow more important and more valuable than the banal, mundane pieces of testimony that saturate our normal lives (though I'm skeptical), but the beliefs of the latter type swamp beliefs of the former type. There might be worlds where one is systematically misled by testimony, but those worlds would be nearly as bizarre and far off as evil demon worlds.

I don't think this does much harm to Lackey's overall point, though, because her claim is much stronger than it needs to be. Testimony will be epistemically different from other sources of belief in the way she desires as long as the worlds containing merely *many* indistinguishable falsehoods from testimony are closer than those containing many indistinguishable falsehoods from perception. However, even this weaker claim will not hold, as the argument underestimates how easy it is to be misled by perception. The more interesting cases are where neurological damage renders a person systematically deceived in a certain perceptual domain while simultaneously rendering her unable to notice the extreme deficit (unilateral neglect, agnosia, etc.), but perhaps these afflictions will be thought too rare to count against the argument. Simpler and more common examples would include being color-blind, having the gene which makes cilantro taste like soap, and damage to eardrums which prevents certain pitches from being

heard. People with deficits of these sorts will often at least figure out that their senses are unreliable, but the same thing can be said for those misled by testimony.

As a related point, just as the ability for perception to produce indistinguishable falsehoods is underestimated by Lackey, the ability for testimony to produce indistinguishable falsehoods is overestimated. Even if we restrict ourselves to narrow domains such as political or religious beliefs, we should be skeptical that people living in a community which espouses certain false beliefs actually believe the many falsehoods they are told, especially if they defy common sense or have similar defeaters. An agent living in, say, a paradigmatic communist country exposed to the omnipresent propaganda may be bombarded with constant falsehoods, but this won't mean she will automatically form those testimonial beliefs instead of merely withholding belief. And while certain scenarios can be presented to ensure the formation of these indistinguishable falsehoods, these scenarios will by necessity be more involved, often requiring a process of brainwashing on a level which makes these possible worlds that much more distant from the actual world overall.

For these reasons, testimony shouldn't be regarded as less reliable than perception. The same result will be found if we compare testimony to other sources of belief. Due to ailments such as Alzheimer's disease, there exist extremely close possible worlds for agents over the age of 65 in which many of their memorial beliefs are indistinguishably false, and some close worlds in which *most* such beliefs are. A great many such agents will additionally engage in confabulation in

those worlds, and thus will not even believe that their memory is unreliable. In the same demographic, there will be many close possible worlds in which an agent's reasoning faculty will be similarly unreliable; the same is true for agents under the age of 10. Any distinctiveness which testimony may have as a belief-forming process will not be found by a study of its relative modal reliability.

### 3.3.4 *Evidence for Uniqueness: Discrimination*

Having addressed the putative distinguishing characteristic of modal reliability, we can move on to a related difference: what Lackey considers the “most important epistemic difference between testimony and other sources of belief,”<sup>94</sup> She demonstrates this difference with a thought experiment about two individuals, Dolores and Edna, who are involved in a car accident:

[A]fter her involvement in a car accident, Dolores has complete amnesia with respect to her perceptual faculties, that is, she remembers nothing about either the workings or the deliverances of such faculties. . . . [A]fter leaving the hospital: she . . . bumps into some acquaintances on her way home, watches an episode of *Seinfeld* on TV while eating dinner, and spends some time on the internet. . . . [I]t seems very reasonable to conclude that the overall status of Dolores's perceptual beliefs would be very high epistemically. . . . In Edna, however, the accident caused *testimonial amnesia*: she remembers nothing about either the workings or deliverances of testimony. In the absence of acquired principles governing the acceptance of testimony, Edna was led very far astray. She trusted *The National Enquirer* as much as the *New York Times*, she trusted a three-year-old's depiction of Disneyland as much as she would have an adult's, she trusted the characters on a sitcom as much as she would have trusted those interviewed in a *National Geographic* documentary . . .<sup>95</sup>

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<sup>94</sup> Lackey (2008), p. 190.

<sup>95</sup> Lackey (2008), pp. 188, 190-1.



Dolores does well epistemically because “when forming non-testimonial beliefs, subjects do not need to be very discriminating in order to be reliably in touch with the truth.”<sup>96</sup> Lackey concludes that Edna fares so poorly because “testimony is quite unlike other sources of belief precisely because it is so wildly *heterogeneous* epistemically.”<sup>97</sup> Testimonial reliability thus requires greater discrimination. While Lackey attributes this difference in reliability to the homogeneous nature of non-testimony and the heterogeneous nature of testimony, for my purposes I will just focus on the weaker claim that there exists this difference in an agent’s needed discriminatory faculties for justification, whatever its origin. If this difference in reliability exists, it may be thought to provide a defense of (U1); that testimonial justification is indeed irreducible to the more traditional sources of justification.

Before going further, we should note that the argument can only provide a weak defense for (U1) since different subspecies of a source of belief can have varying degrees of reliability. Just as introspection regarding one’s occurrent beliefs is more reliable than introspection regarding one’s dispositional beliefs, it may be that testimony is less reliable than other applications of, say, induction while still being part of the belief-forming process of reason. Even so, if the argument succeeds in showing that testimony is a good deal less reliable than other belief-forming processes such as perception, this will provide at least some evidence that its justifiers are notably different than the justifiers of more traditional processes, and thus potentially unique.

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<sup>96</sup> Lackey (2008), p. 191.

<sup>97</sup> Lackey (2008), p. 192.

In order to evaluate Lackey's argument, we must first get clear on what it means to have perceptual or testimonial "amnesia" in the way described in the case. Broadly speaking, there are two ways to gloss this: amnesia could mean (i) lacking all *reflectively assessable* knowledge about the "workings or the deliverances of such faculties," the information which would typically be used during conscious deliberation, or (ii) lacking all reflectively assessable knowledge as well as any integrated and habituated background information about the faculty in question, information which operates on an unconscious, subpersonal level. I will examine each of these two possible interpretations in turn, starting with the latter.

If "amnesia" is glossed as (ii) I won't contest Lackey's description of Edna's reliability, but instead the supposed epistemic success of Dolores. It may be easier to imagine the gullibility which would stem from testimonial ignorance simply because we reflect on our habituation to perceptual cues far less often, perhaps because subjects involving other people are simply more interesting to social beings like ourselves. But upon reflection, the extent to which a person has integrated her experiences in the domain of sense perception is quite staggering.

If Dolores really has lost that information, it would be hard to exaggerate the epistemic effect. For instance, hopefully Dolores went out during the day because she will no longer know that vision is more reliable in well-lit conditions. Strictly speaking, she wouldn't discriminate between what she sees in brightly-lit areas compared to what she sees in a pitch-black room, and if she *does* find herself in darkness, she has no reason to trust that her eyesight is deceiving her into

thinking that there are no external objects in her vicinity. When looking at objects from afar, she won't know that the more distant a thing is, the smaller it appears, so she has no way to judge that the cars, buildings and even people she sees in the distance aren't tiny replicas, or that vehicles driving away aren't getting progressively smaller.

In fact, it's particularly hard to imagine how Dolores forms beliefs about distance and size, but what we *can* be certain of is that she is unaware of any relation between the two. Does she have any reason to think that all the objects in her line of sight are not really within her grasp? Even if she is intellectually aware of concepts like three-dimensional space, distance and depth, this won't help her discriminate between an object being small and close and an object which is large and far away. If she wears glasses for near-sightedness, it might seem that, by hypothesis, she has no reason to trust her visual beliefs when they are on rather than off.

If the example permits her to actively remember that they provide more reliable sight so that she can use that information to good effect, then surely Edna should be allowed to remember upon reflection that three year-olds and fictional sitcom characters are not reliable sources of testimony. If Dolores wears contacts and one falls out, she won't be able to discriminate between the beliefs produced by one eye versus those produced by the other. In such a circumstance, she will likely even regard the images from both as separate objects in her line of sight even if she

is staring at same object, if the difference in the two visual seemings is great enough.

All of this serves to show that if amnesia is interpreted as (ii) then contrary to Lackey's claim, the outputs of sense perception are not very reliable.<sup>98</sup> If amnesia is instead interpreted as (i), many of the problems undercutting Dolores's reliability can be avoided, but now many of Edna's practices will become epistemically successful enough to bring the overall reliability of her beliefs close to the level which Dolores enjoys. This requires that we allow for the belief-forming process of testimony to be in large part as subpersonal and automatic as perception, a move that most variants of reductionism reject. However, there is nothing incompatible with holding both a subpersonal account of testimony together with the Reduction Principle (and thus a rejection of the Uniqueness Principle), and I will in fact argue for just such a view in Chapter Six.

Under a subpersonal view of testimony it will not be the case that Edna will believe a three year old as much as she would an adult, nor will she believe the assertions of sitcom characters as much as she would a documentary narrator. This is because Edna will have become habituated to trust adults and documentarians

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<sup>98</sup> It may seem that interpreting amnesia as (ii) is far less plausible than as (i); so implausible that a reader may ask why I include (ii) at all. The reason is that, in the context in which it is found in *Learning from Words*, I think that Lackey herself is committed to (ii). Without going into detail, it is crucial for her purposes that the Dolores and Edna case be analogous to her earlier ALIEN case, a case in which Sam picks up a diary written by an obviously alien being and forms beliefs based on the assertions written within. The important feature of ALIEN is that Sam has no background information *whatsoever* about the testimonial practices of aliens, which means that Sam lacks even the kind of experiences which could normally subconsciously habituate a believer in certain ways. In order for the two cases to be saliently analogous, this means that Dolores and Edna should similarly become completely clean states who lack any prior habituated and integrated information, personal or subpersonal, about perception and testimony respectively. For our uses, however, both (i) and (ii) are possible interpretations to explore.

more than children and fictional characters; habituated to the point where she no longer has to consciously decide to trust or mistrust based on any reflective consideration.

While watching *Seinfeld*, a normal adult automatically rejects the statements of the sitcom characters (say, that there is a New Yorker named George Costanza whose wife died by licking toxic stamps) in the same way that she automatically rejects the perceptual experience that the people on *Seinfeld* are six inches tall. If Dolores's amnesia isn't enough to make her "forget" that people on television screens are not actual size, then Edna's amnesia isn't enough to make her "forget" that sitcom characters are not trustworthy sources of biographical information. Edna will still get some things wrong on this account; it is still plausible that her amnesia is enough to cause her to trust the *National Enquirer* as much as the *New York Times*. However, there are analogues to this for perception as well; Dolores will likely be fooled into believing that heat waves in the distance are bodies of water, that objects in standing water are bent when they are really straight, and so forth. There are a multitude of beliefs which are grounded in perceptual illusions, beliefs which agents commonly correct themselves about because of background knowledge which Dolores now lacks in the same way that Edna lacks background knowledge about which newspapers and websites are trustworthy and which aren't. If amnesia is interpreted as (i), then we find that Dolores is not much better off than Edna.

As a final point, in order to be used in defense of the Uniqueness Principle the findings of the Edna and Dolores case need to generalize to the other sources of belief. But clearly the faculty of reason is not only wildly heterogeneous, but more importantly the reliability of the various inductive and deductive techniques will rely greatly on reflective, conscious consideration which a “reason amnesiac” will lose even on (ii). Not all reasoning is likely grounded in reflective principles; a lot of reasoning probably involves subpersonal heuristics which agents don’t have, or require, conscious access to. But it shouldn’t be controversial to say that the belief-forming process of reason would be hit much harder than sense perception by the kind of amnesia Lackey describes. To conclude, compared to other sources of belief the reliability of testimony is not particularly reliant on an agent’s powers of discrimination.

### **3.4 Conclusion**

This chapter has examined two paradigm examples of non-reductionist theories and located the two fundamental principles which all standard non-reductionist views embrace. First, according to the Default Justification Principle testimonial justification is the default state for hearers, requiring only that she have no undefeated defeaters for the reliability of the report. And second, according to the Uniqueness Principle testimony is unique in some way which makes either testimony as a belief-forming process, or testimonial justification irreducible and

distinct from the more traditional sources of belief such as inference, memory or sense perception or the justification these sources provide.

The Gullibility Objection is often raised by non-reductionism's opponents as a criticism against the Default Justification Principle; a hearer can meet the conditions of default justification and yet intuitively lack credit or justification for her testimonial belief. Less challenged in the literature is the Uniqueness Principle, which is why the majority of this chapter analyzed and criticized that principle of non-reductionism. Five possible defenses for the principle were examined and rejected. The next chapter continues this project, looking at perhaps the two most popular arguments for the uniqueness of testimony.

## **Chapter 4: Uniqueness, Intentionality and the Transmission of Knowledge**

The last chapter explored non-reductionist views of testimony. The two main tenets of such accounts are (i) the Default Justification Principle, which states that testimonial justification is the default state for hearers and requires only that she have no undefeated defeaters for the reliability of the report, and (ii) the Uniqueness Principle, which states that testimony is a unique and irreducible source of belief or justification which is separate from any other source of belief or justification such as reason, memory or perception. I then argued that non-reductionism suffers from twin worries. First, (i) seems to license gullibility in hearers; a consumer of a piece of testimony can meet non-reductionist's conditions for justification even if their testimonial belief is insensitive, unreliable, epistemically vicious, and so forth. Second, the various arguments which can be raised in defense of (ii) should be rejected. Because proponents for (ii) are positing a new source of belief or justification, the burden of proof is on them to show that such a process exists.

Five possible arguments for (ii) were considered and rejected in Chapter Three; this chapter examines what are perhaps the two most common arguments which can be used to defend (ii). In 4.1 will look at the role speaker intentionality plays in testimony. Many theorists have pointed to this feature of testimony, and the subsequent possibility of purposeful deception, as traits distinctive to testimony. Then in 4.2 I turn to the Necessity Thesis; the view that unlike any other belief-



forming process, testimony is both (a) capable of increasing the number of knowers in the world while (b) incapable of increasing the total number of propositions known in the world. This is because only speakers who themselves have knowledge that  $p$  can transmit testimonial knowledge that  $p$  to a hearer. Ultimately I conclude that neither argument provides a sufficient defense for the Uniqueness Principle, further compromising the plausibility of non-reductionism.

## **4.1 Speaker Intentionality and Purposeful Deception**

### *4.1.1 Evidence for Uniqueness: Speaker Intentionality*

Perhaps the most common feature of testimony posited in defense of the Uniqueness Principle is its intentional nature. It is often said that unlike any other belief-forming process, testimony uses as inputs the utterances of agents with their own interests, motivations and agendas (thus providing evidence for U2). And this means that unlike any other kinds of justification, the epistemic principles which ground testimonial-based beliefs must necessarily take a speaker's agency into account (thus providing evidence for U1). One frequently cited consequence of this feature is that hearers have to deal with the possibility of purposeful deception, which is seen as an important difference between forming beliefs from testimony as opposed to forming beliefs from the more traditional sources of belief.

Reid distinguishes the mistakes we make while following the credulity principle (belief from testimony) from the mistakes while following the inductive principle (which include most beliefs from perception and reason):

But the mistakes we are led into by these two natural principles are of a different kind. Men sometimes lead us into mistakes when we perfectly understand their language, by speaking lies. But nature never misleads us in this way: her language is always true; and it is only by misinterpreting it that we fall into error.<sup>99</sup>

Similarly, Lackey sees this added deceptive element as one of the ways that testimony differs epistemically from other sources of belief:

[T]here are two aspects that are often involved in rendering a speaker a reliable testifier: her competence as a speaker and her sincerity as a testifier. . . . [P]erceptual illusions, hallucinations, and so on all parallel only the testimonial case of incompetent believing – there simply is no analogue of insincere testifying with non-testimonial sources of belief. For insincerity involves the *intention* to deceive or mislead, and intentions of this sort are distinctive of persons.<sup>100</sup>

Audi presents this feature as well when enumerating the ways testimony is unique:

The attester must in *some* sense, though not necessarily by conscious choice, select what to attest to, and in doing so can also lie or, in a certain way, mislead, and in these cases the testimony-based belief does not constitute knowledge. . . . For the basic sources, there is no comparable analogue of such voluntary representation of information.<sup>101</sup>

Faulkner also argues that what makes testimony unique is the required *dual* considerations of a speaker's artfulness (being insincere) and dependability (believing true) in a report:

It might be argued that considerations of artfulness and dependability are comparable to considerations of illusion in perception and memory. It is equally true, for instance, that, if a subject is to acquire (noninferential) perceptual knowledge, then he must not be hallucinating. This parallel only holds, however, for the case of a speaker's dependability. The parallel does not hold in the case of artfulness, because the expression of something thought to be false is quite intentional. It is the relevance of another's

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<sup>99</sup> Reid (1983), p. 102.

<sup>100</sup> Lackey (2008), pp. 189-90.

<sup>101</sup> Audi (2006), p. 40. Though only testimonial knowledge is mentioned in the portion cited here, the fuller quote also explicitly includes testimonial justification as well.

intentions that renders testimony *fundamentally* distinct from perception and memory.<sup>102</sup>

And as a final example, Moran describes the “additional risk” of deception as a distinctive trait of testimony compared to other sources of belief:

When I learn of someone’s beliefs through what they *tell* me, I am dependent on such things as their discretion, sincerity, good intentions—in short, on how they deliberately present themselves to me—in a way that I am not dependent when I infer their beliefs in other ways. People are known to lie, exaggerate, and otherwise speak in ways that do not express their genuine beliefs. Thus, in relying on what a person says, I am incurring an additional risk that the behavior he is manifesting may be deliberately calculated to mislead me as to what he believes.<sup>103</sup>

The argument suggested in the above quotes is that the intentional nature of testimony provides an additional way of producing unreliable or false beliefs compared to other belief-forming processes. While any source of belief can lead one to falsehood through incompetence, misunderstanding and the like, only testimony can lead to falsehood by way of intentional acts of deception on the part of the speaker. For agents to successfully acquire truth from the reports of others, a distinct set of epistemic principles will be needed to address this possibility of deceit. For instance, a deceptive speaker will come with her own unique defeaters for a believer to attend to. However, there are two possible replies to what I will call this *argument from intentionality* to show that it fails to give evidence for the Uniqueness Principle. The intentional nature of testimony does not provide an

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<sup>102</sup> Faulkner (2000), p. 586.

<sup>103</sup> Moran (2006), p. 277. It should be noted that Moran and other “interpersonal” theorists have what they likely consider stronger reasons for testimonial uniqueness than this added element of possible deceit. Such theorists hold that the acceptance of testimony involves a kind of “trust” that epistemically differs quite radically from the kinds of considerations of evidence (or reliable cognitive processes) that other sources of belief rely on. This dissertation focuses on the reductionist/non-reductionist divide, and assurance theories are beyond my present scope.

appreciable enough *epistemic* difference to judge it a unique, irreducible source of either belief or justification.

#### 4.1.2 *The Intentions of Others are Neither Unique to Nor Necessary for Testimony*

First, the “reports of others” is not the only domain in which agent-based deception will affect the beliefs that a person forms. Beliefs from more traditional sources can run the risk of being influenced by the machinations of deceitful persons. For example, the objects of perception can be modified or doctored with the intent to lead a perceiver to falsehood. If Saul sees what appears to be a zebra while shopping at an exotic pet store, he’ll have to consider the possibility that it is a painted mule if he possesses any reasons to think it at all likely.<sup>104</sup> The same sorts of defeaters for his perceptual “zebra belief” exist as are commonly found in testimonial cases, and he will have to consider things like the shopkeepers motives, prospects for personal gain, accountability if caught, and so forth. If he then notices a sign hanging above the animal which states “Buy this *zebra!*”, the same extra epistemic considerations will have to go into an assessment (whether reflective or subpersonal) of the sincerity of this report as will go into the assessment of his

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<sup>104</sup> It is interesting how many paradigmatic cases of perceptual belief in the post-Gettier literature explicitly feature agent-based deceptions as a matter of course. In the context of defining knowledge, fake barns, painted mules, holographic vases, disguised sheep dogs and jokester-controlled lighting stand alongside malfunctioning matches, sheep-shaped rocks and broken clocks, and with virtually no discussion of whether the presence or absence of outside intentionality in any given example deserves attention.

visual zebra-seeming. Like the sign, Saul's perceptual belief can be unreliable in two different ways; one of which involves the honesty of another agent.<sup>105</sup>

Even so, there are two differences in the intentional nature of testimony compared to other sources of belief that a proponent of the Uniqueness Principle can raise here. First, deception is more common in testimonial reports than it is in perceptual beliefs; there simply won't be as many attempts to trick others by altering the perceptual landscape compared to uttering a misleading statement. But this will only provide a difference of degree, not of kind. Sincerity considerations need to be particular to testimony if this is to provide any kind of evidence that testimony is epistemically distinctive in a way that demands its own category.

Second, proponents of uniqueness can say that unlike other sources of belief, only testimony *necessarily* involves the intentions and agency of others. Two responses can be made here. First, even if testimony does have this uniquely necessary feature of *intentionality*, it does not necessarily involve the possible *deception* of others, as some argue. We can imagine an alien race of intelligent, social beings that are incapable of deceit. These beings would be similar to *Star Trek* Vulcans, who are incapable of lying, but takes this racial trait one step further and rules out the ability to employ any and all forms of deception whatsoever. It should be intuitively plausible that such a race is metaphysically possible, and similarly plausible that members of this race could give testimony. But this

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<sup>105</sup> This point is generalizable to other belief-forming processes as well. To take an example from Kant (1979), p. 226., I can pack my I can pack my luggage in front of someone to try to make them erroneously conclude (via reason) that I am going on a journey (*Ethical Duties towards Others: Truthfulness*, Lectures on Ethics, Methuen & Co., London, England, p. 226.).

provides a counterexample to the claim that testimony necessarily allows the possibility of deceit; if a hearer were to receive a report by such a being, there would be no possibility that the speaker might be attempting to deceive her audience. When combined with the previous point, we find that (i) cases of deception are not necessarily cases of testimony (as the zebra example shows) and (ii) cases of testimony are not necessarily cases of possible deception (as the alien example shows).

Finally, even if the necessity of intentionally *were* particular to testimony (which I have argued it is not), this would fail to provide evidence for testimony being a unique or irreducible source of belief. There are any number of ways to split a source of belief (or beliefs from a specific combination of sources) into subcategories that won't make those created subcategories unique. Only vision-based beliefs necessarily must include considerations of what a believer perceives with her eyes; other sources of belief *may* include one's visual experience as inputs or as possible defeaters (reason, memory, etc.) but *every* vision-based belief involves the outputs of the agent's eyesight. Only beliefs formed by probabilistic reasoning necessarily must involve considerations of likelihoods (though other belief-forming processes *may* involve them). But this won't show vision or probabilistic reasoning to be unique sources of belief.

The fact that a belief-forming process has a uniquely necessary input, output, etc. is quite compatible with that process being a reducible source of belief; it may still just be a subcategory of a larger source of belief (or a particular

combination of traditional sources of belief). On a Humean account, for example, testimony just is the subcategory of induction which uses the reports of others as inputs in much the same way as vision is just the subcategory of perception which uses the experiences of light hitting the eye as inputs. Testimony is *defined* in such a way that it can only be produced from intentional beings, so the fact that it necessarily involves intentionality will not by itself show it to be a unique source of belief; this fact is definitional rather than substantive. This is particularly true given that it is not the only source of belief which can deal with agent intentions.

#### 4.1.3 *Intentionality Affects All Belief-Forming Processes*

A second general reply can be leveled against the argument from intentionality, one which further presses the prior point that agent-based intentions, interests and motives commonly affect our non-testimonial beliefs as well. We know that agent-based deception can influence, and thus has an epistemic effect on, non-testimonial beliefs, as just discussed. But overt attempts at deception from other persons are not the only way that agency can affect belief; a believer's own subconscious interests can affect what she believes in countless ways. Our memories can be influenced by subconscious motives, expectations and biases. In one study of racial bias, after white participants were given details of an assault case and asked about the details later, participants overwhelmingly *misremembered* aggressive conduct by blacks in the stories, even fabricating such behavior out of whole-cloth, and were far less likely to correctly remember aggressive conduct by

whites.<sup>106</sup> Our perceptions can similarly be affected by intentional features like personal interests and desires. In a classic study where participants were shown a filmstrip of a Princeton-Dartmouth football game, Princeton viewers reported seeing nearly twice as many rule infractions committed by the Dartmouth team than did Dartmouth viewers.<sup>107</sup> And the faculty of reason is famously prone to these kinds of influences, as we teach to our Critical Reasoning students.

None of this should be new or particularly contentious, but it has important implications for the topic at hand. The argument from intentionality relies on the fact that testimonial beliefs are intention-laden in a way beliefs from other sources aren't, and thus the interests, motives, and other agent-specific baggage carries unique epistemic features all their own. But most such epistemic features will infect perhaps most of an agent's beliefs anyway simply by virtue of the fact that the agent herself has subconscious interests and motives which affect what beliefs she is inclined or disinclined toward. Betty's desire to think well of herself can motivate her to see herself as an above-average driver just as surely as Bob's desire for Betty to think well of him can motivate him to insincerely confirm this for her. A fear of divorce can motivate a wife to ignore evidence of infidelity in the same way that that same fear can motivate her cheating husband to lie about it.

Interestingly, in his discussion of testimony one of Hume's arguments for the irrationality of believing miracles reports rests on the strong psychological

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<sup>106</sup> Levinson (2007).

<sup>107</sup> Hastorf and Cantril (1954), pp. 129-134.



pressures to both believe *and* report about miracles, remarking on the similarity between motives to speak and motives to believe:

The passion of *surprise* and *wonder*, arising from miracles, being an agreeable emotion, gives a sensible tendency towards the belief of those events, from which it is derived. And this goes so far, that even those who cannot enjoy this pleasure immediately, nor can believe those miraculous events, of which they are informed, yet love to partake of the satisfaction second-hand or by rebound, and place a pride and delight in exciting the admiration of others. . . . Do not the same passions, and others still stronger, incline the generality of mankind to *believe and report*, with the greatest vehemence and assurance, all religious miracles?<sup>108</sup> (third italics added)

Here Hume notes that the motivations for false speech can be the same as for false belief. And one doesn't have to agree with his ultimate conclusions about religion or testimonial justification to agree with this psychological claim about the role intentionality and personal interest plays for speaker and believers alike. Similar intentional factors can explain (i) believing *p* on the basis of (say) perception, (ii) reporting that *p*, and (iii) believing that *p* on the basis of a report.

All of this serves to show that many if not most of our beliefs are in fact influenced this way by intentionality; this in turn shows that beliefs formed by perception, memory, reason and introspection necessarily involves the possibility of being influenced by one's own intentionality. This makes intentionality a poor basis for testimonial uniqueness. There are, however, two differences between the intentional features of testimony and that of other sources of belief. First, testimony involves the agency of another person besides the believer. But this shouldn't produce an epistemic difference of kind; a human hearer has the same sorts of

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<sup>108</sup> Hume (1992), s. 93 p. 117, 119.

psychological motivators as a human speaker, even if the positional difference between the two means that some motivators are more likely to manifest. A desire for acceptance may motivate insincere utterances more often than an acceptance of a false belief, for instance, but this is only a difference in likelihood; there will rarely be motivations specific to agents *qua* speaker but not *qua* believer, and vice versa.

Second, testifiers speak according to conscious, deliberate intentions and choose to report sincerely or insincerely, whereas the features of one's own agency that affect belief in the ways I have described are unconscious motivators not under her control. This raises the following question: which features of agency and intentionality would be epistemically salient indicators of a source of belief's irreducibility? Given that the motivations (desire for x, fear of y, bias towards z, etc.) which can cause one to deliberately choose to speak insincerely are the same as those which can cause one to unconsciously believe unreliably, this doesn't seem to provide a very strong difference. To some degree, the presence of an agent's conscious intentions may demand different considerations than those demanded by unconscious motivations, but this seems even less of a difference than, say, the different considerations that go into formal logic compared inference to best explanation, or those of visual perception compared to proprioception (the sense of bodily position and movement). Whether intentionality is involved in the source of the belief (as in testimony) or in the agent's processing of a belief (as in perception, reason, etc.), the formation and sustainment of *any* sort of belief necessarily

involves the possibility of intentionality affecting the formation or grounds of that belief.

## **4.2 Evidence for Uniqueness: Incapable of Producing New Knowledge**

### *4.2.1 The Necessity Thesis*

In 3.3.1 and 4.1.1 I looked at four arguments total by Audi that testimony is a distinctive source of beliefs. In this section, I look at a fifth point that Audi offers as another difference between testimony and other basic sources of knowledge: testimony “yields testimony-based knowledge in the recipient only if the attester knows that *p*,” which results in the distinctive fact that “although testimony can increase the number of *knowers* in the world, it cannot increase the number of *propositions known*.”<sup>109</sup> Contrast this with perception, reason and introspection, which can all increase both the number of knowers *and* propositions in the world. Similarly, contrast it with memory, which (by itself) can neither increase the number of known propositions *nor* knowers in the world. In this way, testimony occupies a unique place all its own regarding the dissemination of knowledge.<sup>110</sup> If correct, this feature of testimony will make it unique compared to any other belief-forming process, and thus can be used to support (U2) and the Uniqueness Principle.

Audi’s claim here has been challenged by those who hold that testimonial knowledge of *p* can be transmitted even by those who do not possess knowledge of

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<sup>109</sup> Audi, (2006) p. 43.

<sup>110</sup> Audi, (2006) p. 43.

*p*. Greco gives one popular variant of a counterexample against speaker knowledge being necessary for hearer knowledge:

The most plausible counterexamples to [the necessity of speaker knowledge] concern circumstances where the hearer is somehow in an epistemically superior position to the speaker regarding the facts around *p*. For example, suppose that H but not T knows that Jim has an identical twin. Accordingly, T does not know that Jim has entered the building merely on the basis of seeing that he has. Suppose now that, over the phone, T testifies to H that Jim has entered the building, and does so in circumstances where Jim's identical twin is standing next to H in plain view. Plausibly, H knows on the basis of T's testimony that Jim has entered the room, although T does not know this himself.<sup>111</sup>

We can dismiss cases of this style, however, on the grounds that they are not examples of beliefs being formed solely on the basis of the testimony. In the example above, H's belief is grounded on both T's report and his knowledge of the (i) existence and (ii) current location of Jim's twin. This grounding may not have to be consciously considered in any way, but the epistemic importance of this added background knowledge is clearly salient to what we should say H has based his subsequent 'Jim' belief on, given that without this background knowledge H would share T's ignorance of Jim's entrance. Given this, while H has knowledge which T lacks, he does so because his belief wasn't based solely on H's testimony. There are other counterexamples which might be more promising, however, so we should consider other attacks on the requirement before surrendering the point.

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<sup>111</sup> Greco (2012), p. 22.

#### 4.2.2 *Counterexamples to Necessity: CREATIONIST TEACHER*

Lackey is perhaps the most famous opponent of the necessity for speaker knowledge (which she calls the Necessity Thesis), and gives the following case to show such a necessity should be abandoned:

CREATIONIST TEACHER: Stella is a devoutly Christian fourth-grade teacher. . . . Part of [her] faith includes the truth of creationism and, accordingly, belief in the falsity of evolutionary theory. Despite this, she fully recognizes that there is an overwhelming amount of scientific evidence against both of these beliefs. . . . [S]he regards her duty as a teacher to involve presenting material that is best supported by the available evidence, which clearly includes the truth of evolutionary theory. As a result, after consulting reliable sources in the library and developing reliable lecture notes, Stella asserts to her students, “Modern-day *Homo sapiens* evolved from *Homo erectus*,” . . . . Stella herself neither believes nor knows this proposition. . . . [The students] form the corresponding true belief solely on the basis of her reliable testimony.<sup>112</sup>

Lackey concludes that this is a case of testimonial knowledge being produced by a speaker who lacks knowledge of what is being asserted. Stella has skillfully and dutifully formed her day’s lesson plan from reliable sources, and presented it to her students in a reliable manner; intuitively her assertion will successfully transmit knowledge. If Lackey is right, the example will successfully show that testimony is not distinctive in the way Audi describes; it will be on par with perception, reason and introspection in its ability to produce new knowledge and knowers. This would be a happy outcome for opponents of the Uniqueness Principle, but unfortunately there are good reasons to think CREATIONIST TEACHER fails to be a successful counterexample to the Necessity Thesis.

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<sup>112</sup> Lackey (2008), p. 48.

To locate the problem with CREATIONIST TEACHER, we should first examine a slightly altered version of the case:

Creationist Friend: After giving her lesson, Stella meets with Birch, an old acquaintance, for lunch. Birch believes neither that Stella is a creationist nor that she is a teacher. Remembering (correctly) that Stella has always been quite knowledgeable about biology, Birch asks her where humans evolved from, to which Stella promptly replies “Modern-day *Homo sapiens* evolved from *Homo erectus*” (hereafter M). Even though she believes she is telling Birch a falsehood, she regards her duty as a friend to give answers which are best supported by the available evidence. Having excellent reasons to trust Stella, Birch forms the belief that M.

Unlike in CREATIONIST TEACHER, I think our intuitions should be that Birch does not gain knowledge of M.

What explains this difference? I think that the salient difference is that while in the classroom, Stella acts as a different kind of testifier than in more common conversational contexts. In her role as a teacher, Stella is not reporting to her students that *M*, but rather is reporting something like “*Scientific consensus is that M*” (hereafter *C*), which is a proposition that Stella indeed has knowledge of. In a classroom context, there is an implicature on both sides of the lectern that the statements made by a teacher are held by the consensus of experts in the field in question (unless explicitly noted otherwise), and there does not have to be any such implicature that the teacher believes what she is espousing. Cases of testimony involving teachers for this reason deviate from more standard testimonial cases, where S’s stating of *p* implies that S herself believes that *p*.<sup>113</sup>

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<sup>113</sup> This implicature won’t hold in all teaching cases. For instance, the more expertise a teacher is believed to have on the subject, the more likely she will be taken as giving her direct testimony rather than merely the opinions of the experts. Similarly, a teacher may be taken as giving her own

One plausible explanation for why Birch doesn't seem to acquire knowledge of *M* in Creationist Friend is because there is an improper causal chain between (i) the reason for his forming (and maintaining) the belief and (ii) the reason the belief is true. Birch believes *M* is because he erroneously believes that Stella herself believes *M* (or at least because he lacks the important defeater that she doesn't believe *M*). But Stella's personal beliefs about evolution don't play a role in why she reports *M*; she reports what she thinks is false. "Reports which a speaker believes are false" is generally an extremely unreliable domain for a hearer to ground a testimonial belief on. But luckily, *M* turns out to be true due to Stella's odd practice of making statements which the evidence supports even while at the same time believing that she is telling a falsehood. There is no such deviant causal chain in CREATIONIST TEACHER because Stella (justifiably) believes *C*.

Though my argument is that Stella is really testifying to *C* in class rather than *M*, I am not committing myself to a view of testimonial uptake where her students form the occurrent belief that *C* and then inferentially derive *M* from *C*. Even though Stella is reporting that *C*, it is likely the case that her students will quickly and automatically derive from that the belief that *M*; they may not in fact even consciously consider anything about the scientific consensus. This is common for cases of passed down testimony, and shouldn't strike us as odd. For example, if I ask my friend Ben what time the movie starts and, iPhone to his ear, he says

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beliefs if the academic class level is sufficiently high. Stephen Hawking teaching a physics seminar is more likely to be giving his own testimony than the average high school science substitute teacher. But in CREATIONIST TEACHER Lackey is careful to explain both that Stella forms her lesson plan from the conclusions of others rather than her own and that it is a low-level biology class. Given this, these added variables won't come into the case.

“Moviefone says 5:00,” I’m likely to reflexively form the belief that the movie starts at five without ever reflecting about the person on the other end of Moviefone. The same principle applies to Stella’s students; even if on some level they understand that teachers like Stella report what others believe,<sup>114</sup> this understanding doesn’t have to be consciously reflected upon for them to form the belief that *M*.

One final reason to think that Stella is reporting *C* instead of *M* to her students is that, intuitively, what Stella tells her class doesn’t sound like a lie while what she tells Birch does. The reason that Stella’s statement to Birch is intuitively a lie can be easily explained by the fact that she is consciously and purposefully making a claim that she believes to be false, and with the goal of having him believe the (presumed) falsehood. Similarly, if Lackey is right that Stella is asserting *M* to her class, this would be a clear instance of a lie on most definitions<sup>115</sup> and our intuitions should be in line with this. But this isn’t our intuition because she is actually reporting *M*, which she believes to be true and thus is being sincere about.

If I am right, Stella is reporting *C* instead of *M* to her students and CREATIONIST TEACHER is not a counter-example to the speaker-knowledge requirement. This explains why we have the intuition that Stella’s friend doesn’t

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<sup>114</sup> I think even fourth graders have this understanding. Most classes are taught at least partially from external materials such as textbooks are the like which the students presumably know that their teacher didn’t personally author. If one of Stella’s students has no such understanding, and simply believes that Stella is conveying her own personal beliefs in the classroom without regard to what others in the field think, then I think such a student won’t acquire knowledge of *M*.

<sup>115</sup> If it is thought that a lie must be an actual falsehood, then add that (remarkably) *M* is, in fact, false.



have knowledge even when forming her belief on the basis of the same utterance as the students. If one does not share this intuition that Birch does not gain knowledge of M from Stella at lunch, it may be because M belongs to a class of claims that automatically get classified under the “teacher” context above, even outside of any classroom. It may be that any scientific or technical claim (particularly claims about theories rather than concrete facts) will be regarded in this manner. But the less likely it becomes for this to be the presumed context, the more doubtful it becomes that the proposition stated is the one correctly transmitted.

Here is a case which avoids this possible confusion about contexts:

Veteran Teacher: Harry is a 90 year-old fourth-grade history teacher and, unbeknownst to his class, a high-ranking veteran of World War II. Brain damage from an old war wound causes Harry to believe odd things about the war, including the belief that war-time head injuries were incredibly rare. On the day he is to teach his class about the war he draws up his lesson plan from the findings of the leading historians of World War II, even when they report counter to what he thinks true, believing his duty is to teach what the experts believe even when he thinks they are wrong. He reports to his class that “head injuries were very common on the battlefield,” which he erroneously believes to be false. After class he joins an old friend for lunch who, knowing that Harry fought in WWII, asks him about the frequency of various wartime injuries. Believing that his duty is to report to his friend what the experts hold instead of what he himself thinks is true, Harry replies that “head injuries were very common on the battlefield.” Having excellent reason to think that Harry is quite knowledgeable on the matter but not knowing about his brain damage, his friend forms the belief.

Our intuitions should be clear in this case: Harry’s students have knowledge while his friend does not. And this is because of the shift of context; Harry is making a different report to his students than he is to his friend. He has knowledge of the report he makes to his class, namely that “Historians believe that head injuries were

very common on the battlefield,” and we should interpret Stella’s report to her class similarly.

Lackey considers objections in this vein; objections which make use of the distinction between what she calls *direct* and *indirect* testimony and diagnose the case as one in which Stella gives indirect testimony of something like *C* rather than the direct testimony of *M*. Lackey responds by saying that “it is not entirely clear what the criterion could be for distinguishing between direct and indirect testimony such that Stella’s report turns out to be an instance of the latter.”<sup>116</sup> The way she eventually distinguishes between them “is by the *content* of the proffered statement,” saying that if “I report to you that *p* (whether or not I believe *p*), then this is a case of direct testimony” whereas “if I report to you that so and so said that *p* (whether or not I believe that *p*), then this is a case of indirect testimony.”<sup>117</sup> In this way, she concludes that Stella has given direct testimony of *M*.

However, it is clear that there are some contexts where “so and so said” will be implied in a statement without having to be explicitly spelled out. If upon your entrance into the room I announce “Berlin was founded in 1237” while my eyes are cast downward at an open book in my lap entitled *13<sup>th</sup> Century German History*, the context is such that my utterance will be taken to imply the fuller report “this book says that Berlin was founded in 1237.” A classroom setting is a similar context for statements made by a teacher which fall under the topic of a current lesson. While I will not defend a specific criterion here which would provide an

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<sup>116</sup> Lackey (2008), p. 51.

<sup>117</sup> Lackey (2008), p. 51.

easy way to categorically distinguish cases where there is an implicature of indirect testimony, CREATIONIST TEACHER does seem to be one such case.

#### 4.2.3 *Counterexamples to Necessity: CONSISTENT LIAR*

A second case Lackey offers against the Necessity Thesis is CONSISTANT LIAR, which is described as follows:

When Bertha was a teenager, she suffered a head injury while ice skating and, shortly afterwards, became prone to telling lies, especially about her perceptual experiences involving wild animals. . . . Dr. Jones noticed a lesion in Bertha's brain which appeared to be the cause of her behavior. . . . he decided to modify her current lesion and create another one so that her pattern of lying would be extremely consistent and would combine in a very precise way with a pattern of consistent perceptual unreliability. . . . As a result of this procedure, Bertha is now—as a young adult—a radically unreliable, yet highly consistent, believer with respect to her perceptual experiences about wild animals. . . . For instance, nearly every time she sees a deer and believes that it is a horse, she insincerely reports to others that she saw a deer. . . .<sup>118</sup>

Lackey argues that hearers can gain knowledge from Bertha's reports; if she says she saw a deer, a hearer can thereby gain knowledge that she saw a deer, even though Bertha doesn't know (or believe) that she did.

However, I would argue that the case's reliance on such a bizarre causal story – Bertha's (i) initial sighting, to (ii) a reliably false belief, to (iii) a reliably insincere report, to (iv) the true belief formed by the hearer – makes the final belief too lucky to count as knowledge. Lackey anticipates this intuition and counters that the deliberate, purposeful nature of Dr. Jones's surgery to tie Bertha's false beliefs with her false reports (and which we can stipulate he does in every close possible

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<sup>118</sup> Lackey (2008), pp. 53-4.

world) removes the charge that this is a Gettier case.<sup>119</sup> The important fact, for Lackey, is that Bertha's reports are extremely reliable (and not by accident, thanks to the doctor's role); believing on the basis of her reports will almost always result in a true belief.

My first response to Lackey's reply is that the knowledge-defeating luck in the case does not depend on whether the brain lesions were produced by accident or on purpose; the salient point is that there exists a nonstandard causal connection. A process is used by an agent which would normally reliably obtain a truth (belief on the say-so of a trusted speaker), but unknown to the agent there are odd circumstances at play which would normally make a subsequent belief false (the first lesion), but luckily *other* odd circumstances are also at play (the second lesion) which result in a true belief being obtained after all. The following variant on Robert Chisholm's classic Gettier case<sup>120</sup> will help clarify:

Sheep Strapping Case: A herder comes across a field which has been secretly populated with sheepdogs which are expertly groomed and disguised to look like sheep, even to a trained eye. To protect the residents from any epistemic harm which could result, he straps a tiny baby sheep to the belly of every dog, cunningly concealed from observation. His careful, deliberate actions are such that no sheepdog resides in the fields without such an attached sheep, and no other sheep reside in the field. Afterwards, Frank views a sheepdog and forms the justified true belief "There is a sheep before me."<sup>121</sup>

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<sup>119</sup> Lackey (2008), pp. 56-7.

<sup>120</sup> Chisholm (1966), p.23, fn. 22.

<sup>121</sup> The following can be added if needed: In order to match the well-known regularity of Bertha's reports in CONSISTANT LIAR while also matching the inability of others to detect the odd causal story of each report, we can imagine that Frank and others sometimes have used a 'sheep detector' app on their smart phones which reliably emits a beep if there is a sheep at the spot pointed to, and it is well-known that the sheep-looking objects in this field always produce a beep from the app. If needed, we can also say that the sheepdog's sheep-like appearance is due to some bizarre natural occurrence rather than the actions of any agent.

Just like in Chisholm's original case, our intuitions should be that Frank does not have knowledge, even though his belief is both true and justified.

It is irrelevant to Frank's epistemic state that the herder's actions were intentional and purposeful, and that his explicit goal was to cause the sight of a sheepdog to reliably produce true sheep beliefs. It is irrelevant that sheepdog sightings reliably produce accurate sheep beliefs in this field.<sup>122</sup> The strange causal contortions a belief maneuvers through to end up true are unusual enough to compromise knowledge. A similarly deviant causal chain exist in CONSISTANT LIAR with Bertha's bizarre pathological insincerity being thankfully offset by an equally bizarre perceptual incompetence, all of which the hearer is ignorant of. The fact that this thankful offsetting is the purposeful result of some external agent is irrelevant to epistemic status of the clueless hearer's subsequent testimonial belief.

A second criticism of CONSISTANT LIAR is the implied reliable domain in question isn't adequately broad enough. In her discussion of the case Lackey seems to be restricting the salient domain that one should scrutinize for reliability all the way down to the testimony of a single person ("Bertha's reports"), which is too narrow. There are different ways to show this, depending on what version of reliabilism one adheres to, but for present purposes it will be clearest to describe

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<sup>122</sup> Of course, only certain sorts of sheep beliefs, are accurate, not beliefs like "*that very animal* is a sheep." But not only could the example be firmed up to allow for a greater range of beliefs to be true, more importantly I think the hearers in CONSISTANT LIAR form false beliefs in some rather important related domains as well; false beliefs such as "Bertha believes she saw a deer," "Bertha isn't trying to lie to me," "Bertha is generally an accurate and sincere testifier about such things," etc.

the problem in terms of a distinction between global and local reliability.<sup>123</sup>

Generally speaking, a belief-forming process will be globally reliable if and only if it produces a high proportion of truth beliefs over false beliefs across a variety of circumstances in which it is typically employed. A belief-forming process is locally reliable in a context C if and only if it produces a high proportion of true beliefs over false beliefs across the kind of circumstances which are relevantly like C.

Gettier (and fake barn) cases can be roughly described as when a globally reliable process is undermined by local unreliability. For example, my ability to identify and properly discriminate the objects of vision is an excellent and thus globally reliable belief-forming process, but when I enter barn façade county the local environment teems with indistinguishable façades and thus my normally excellent power of visual discrimination (for objects relevantly similar to barns at such and such distance) is unreliable in this context in a way which prevents me from obtaining knowledge, even when viewing a genuine barn. Though this discriminatory power is globally reliable, the fact that it isn't locally reliable is what explains my lack of knowledge. Similarly, even if a hearer has global reliability for her testimonial beliefs, (carefully being neutral here on the exact requirements for justification), which just means that her testimonially-based beliefs normally turn out to be true, any claims to knowledge will be compromised if she lacks local reliability.

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<sup>123</sup> Such as found in Goldman (1986) and Goldberg (2010). Even if one doesn't agree with describing reliabilism in terms of global vs. local reliability, my argument can be advanced with a different terminology.

Are those who rely on Bertha's testimony locally unreliable due to the peculiar local circumstances involved in the production of her testimony? It will depend on how we define the local reliability. Lackey focuses on the reliability of Bertha's reports, and since they are reliable, knowledge can be gained from them. But it is implausible that the set of reports of a single individual, even over time, is the proper domain to examine. When an agent forms a barn belief when looking at a genuine barn in barn façade county, it wouldn't be proper to restrict the local domain just *that* individual barn. We can imagine that that one barn is extraordinarily reliable at producing true barn-beliefs in the many perceivers driving by; it has in fact kept a perfect "true barn-belief" producing record for many decades now. That won't make those beliefs knowledge, because the domain to look at is wider than just the perceptual experience of that particular barn.

The local environment is unreliable because the basic process used (visual discrimination) would lead to a falsehood when forming visual discriminatory beliefs about things relevantly similar to the barn, i.e., objects sharing features that are epistemically salient. What is epistemically salient for visual discriminatory beliefs might be something roughly like 'perceptions of objects of a barn's rough appearance'; this is an epistemically salient category because forming beliefs on the basis of things of that nature will often lead to a false belief in barn façade county. The salient domain will be wider than the single barn, yet narrower than, say, any medium-sized object.

What would be the analogous circumstances for CONSISTENT LIAR?

They would include testifiers with qualities that are epistemically salient to the formation of a testimonial belief that are similar to those Bertha possesses. What qualities does Bertha possess that are epistemically salient? Two plausible candidates come immediately to mind: (i) competence in the topic discussed, and (ii) sincerity about the topic discussed. However we cash out the global reliability of the hearer, the local reliability might be something like ‘speaker’s with Bertha’s level of competence (about animal sightings), or perhaps ‘speakers with Bertha’s level of sincerity (about animal sightings). Normally, if a hearer forms a belief on the say-so of someone as incompetent as Bertha, the belief would turn out false. And the same is true for a hearer who forms a belief on the say-so of someone as shamelessly consistent a liar as Bertha.<sup>124</sup> Thus, this provides an additional reason to think that CONSISTANT LIAR is not a counterexample to the Necessity Thesis.

#### 4.2.4 *Counterexamples to Necessity: PERSISTENT BELIEVER*

The last counterexample offered by Lackey that I will consider is PERSISTENT BELIEVER, in which a speaker lacks knowledge of  $p$  due to holding an undefeated defeater, yet is able to report  $p$  and produce knowledge in a hearer:

Millicent in fact possesses her normal visual powers, but. . . . [a] surgeon falsely tells her that some implants are causing malfunction in her visual cortex. While she is persuaded that her present visual appearances are an

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<sup>124</sup> Additionally, false beliefs are usually the result of forming a belief on the say-so of a speaker who is both as incompetent *and* insincere as Bertha. Only a small fraction of possible worlds exist where both of these traits perfectly calibrate to produce truth assertions with any regularity.



entirely unreliable guide to reality, she continues to place credence in her visual appearances. . . . As Millicent is walking out of the neurosurgeon's office, she is the only person to see a badger in Big Bear Field. On the basis of this visual experience, she forms the corresponding true belief that there was a badger in this field, and then later reports this fact to her friend Bradley without communicating the neurosurgeon's testimony to him. Bradley, who has ample reason to trust Millicent from their past interaction as friends, forms the correspondingly true belief solely on the basis of testimony.

Lackey argues that even though Millicent herself lacks knowledge, Bradley (who knows nothing of the surgeon's claim) gains knowledge from her testimony, "[f]or not only does Bradley have excellent positive reasons for accepting Millicent's testimony, but he also possesses no relevant undefeated defeaters," and "[g]iven this, Bradley comes to know (believe with justification/warrant) that there was a badger in Big Bear Field."<sup>125</sup>

In response, I agree with Lackey that Millicent doesn't possess knowledge, and that Bradley's testimonially-based belief is both justified and true, but he still doesn't have knowledge. This is because, much like CONSISTANT LIAR, the example is a Gettier case with the classic markers of such cases. Bradley is described as having "ample reason to trust Millicent," indeed, he is said to have "excellent positive reasons," so he is employing a process which is normally highly reliable. Bad luck strikes, though, and the person he has so much reason to trust testifies to an unjustified belief, which would normally result in his (likely) getting a false belief. However, as a stroke of good luck, her unjustified belief improbably

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<sup>125</sup> Lackey (2008), p. 60.

turns out to be true, so Bradley ends up with a true belief after all. Therefore, PERSISTANT BELIEVER is not a counterexample to the necessity thesis.

One possible reply would be that because Millicent formed her belief as a direct result of the workings of a highly reliable process (her vision), there is no improper causal chain here that define Gettier cases. Bradley is following the reliable practice of believing a report which a speaker has herself formed through a reliable process, which is a perfectly proper way for a hearer to acquire a testimonial belief. I won't argue here whether the existence of an undefeated defeater in a speaker breaks a proper testimonial causal chain or not; even *if* it does not, the case would still turn out to be a fake barn case.

The epistemically salient domain is that of similar reports; this will mean looking at reports (i) received by the hearer in a similar way, (ii) told by the speaker in a similar way, (iii) held by the speaker in a similar way, etc. And most testimonial beliefs formed on the basis of an unjustified belief being reported (due to undefeated defeaters or any other reason) will be false, simply because most unjustified beliefs will be false, whether they are sincerely asserted or kept to oneself. In most similar situations, Bradley's belief would have been false, so whether a Gettier case or a fake barn case, PERSISTANT SPEAKER fails as a counterexample to the Necessity Thesis.

#### 4.2.5 *The Necessity Thesis and Other Belief-Forming Processes*

I have considered and rejected four separate types of counterexamples to the claim that the belief-forming process of testimony can never produce new knowledge since the source of a report that *p* must herself know that *p*. If any of the examples had been successful the Necessity Thesis would have been shown to be false, and thus could not be used as possible evidence for the Uniqueness Principle. However, even if it turns out that the Necessity Thesis holds true, if we more closely examine just *why* it likely holds true, its potential for propping up the uniqueness of testimony dissolves, as I argue next.

Reducing the Necessity Thesis down to its bare components, it states that a hearer H can have knowledge of *p* on the basis of speaker S's report only if *p* is (i) justifiably believed by S, (ii) true and (iii) sufficiently lacking in the kind of luck or nonstandard causal features representative in Gettier/fake barn cases. But each of these requirements for H's testimonially-based knowledge have direct analogies to similar requirements for *non-testimonial* knowledge; requirements for perceptual, memorial and rational knowledge which are not appreciably or epistemically different than those for testimonial knowledge. This is clearest in the case of requirement (ii), since any feature of S is irrelevant to this requirement. Whether or not *p* is true is a fact about the world and not a fact about S; that is, about the testimonial source of the belief, and this holds for any other source of belief. The truth of "Bill's dog is green" is independent of any feature of the source of that

belief, whether the source is Bill's report, my visual sense data while looking at the dog, my memory while reminiscing about past good times with the dog, etc.

When we move to (i), the same cannot be said; it does depend on some psychological features of S. But this can be redefined for epistemological purposes in terms of a reliable or cooperating environment, with the various general normative features of the speaker's belief (competently or conscientiously formed, carefully checked against possible defeaters, etc.) fulfilling the same role as the epistemically salient features of any other environment in which an agent forms a belief. The source of the testimonial belief must be a suitable environment for testimonial knowledge to result the same way that, say, the lighting of a room must be suitable for visual knowledge to be gained. Again, this can be put in terms of global vs. local reliability; regardless of what constitutes global reliability for a hearer (which will differ depending on what variant of reductionism or non-reductionism, if any, is right), testimonial knowledge will depend on her testimonial process being reliable in the testimonial environment she is currently in.

A report which is unjustifiably held by a speaker will possess features which commonly constitute a bad environment to form a testimonial belief the same way that a poorly lit room is a bad environment to form a visual belief. Visual beliefs formed in a poorly lit room and testimonial beliefs formed on the basis of an unjustifiably held report deny the agent knowledge for the same reasons, however those reasons are described: beliefs in those conditions fail to track the truth, are unstable, unsafe, not sensitive, turn out false in an unacceptable number of possible

worlds, and so forth. If S is regarded of part of H's environment, the requirement that S be justified in her report lacks any distinctive quality.

Finally, a similar analysis can be given for (iii). Traditional Gettier cases feature an improper causal connection between an agent's belief and the truth-maker of that belief; for example, a belief that "a sheep is in the field" is not properly caused if the belief is grounded on the sight of a sheepdog which looks like a sheep, even if the belief turns out to be true because a sheep happens to be standing behind it. But an improper causal chain retains its epistemic impropriety no matter how long the chain gets; just one bad connection is enough to deny knowledge at any step later on. So if S lacks knowledge of *p* because of this kind of nonstandard causal chain, any future beliefs formed which (substantially) rely on that belief and thus are causally linked to it will also fail to be knowledge. This is true if H's testimonial belief relies on S's Gettiered belief in exactly the same way as it is true if one of S's future memorial beliefs relies the Gettiered belief.

Another way that S can lack (iii) is if her belief was formed in fake barn conditions and her belief could have too easily been false, even if it was formed in the right sort of way. But again, this lack of sensitivity will carry over to H's testimonial belief in the same way as it would if one bases a future memorial belief purely on the basis of the past insensitive belief. If S forms her belief in conditions which would often result in a false belief, then H will similarly form her testimonial belief in conditions under conditions which would normally result in a false belief given that reports of "beliefs formed unreliably" is a highly epistemically salient

category for testimony. Testimonial beliefs formed in this locally unreliable condition will turn out to be false much of the time and for that reason H will find herself in fake barn conditions if S found herself in fake barn conditions.

For example, Harriet and Sue are driving in barn façade county and, her gaze just happening to fall upon the only genuine barn in the area rather than one of the many fakes, Harriet reports to the blind Sue “we’re driving past a *barn!*” The testimonial belief that Sue subsequently and justifiably forms will not be knowledge. But this is not distinctive of testimony; if Harriet later forms a memorial belief “Sue and I drove by a barn!” or the deductive belief “There’s at least one barn in that county!” it too would fail to be knowledge for similar reasons. The above analysis may give us an account of why the Necessity Thesis will hold in all cases, and suggests a basic strategy for studying putative counterexamples. Even if the Necessity Thesis holds, however, I have argued that this will fail as a defense of the Uniqueness Thesis.

After looking at the objections against non-reductionism in the last two chapters, I believe that it is sufficiently problematic to prompt an examination into any possible alternatives. Still, as flawed as it may be it may still be thought more plausible than reductionism, given the sorts of criticisms examined in Chapter Two. But these two views on the epistemic status of testimony do not exhaust the possible positions one can take on the issue, and there are a variety of nonstandard accounts that merit an examination. In the next chapter, I look at two such views: Lackey’s hybrid account of dualism, and Goldberg’s Extended Hypothesis.

## **Chapter 5: Nonstandard Accounts: Lackey's Dualism and Goldberg's Extendedness Hypothesis**

The past two chapters were devoted to the two major views of testimonial justification: reductionism and non-reductionism. I argued in Chapter Two that standard reductionist accounts face severe skeptical problems; problems which have not been adequately responded to. I then argued in Chapter Three that non-reductionism suffers from twin worries: the view (i) seems to license gullibility in hearers and (ii) implausibly regards testimony as having either a unique and distinctive belief-forming process or source of justification. Before presenting my own view of testimony in the next chapter, I here explore two promising alternatives which don't neatly fit into either of the two camps above.

In 5.1.1 I look at Lackey's dualist account of testimonial justification, which she presents as a hybrid view taking the best elements of both reductionism and non-reductionism. Dualism combines a positive reasons requirement on hearers along with a reliability requirement on the report given, both of which must obtain in order for a testimonially-based belief to be justified. By placing requirements on both the sides of the exchange, Lackey argues that her account achieves two things: it (i) relieves much of the justificatory burden from a hearer and thus avoids the skeptical problems reductionism faces, while still (ii) leaving enough of a burden on the hearer to avoid worries of gullibility that plague non-reductionism. However, I will argue in 5.1.2 that dualism cannot meet the first goal; or rather, when necessary corrections are made to the criteria of justification which it

demands, it becomes close enough to a reductionist view that falls prey to all of the criticisms examined in 2.2.

Section 5.2 is devoted to Sanford Goldberg's 'extendedness hypothesis' of testimony, which has many interesting implications for any theory of testimonial justification. Both internalist and reliabilist theories of justification typically agree that whether or not a subject's belief is justified will depend solely on the cognitive processes of that subject. Unreliable features in the environment may compromise a subject's claim to knowledge but will not compromise her justification. For example, when forming the true belief that it is noon on the basis of a clock which stopped at midnight the night before, and which the subject has good reasons to trust, most theorists will say that the unreliability of the clock can won't cause her belief to be unjustified even though it will cause the belief to fail to be knowledge. In Relying On Others, Goldberg has challenged this assumption in the case of testimonial belief, arguing that the justification of such beliefs relies at least partly on the reliability of the cognitive processes which formed the testimony as well. I will hold off on giving a more detailed outline of his theory and my critique of it until 5.2.1.

## **5.1 Lackey's Dualism**

### **5.1.1 *Dualism: The Account***

Lackey's motivation for building a hybrid view is dissatisfaction with either of the two prevailing accounts of testimony. She argues that non-reductionism is



untenable because it embraces what I have called the Default Justification Principle, which states that hearers are not required to possess positive reasons for the reliability of a speaker's report in order to know the content of that report. Lackey provides a counterexample which purports to show that a correct account of testimonial justification needs such a requirement. Lackey takes her ALIEN case<sup>126</sup> to provide a decisive counterexample to this principle.

More interesting for our purposes is Lackey's argument against reductionism. She first notes that reductionism's thesis, that testimonial justification *reduces* to other justificatory sources, can be thought of in either of two ways: the positive reasons a hearer holds for trusting a piece of testimony can be (i) merely necessary for testimonial justification/warrant, or (ii) both necessary and sufficient.<sup>127</sup> She then gives an argument for the latter:

[I]n order for testimonial justification or warrant to be *reducible* to sense perception, memory, and inductive inference, the positive reasons must be fully sufficient for justifying, or conferring warrant on, the relevant testimonial belief. Otherwise, there would be an asymmetry between the epistemic status of the *testimonial belief being reduced* and the *positive reasons doing the reducing*, thereby preventing the possibility of such a reduction.<sup>128</sup>

Lackey's point here is that the reduction relation requires that the epistemically normative properties of the object of reduction be fully explained in terms of the properties of that which it reduces to. For any particular case of testimonial belief, if testimonial justification (T) really does reduce to having positive reasons from some other more traditional form of justification (O), then it won't be the case that

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<sup>126</sup> As summarized in Chapter 3 footnote 98.

<sup>127</sup> Lackey (2008), p. 148.

<sup>128</sup> Lackey (2008), pp. 148-9.

T requires O plus some additional feature; O alone will be sufficient for T. If it can be shown that T does require more than just O, then T does not reduce to O like reductionists claim.

If a case exists in which a hearer meets the positive reasons criteria and yet not possess justification, so the argument goes, then reductionism will fail as a theory. Lackey presents the following NESTED SPEAKER example as just such a case:

Fred has known Helen for five years and, during this time, he has acquired excellent epistemic reasons for believing her to be a highly reliable source of information. . . . Yesterday, Helen told Fred that Pauline, a close friend of hers, is a highly trustworthy person. . . . Because of this, Fred unhesitantly believed Pauline earlier today when she told him that albatrosses . . . have the largest wingspan among wild birds. It turns out that Helen . . . was incorrect on this particular occasion: Pauline is, in fact, a highly incompetent and insincere speaker. . . . though Pauline is correct about albatrosses, she came to hold this belief merely on the basis of wishful thinking . . .<sup>129</sup>

Lackey claims that intuitively Fred's belief is not justified because of the highly unreliable nature of both Pauline as a testifier and the way she formed her belief reported.

This shows that in addition to what reductionism requires for justification, a proper account also needs a "speaker-condition" in place "that requires that a speaker's testimony be reliable or otherwise truth-conducive."<sup>130</sup> Sensitive to this requirement, Lackey gives the following account of testimonial knowledge, testimonial justification and testimonial warrant:

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<sup>129</sup> Lackey (2008), p. 149.

<sup>130</sup> Lackey (2008), p. 164.

For every speaker, A, and hearer, B, B knows (believes with justification/warrant) that p on the basis of A's testimony only if: (D1) B believes that p on the basis of the content of A's testimony, (D2) A's testimony is reliable or otherwise truth-conducive, (D3) B is a reliable or properly functioning recipient of testimony, (D4) the environment in which B receives A's testimony is suitable for the reception of reliable testimony, (D5) B has no undefeated (psychological or normative) defeaters for A's testimony, and (D6) B has appropriate positive reasons for accepting A's testimony.<sup>131</sup>

Lackey argues that the added requirements allow dualism to escape the various objections leveled against reductionist accounts. Reductionism requires the positive reasons of hearers to “carry *all* of the justificatory burden for testimonial beliefs,” whereas “in contrast to reductionism, dualism has the epistemic work being *shared* between the speaker and hearer, leaving the work for the positive reasons condition far less burdensome.”<sup>132</sup> For example, this shifting of epistemic burden allows dualism to avoid the Lack of Evidence Objection because it only requires hearers have positive reasons that make it merely “*not irrational for her to accept the testimony in question*”<sup>133</sup> (rather than the stricter reductionist requirement to be rational).

### 5.1.2 Dualism: Objections

Dualism is a hybrid of both reductionism and non-reductionism because it embraces both the reductionist Positive Reasons Principle (that testimonial justification requires that a hearer possess positive reasons to think the report

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<sup>131</sup> Lackey (2008), pp. 177-8.

<sup>132</sup> Lackey (2008), p. 180.

<sup>133</sup> Lackey (2008), p. 181.

reliable) and the non-reductionist Uniqueness Principle (testimony is an epistemically distinctive source of belief or justification), as defined in 3.1.3. Her defense of both principles will be subject to scrutiny to gauge the plausibility of the account, and I will argue in turn that both are problematic. Though Lackey defends the Positive Reasons Principle and requires that those reasons be inferential inductive reasons, she argues in the above section that by additionally advocating a speaker-reliability requirement, dualism avoids the standard problems raised against reductionists. However, this will not adequately distinguish dualism's criteria for testimonial justification from that of traditional reductionism.

When the six criteria Lackey gives for testimonial justification are examined, they are shown not to differ appreciably from a purely reductionist account. (D1), (D3), and (D5) are already requirements for reductionism. (D4) is a standard anti-luck condition on *knowledge* which any account of knowledge nowadays will include. However, most theories of knowledge will include such an anti-luck condition only as an additional criterion of *knowledge* – additional, that is, to the justification condition (among others). It is highly unusual, and more than a little puzzling, that Lackey includes it here as a requirement for *justification*.

While there are some epistemologists who diagnose barn-cases as cases of unjustified belief,<sup>134</sup> Lackey doesn't hold this, as evidenced in an earlier discussion of this environmental requirement (in the context of non-reductionism) in *Learning's* Chapter Five. There she states that in cases where one's environment is

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<sup>134</sup> See Greco (2010), pp. 76-80.

unsuitable for testimony even when a hearer and speaker are functioning properly, one can either describe the case as (i) a Gettier/barn case or (ii) a second-order Gettier/barn case where “the accidentality [is] located at the justificatory level rather than at the level of truth.”<sup>135</sup> Given that Lackey states that the reasons for holding (D4) as a requirement was discussed in Chapter Five,<sup>136</sup> I interpret her as only holding (D4) as needed for knowledge rather than justification. And since, as previously stated, it is commonplace for theories of knowledge to have such anti-luck conditions on knowledge, (D4) does not plausibly distinguish her view from standard reductionist theories of testimonial justification.

Moving next to (D6), while it is similar to a typical reductionist requirement for positive reasons, a key point of dualism is that (D6) can be more lax in its requirements due to the speaker shouldering some of the hearer’s epistemic burden; due, in other words, to (D2). This marks (D2) as the criterion which distinguishes Lackey’s dualist account from reductionism. The need for its inclusion was argued for with the NESTED SPEAKER case, so we should revisit that example. The reader is expected to have the intuition that Fred lacks justification, and this lack is then attributed to Pauline’s unreliability. I do not share Lackey’s intuition about the case, however; Fred seems to possess strong internal justification for his belief, given that he possessed excellent reasons for trusting both Helen and Pauline. The belief itself has also been formed by the perfectly reliable process of “trusting those whom highly trustworthy people vouch for.” But I agree that there is something

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<sup>135</sup> Lackey (2008), p. 166.

<sup>136</sup> Lackey (2008), p. 164-7.

epistemically improper about Fred's belief, and this is because it is a Gettier case. I diagnose Fred as having a justified true belief which still fails to be knowledge.

Lackey herself considers but ultimately rejects this diagnosis. She presents the new case of UNNESTED SPEAKER to show we should do so. In this case, Max has excellent reasons to trust the normally reliable Ethel, and he forms a belief on the basis of her report. But Ethel's belief, which constitutes the basis of her report to Max, is uncharacteristically irrationally formed. Yet, the belief improbably turns out true.<sup>137</sup> This is clearly a Gettier case, and Lackey agrees. But she thinks this case differs importantly from NESTED SPEAKER in that Ethel is a "*generally reliable speaker*" whereas Pauline "*is not a reliable speaker in any sense of the word*," and thus "given the degree and depth of Pauline's unreliability, there is simply no plausible sense in which the belief Fred forms on the basis of her testimony could be justified or warranted."<sup>138</sup> So NESTED SPEAKER is not a Gettier case.

As a first response to Lackey's reply, I'll note that the existence of differences in the UNNESTED SPEAKER and NESTED SPEAKER cases won't show on its own that the latter case is not a Gettier case. Gettier cases can take a multitude of forms, and the fact the one clear Gettier case has certain structural differences compared to a second doesn't mean that the second won't be Gettier case as well. The following two examples are analogues to Lackey's pair of cases:

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<sup>137</sup> Lackey (2008), p. 152.

<sup>138</sup> Lackey (2008), pp. 152-3.

Nested Viewer: Pam travels to a nearby coastal bird observatory to spend the day watching albatrosses. A viewing platform contains a row of telescopes for visitors, each with its own extremely reliable indicator light which, if red, indicates that the normally reliable telescope is defective or malfunctioning. Knowing this, Pam looks through one that has no warning light, sees an albatross, and forms the belief that the bird has speckles on its belly. The indicator light is uncharacteristically wrong, however, and what Pam thinks are speckles are really spots caused by the defective, consistently unreliable telescope. By chance, the albatross does indeed possess belly speckles.

Unnested Viewer: Sam is watching an albatross through his telescope which he knows to be extremely reliable, and forms the belief that it has speckles on its belly. This is a rare case in which his telescope is malfunctioning, however, and the speckles that he thinks he sees are really spots caused by the malfunction. By chance, the albatross does indeed possess belly speckles.

Intuitively, both Pam and Sam have Gettiered justified true beliefs. Yet the same difference exists for them as does Lackey's Fred and Max.

In Nested Viewer, the justification for accepting the sight in the (consistently unreliable) telescope is nested within the positive reasons the telescope's reliability. The perceptual belief "that bird has a speckled belly" (formed by looking through the telescope) is grounded by the perceptual belief "that telescope is reliable" (formed by looking at the indicator lights), just as Fred's testimonial belief "albatrosses have the largest wingspan" (formed by accepting Pauline's report) is grounded by the testimonial belief "Pauline is reliable" (formed by accepting Helen's report). Contrast this with Unnested Viewer, where justification doesn't lie in any such secondary consideration but rather in the track record of the telescope, just as in UNESTED SPEAKER justification lies in the track record of Ethel. But regardless of any difference between Nested and

Unnested Viewer, in the former case the unreliability of Pam's telescope doesn't result in Pam lacking justification in her belief that "that bird has a speckled belly." Her belief is still internally responsible, her character epistemically virtuous, her faculties of reason and sight globally reliable, etc. Pam's belief is justified though unluckily compromised by environmental features, and if Pam's belief is justified in Nested Viewer, consistency demands that we deem Fred's belief justified in NESTED SPEAKER.<sup>139</sup>

As a second response to Lackey's reply, NESTED SPEAKER fits the classic structure of Gettier cases. Linda Zagzebski gives one such account; her analysis of Gettier cases is that "[w]hat generates the problem for JTB, then, is that an accident of bad luck is cancelled out by an accident of good luck. The right goal is reached, but only by chance."<sup>140</sup> And this is what is happening in NESTED SPEAKER. Fred has a reliable belief-forming process of "trust speakers who are likely reputable," and given that Helen is a reliable source of which speakers are reputable (and Fred knows this), Fred formed his belief "albatrosses have the largest wingspan" on the basis of this process. Being a reliable process, most beliefs formed through this process turn out to be true. But *bad luck* strikes which would normally result in the belief being false; Helen was wrong in this case, and unreliable Pauline has asserted an irrationally held belief. But then *good luck* strikes and her belief turned out to be true after all. So Fred's belief about

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<sup>139</sup> If one instead has the intuition that Pam's belief is unjustified, this will still show that NESTED SPEAKER is not an example which shows an asymmetry between testimonial and other sources of justification. And if there is no such asymmetry, then the possibility remains of reducing testimonial justification into other kinds of justification.

<sup>140</sup> Zagzebski (1994), p. 66.



albatrosses is true due to good luck which counters bad luck, which provides an excellent reason to diagnose NESTED SPEAKER as a Gettier case.

One reply Lackey could make is that testimonially-based beliefs are importantly different than beliefs formed by other processes, such that an unreliable speaker can be sufficient to deny a hearer's justification in a way that, say, an unreliable instrument cannot. But Lackey doesn't argue for this claim, instead relying that our intuitions will be that NESTED SPEAKER is a case of unjustified belief; an intuition that many will not share. A detailed argument defending just such an asymmetry between testimony and other belief-forming processes is given by Goldberg in the next section, and absent such an additional argument the case should be regarded as a Gettier case following the standard "bad luck plus good luck" formula.

Bringing the discussion back to dualism's criteria for justification, I have argued that NESTED SPEAKER is a case of justified true belief which has been Gettiered. Since this case was the only reason presented for why we should think that (D2) should be a requirement on hearer justification it should now be rejected. It would still make sense for (D2) to be a requirement on hearer *knowledge*, for the same reason as (D4) is a requirement for knowledge. Speakers can be considered part of the hearer's cognitive environment and thus capable of affecting the local reliability of a hearer's belief-forming process.<sup>141</sup> But this is a requirement that *any*

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<sup>141</sup> This becomes complicated because, as previously mentioned, Lackey inexplicably *does* include the presence of a suitable environment (D4) as a requirement for testimonial justification. Since she earlier explicitly states that the lack of cooperation of one's environment is a feature of luck and

reductionist account will require; the inclusion of some sort of anti-luck/deGettierizing component is standard in today's epistemic climate.

This being the case, only the relaxed requirements on (D6) remains to differentiate dualism's criteria for testimonial justification compared to reductionism. But once it is clear that (D2) is a constraint on knowledge rather than justification, dualism loses its most powerful feature; it will no longer be the case that both speaker and hearer shoulder the justificatory burden together. This was the grounds for allowing (D6) to be a weaker requirement compared to traditional reductionist versions of the Positive Reasons Principle. Without this relaxed condition on (D6), dualism becomes just as vulnerable as reductionism against any objections which attack the latter. For example, Lackey can no longer counter the Lack of Evidence Objection by only requiring that hearers have positive reasons that make it merely "not irrational for her to accept the testimony in question," since this lessened requirement was premised on the speaker taking over some of the cognitive workload. Dualism has become a variant of standard reductionism, and if the objections show that reductionism is untenable, dualism will share that fate.

Additionally, NESTER SPEAKER is the argument Lackey gives to show that the Reduction Principle is false. Recall that it was presented as a counterexample to the view that testimonial justification reduces completely into

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doesn't hearer justification, I think she be interpreted as only requiring (D4) for knowledge. If she thinks that it is required for justification, she doesn't argue for it, and it makes for an even more contentious and unintuitive claim.

positive reasons provided by the more standard sources of justification (such as induction). NESTED SPEAKER purported to show a case in which a hearer lacked testimonial justification even though she possesses good positive reasons for the reliability of Pauline's report. But if we correctly diagnose that case as a Gettier case, it won't act as a counterexample to the Reduction Principle. This denial of reduction, and consequent embrace of the Uniqueness Principle, was manifested in dualism's criterion (D2); a criterion which, without NESTED SPEAKER, is groundless. While Lackey gives additional arguments for the distinctiveness of testimony, these arguments were examined and rejected in 3.3.3 and 3.3.4.

To conclude, dualism inherits the problems of both reductionism and non-reductionism and combines the least plausible elements of both. Dualism purports to avoid the skeptical issues that plague reductionist models which require hearers to possess positive inferential reasons for justification; issues examined in 2.2. Yet without adequate grounding for (D2), dualism falls prey to identical issues. Like non-reductionism, dualism accepts the Uniqueness Principle, which I have argued is implausible in the last two chapters and cannot rely on NESTED SPEAKER for independent support of uniqueness for the reasons above. I next turn to a second promising nonstandard theory of testimony, Goldberg's Extendedness Principle.

## 5.2 Goldberg's Extendedness Hypothesis

### 5.2.1 *Extendedness*

In the section above, I have argued that Lackey is incorrect that the reliability of a speaker can affect the justification a hearer subsequently has in her testimonially-based belief. Goldberg has devoted a great deal of space in his newest book defending a principle similar to Lackey's as part of his fascinating account of testimony which I turn to presently. In the testimonial account I advocate in the next chapter, I accept the following commonly held view: the reliability of a speaker should be regarded as part of the hearer's environment for the purposes of determining how it may affect the epistemic value of the hearer's subsequent testimonially-based belief. As such, a speaker's reliability can affect whether or not the belief counts as knowledge, but not whether or not the belief counts as doxastically justified. Just as, say, an unreliable (but luckily correct) stopped clock prevents a true belief formed on its basis from being knowledge without affecting the belief's justification, so too does an unreliable testifier undermine knowledge without undermining the hearer's justification.<sup>142</sup>

Like Lackey, Goldberg denies this claim, instead arguing that testifiers are not merely parts of a believer's environment but rather should be regarded as a factor determining whether or not the speaker's testimonial belief is justified or not. For the rest of this chapter I will present and address his arguments head on and

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<sup>142</sup> All other things being equal. The claim here is that if a clock reader or testimony consumer would have knowledge in a case where the clock or speaker is reliable, then in a similar case where the only changed variable is the clock's or speaker's reliability (and not in a way that the believer can reasonably be able to detect), the believer should have the same justification as before.

defend the traditional view that the justification of a hearer is not affected by a speaker's reliability. I am motivated in part by my adherence to the Reduction Principle; if Goldberg is correct, one consequence would be that testimonial justification would have an important feature that no other source of justification does, providing powerful evidence for the Uniqueness Principle. Finally, I will explore what I see as the most interesting implications of taking Goldberg's arguments to their logical conclusion. Though I won't personally advocate it, if Goldberg is right that a hearer's justification in her testimonial belief can be dependent on a speaker's reliability, there is little reason not to go further still, generalize this point and conclude that the justification of *other* kinds of beliefs can depend on features of the believer's environment, hence once again undermining the Uniqueness Principle.

Reliabilists commonly hold that whether a subject's belief is justified or not depends solely on the reliability of the cognitive processes of that subject; as Alvin Goldman has put it, "One thing we do not want to do is invoke factors external to the cognizer's psychology. The sorts of processes we're discussing are purely internal processes."<sup>143</sup> Goldberg challenges this assumption in the case of testimonial belief, arguing that the justification of such beliefs rely at least partly on the reliability of the cognitive processes which formed the testimony as well. Goldberg's motivation for the extendedness hypothesis is presented in 5.2.2. In 5.2.3 I detail and respond to his counterexample against the traditional view of

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<sup>143</sup> Goldman (1986), p. 51.

testimony that he is rejecting; the view that the unreliable processes of a testifier can be explained fully in terms of background local unreliability.

Then in 5.2.4 I examine and reply to Goldberg's claim that testimony cases should be treated like interpersonal analogues of memorial and inferential belief. Finally, in 5.2.5 I argue that if an extendedness theorist accepts that processes outside of a subject's head can determine justification, it will be arbitrary to rule out non-cognitive processes from evaluation. Once one has already decided to move beyond the skin of a believer, there is no good reason to restrict oneself to processes in the skin of others, and excellent reasons not to. If one fully embraces this more extreme form of extended cognition, testimony will again cease to be a unique form of belief acquisition.

### *5.2.2 Motivation for Extendedness*

The first step in Goldberg's argument for the 'extendedness hypothesis' is to provide the reader motivation to accept that "Whether a testimonial belief amounts to knowledge depends on the reliability of cognitive processes implicated in the production of the testimony," a principle which he calls 'Epistemic Reliance in cases of Testimonial Knowledge' (ERTK).<sup>144</sup> To this end, he provides the following intuition pump: Imagine two physical and psychological doppelgangers H and H\* who consume true testimonies from speakers S1 and S2, respectively. Both speakers appear equally sincere and competent, but the testimony from S1 is

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<sup>144</sup> Goldberg (2010), p. 14.

much more reliable than the testimony of S2 because S2 is attempting to deceive H\*. Goldberg concludes that although H and H\* are type-identical and come from communities which are equally filled with true and reliable testifiers, intuitively there is a difference in the epistemic status of the subsequent beliefs they form on the basis of the testimony; H has knowledge while H\* does not.<sup>145</sup>

If this difference cannot be accounted for by referencing anything inherent in the cognitive processes of H and H\*, then it should be explained by the difference in the reliability of the two testimonies, which will in turn be explained by the difference in the cognitive processes which formed those testimonies. Goldberg recognizes that this should not be controversial to Process Reliabilists; they will likely regard the example as a Gettier or fake barn case and appeal to the Local Reliability Hypothesis (LRH), arguing that the reliability of a piece of testimony merely affects the local reliability of testimonial beliefs formed on the basis of that testimony. Just as a person's globally reliable eyesight can be thwarted by a locally unreliable (but luckily correct) stopped clock when trying to determine what time it is, thus resulting in a lack of knowledge, so too can a globally reliable hearer be undermined by the local unreliability of a deceptive (though luckily correct) testifier. And on this view, these features of the local environment will not affect a believer's doxastic justification.<sup>146</sup>

Goldberg argues that this move is prompted by a commitment to the following seemingly plausible principle which he calls 'Process Individualism'

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<sup>145</sup> Goldberg (2010), pp. 15-6.

<sup>146</sup> Goldberg (2010), pp. 37-42.

(PI): “For every subject S, all of the cognitive processes implicated in the formation or sustainment of S’s beliefs are cognitive processes that take place within S’s own mind/brain.”<sup>147</sup> It is a commitment to this principle, Goldberg argues, which leads many Process Reliabilists to deny that the reliability of a speaker should be taken into account when determining the reliability of a hearer:

[T]he reliability of a piece of testimony is a matter of the cognitive processes through which the testimony was produced. These processes take place in the mind/brain of the source speaker, and so are “external” to the ‘information-processing equipment’ of the hearer. The result is that, by the lights of PI, they are ‘external’ to the cognitive processes through which the testimonial belief is produced. But, according to Process Reliabilism, doxastic justification is a matter of the reliability of the cognitive processes that are responsible for the production of that belief. It follows that facts about the reliability of testimony, including facts about the reliability of the processes that produced the testimony, are irrelevant to the doxastic justification of the resulting testimonial belief.<sup>148</sup>

To accept both Process Reliabilism and Process Individualism is to be an Orthodox Reliabilist (hereafter OR), a position which, given textural evidence, he ascribes to both Goldman and Alston.<sup>149</sup>

Because he denies Process Individualism, Goldberg is attacking Orthodox Reliabilism. First, he argues that there exist cases (like H and H\* above) which show ERTK to be true and yet are not Gettier or fake barn cases. If such cases are examples of true belief without knowledge and the lack of knowledge cannot be explained by any Gettier-type features, we should conclude that a lack of doxastic justification is what prevents the hearer from knowing. But even if an OR insists on

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<sup>147</sup> Goldberg (2010), p. 36.

<sup>148</sup> Goldberg (2010), p. 44.

<sup>149</sup> Goldberg (2010), pp. 45-8.



analyzing the case as a fake barn case, there are other cases which the OR will have more trouble explaining.

Second, Process Reliabilists already have at their disposal a handy analogue for testimony in the form of memorial (and inferential) belief. Just as the justification of a memorial belief will depend on the reliability of the cognitive processes that formed the beliefs which are currently being recalled, so too will the justification of a testimonial belief depend on the testimony being formed by reliable cognitive processes. I will fill in the details of his arguments for these two claims and provide analysis in the next two sections. I start by examining a thought experiment which he presents in order to show that there exist some testimony cases which are not analogous to Gettier or fake barn cases, and yet still fail to be knowledge. Goldberg argues that these cases can be explained by the extendedness hypothesis but by the OR.

### 5.2.3 *Argument for Extendedness: 'Not Quite Good Enough' Counterexample*

Goldberg presents a counterexample to OR, one which the reader should diagnose as a case of true, unGettiered testimonial belief which still fails to be knowledge. For Goldberg, this failure should be explained in terms of the unreliable cognitive processes of the speaker rather than any quality in the hearer. The reader is to conclude that a hearer lacks knowledge because the (true) belief is formed by a process which is not reliable enough to count as knowledge, though

not formed in a way that is epistemically irresponsible; and the case should not be deemed either a Gettier or fake barn case:

To get a situation in which the testimony that is accepted is not quite good enough, let us imagine a case in which the testimony expresses a would-be recognition-based belief formed through a momentary glance at what appeared to the subject to be a familiar object, but where the object in question was slightly obscured to the subject, a bit of a distance from her, under non-ideal lighting conditions. Suppose now that when the informant expressed her belief in the testimony she gave, it had all the trappings of competence and sincerity. Finally, suppose an ordinary hearer observes this testimony and, having subjected it to the sort of credibility monitoring that standardly operates in the minds of mature consumers of testimony, accepts that testimony. I want to claim that this testimonial belief in the hearer has the following features: it is true, unGETTIERED [neither a Gettier nor fake barn case], and Terminal Phase Reliable (in the sense that all of the relevant processes ‘internal’ to the mind/brain of the hearer are reliable), yet it fails to amount to knowledge.<sup>150</sup>

The testimony appears to be sincere and competent, the hearer believes it, and it turns out to be true. Goldberg argues it would be “*ad hoc*” to conclude that this is a Gettier case; that the case lacks the defining feature of Gettier cases of truth being merely a matter of luck such as in paradigmatic cases like the Nogot/Haveit or stopped-clock case.<sup>151</sup> He argues that “at the very least the burden would then be on the Orthodox Reliabilist, to identify the relevant requirement on knowledge, and to show how the belief in the ‘not quite good enough testimony fails to be knowledge.’”<sup>152</sup>

I will offer such a requirement the OR has at her disposal. Much like the response I gave to Lackey’s NESTED SPEAKER case in 5.1.2, one account would be Zagzebski’s analysis of Gettier cases, in which she concludes that “[w]hat

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<sup>150</sup> Goldberg (2010), p. 98.

<sup>151</sup> Goldberg (2010), pp. 101-2.

<sup>152</sup> Goldberg (2010), p. 100.

generates the problem for JTB, then, is that an accident of bad luck is cancelled out by an accident of good luck. The right goal is reached, but only by chance.”<sup>153</sup> This is what one should conclude is happening in the “not quite good enough” case (hereafter NQGE). By hypothesis the hearer has “internal” justification in the testimony to a degree necessary for knowledge absent any other atypical features; otherwise this wouldn’t be a counterexample to the claim that only internal features are relevant to a hearer’s justification. This means that she formed her testimonial belief through a reliable process, which means that most beliefs formed through this process turn out to be true. This in turn means that when the hearer believes that a speaker speaks with competence, she is usually correct, which usually results in a true belief.

The fact that a normally properly functioning reliable process would spit out a false reading (this speaker is competent in her testimony) is bad luck; bad luck which would generally compromise the chances that the claim was true. Yet luckily the testifier’s belief turned out to be true after all, even though beliefs formed by momentary glances at distant, obscured objects are often false. So the hearer’s testimonial belief is true due to good luck which counters bad luck, and the OR has a non-arbitrary reason for calling the example a Gettier case.

Even with this explanation in hand, a reader still may not have strong intuitions that NQGE is a Gettier case. Goldberg is right that any Gettier factor in the case is not immediately obvious, certainly not as obvious as in standard

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<sup>153</sup> Zagzebski (1994), p. 66.

paradigmatic Gettier cases presented in the literature. Why might this be? One answer would be that Gettier cases generally make the ‘bad luck’ which would normally compromise truth particularly striking. Because standard examples seek to showcase this feature, the bad luck chosen often injects a very high amount of unreliability: one real barn in a county *teeming* with facades, a given individual presently having *exactly* ten coins in his pocket or vacationing in Barcelona, a sheep or vase is *improbably* in the near vicinity, etc. But I would argue that all a Gettier case should sufficiently need is that the bad luck lowers the probability of truth to a point that is insufficient for knowledge, and then good luck raises it back up to the necessary level. The bad luck in NQGE case lowers the chances of truth noticeably, and that is all that should be needed to render it a Gettier case once good luck corrects for it, even if it is a more subtle case compared to the more standard examples.

Goldberg also compares the case to a version in which the testifier is actively trying to deceive the hearer but tells the truth unknowingly, leading the conscientious hearer to form a true belief. He says that “even if (for the sake argument at least) we agree with the postulation of a Gettier condition in *that* case, the present case is different. In the present case, the speaker is sincere and aims at truth, only her testimony . . . is ‘not quite good enough’ to count as knowledge.”<sup>154</sup> But this shouldn’t be an important enough difference to matter; as Bernard Williams has noted, both speaker accuracy and sincerity are equally “virtues of

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<sup>154</sup> Goldberg (2010), pp. 102-3.

truth.”<sup>155</sup> Insincerity may be a more obvious way of leading another epistemically astray, but volunteering a sincere but ill-formed belief will do the job as well even if it is more lackluster. We shouldn’t withhold a Gettier verdict on that account.

Also, even if one doesn’t hold that the example is a Gettier case, it still won’t help the extendedness hypothesis. This is because a parallel example can be manufactured without involving the cognitive processes of others. Imagine that instead of being told about the object by another, the subject sees the object in through a pane of warped colored glass; glass that she is justified in believing is perfectly normal to the same degree that the hearer is justified that the speaker is competent in Goldberg’s case. Further imagine that the glass conceals the same negative visual features as above that are present in this case to the same degree; the object is in reality far away, obscured, and passes by quickly. Due to the peculiar nature of the glass, however, the object appears to be close, not obscured, and (somehow) in visual range for an adequate amount of time to render an informed judgment. The subject doesn’t seem to have knowledge of the object even though she is using a globally reliable process.

If this is concluded to be a Gettier case, then parity of reason suggests we rule similarly for in NQGE. This conclusion would allow the OR to maintain that the NQGE case does not in fact provide an incentive to conclude that the cognitive processes of a speaker can affect the reliability of a hearer. If instead one decides this isn’t a case of justified belief, then NQGE won’t help the extendedness thesis; we get the same conclusion of an unjustified belief even when, in the warped glass

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<sup>155</sup> Williams (2002), p. 126.

case, the unreliability isn't due to the cognitive processes of others. So again, we won't have to appeal to a special explanation involving the cognitive processes of hearers to explain the lack of doxastic justification. In the parallel glass case, the agent's belief is deemed unjustified due to an unreliable medium (the glass), just as in NQGE the agent's belief is deemed unjustified due to an unreliable medium (the speaker). The two cases arrive at the same epistemic evaluation of the two beliefs, and so the alleged unique quality of testimonial justification, and the unique role which speakers are supposed to play in affecting the degree of justification in a believer, disappear.

Finally, if we are unsure what to say about the case (perhaps our intuitions are too weak to render any stable verdict), at least we can then say that whatever we would end up concluding about the case, we should *equally* conclude about NQGE, unless we have a principled reason to treat the cases differently. Thus, no matter what we decide NQGE cannot be used against the OR. In the next section I will examine a similarity between memorial-belief and testimonial-belief which Goldberg uses as evidence for the extendedness theses.

#### 5.2.4 *Second Argument for Extendedness: Analogy to Memorial-Belief*

I have argued that cases of testimony in which the hearer does not have knowledge due to the cognitive processes of others can be explained in terms of a Gettierizing factor. I will now examine Goldberg's positive arguments for why we should accept the alternative explanation, the extendedness thesis, for which

“cognitive processes in the mind/brain(s) of [the hearer’s] interlocutor(s) – are relevant to reliabilist assessments aimed at determining whether a given subject’s testimonial belief is doxastically justified.”<sup>156</sup> He first points out that the OR should already deny *Terminal-Phase Reliabilism*, the position that only the reliability of the final cognitive process in a chain of such processes is relevant for judgments of the justification of the resultant belief, for inferential and memorial belief.

Why should the OR deny *Terminal-Phase Reliabilism*? Because there are counterexamples in which a subject (a) forms an inferential belief, (b) the belief is formed by a reliable process of inference, and yet (c) the inputs for these processes were formed by unreliable processes (i.e. unreliable memories, or perceptions, or inferences).<sup>157</sup> For example, Tom believes that “all of the balls in this urn are black” (hereafter B). He reliably infers this from the fact he has already seen almost every ball in the urn, and all of them were black. However, some of those beliefs were unreliably formed; there were some dark blue balls which he erroneously perceived as black. Even though the last phase of the belief formation (inference) is reliable, we should conclude that Tom’s belief that B is ultimately unreliable. A similar example can be given for memorial beliefs. Tammy also believes that B because she reliably remembers concluding that B in the past. However, at the time her conclusion of B was due to wishful thinking; she abhors the existence of dark blue objects. Even though the last phase of the belief formation (memory) is reliable, we should conclude that Tammy’s belief that B is ultimately unreliable.

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<sup>156</sup> Goldberg (2010), p. 83.

<sup>157</sup> Goldberg (2010), pp. 84-6.

Even if the terminal beliefs in question are true, an OR should conclude that these are not cases of knowledge due to the unreliability further back in the chain.

And if the true belief fails to be knowledge, Goldberg notes that “there are only two possibilities here: either the belief was GETTIERED, or else it was unjustified,”<sup>158</sup>

Goldberg offers two reasons for not postulating GETTIER factors:

First, it is unmotivated to postulate GETTIER factors in the inference case described. It is not generally true that any belief acquired through inference from an unreliable premise-belief, and so which is not a case of knowledge, fails to be knowledge for “founder[ing] on some . . . requirement for knowledge of the kind discussed in the post-Gettier knowledge trade. . . .” Not only do we lack independent reason to postulate a GETTIER condition in the case before us; what is more, whatever lingering inclination one feels in this direction dissipates once we recognize that the Process Reliabilist already has at hand a simple, independently plausible account for the ‘no knowledge’ verdict *in terms of the whole process used in this case*.<sup>159</sup>

If agents in these sorts of cases lack knowledge even though there are no GETTIER factors, Goldberg argues that we must conclude that their true beliefs are unjustified, and unjustified due to the unreliable processes prior to the time of recollection. And he further argues that we should come to the same conclusion in testimonial cases:

[I]t is no more reasonable to restrict the belief-forming process in testimony cases to processes that start at the (terminal) point at which the subject receives the speaker’s message, than it is to restrict the process in memory cases to processes that start at the (terminal) point at which the subject has an apparent recollection.<sup>160</sup>

However, there is good reason to conclude that it *is* more reasonable to so restrict the belief-forming processes in testimony cases. Recall that the two reasons

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<sup>158</sup> Goldberg (2010), p. 88.

<sup>159</sup> Goldberg (2010), pp. 88-9.

<sup>160</sup> Goldberg (2010), p. 97.



given for the inferential belief cases being unGettiered were (i) the compromising factor does not look like ones in standard Gettier cases which are discussed, and (ii) they can be explained in terms of unreliable cognitive processes. I will take each of these reasons in turn. I have already argued in the previous section that we shouldn't accept (i) for testimony cases because they do look like standard Gettier cases. In fact, standard Gettier cases can easily be modified to replace vital features with testimonial equivalents.

Imagine a standard stopped clock case, and to make the point even more clear, imagine that it has been programmed to 'announce' the time aloud through a mechanical voice when a button on the clock is poked. Subject T mutters loudly "What time is it?" and pokes the clock, which promptly replies "2:03."

Unfortunately, its time-keeping function stopped at 2:03 the night before, but luckily it is in fact 2:03. Next, imagine a doppelganger T\* who mutters loudly "What time is it?" and pokes his friend Sue, who promptly replies "2:03."

Unfortunately Sue is attempting to deceive T\* (or is secretly a horrible timekeeper, engaged in unusually banal wishful thinking, etc.), but luckily it is in fact 2:03.

Unless we have a principled reason for treating the two cases differently we should arrive at the same verdict regarding justification and knowledge; if T is in a Gettier case than we should conclude that T\* is as well.

A more familiar example is the Mr. Nogot case of Keith Lehrer and Thomas D. Paxson, Jr., in which we are to suppose that the writer has "excellent evidence that completely justifies my believing that a student in my class, Mr. Nogot, owns a

Ford, the evidence consisting in having seen him driving it, hearing him say he owns it, and so forth.”<sup>161</sup> He forms the belief that one of his students owns a Ford, which turns out to be true because while Nogot doesn’t have a Ford, another student Mr. Havit does. What I would like to draw attention to is how this classic case does not seem to turn on whether the justification comes from testimony or perception; both are offered as if they were interchangeable sources of justification. Intuitively the two *are* interchangeable; it would in no way affect the case if the subject believed that Nogot has a car on the basis of (a) seeing him drive it or (b) hearing him aver to owning it. If this interchangeability between perception and testimony is intuitive for the Nogot case (as has historically been the case before the current testimony literature), then we should conclude that testimony cases that fail to be knowledge due to the unreliable cognitive processes of the speakers are Gettier cases and deserve the same treatment. Otherwise we will need positive incentives to conclude that the subject has justified true belief in (a) but unjustified true belief in (b).

Turning now to (ii), perhaps the extendedness hypothesis can better explain why a believer in the testimonial version of a Nogot case (where the belief in formed due to trusting Nogot’s report) forms an unjustified belief by appealing to the unreliability of Nogot’s cognitive processes. While it may be true that liars, wishful thinkers, and incompetent testifiers are unreliable indicators of the truth, so are broken clocks, faulty matches and a host of other unreliable instruments that many Gettier cases rely on. The important distinction for Goldberg is that the

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<sup>161</sup> Lehrer and Paxson Jr. (1969), p. 229.

former processes are cognitive; they are in *someone*'s head, just not the hearer. He argues that testimony is a belief-dependant process and "such a process must be a cognitive process the reliability of whose outputs are a function of its inputs," and that "(the input) is itself the output of a cognitive process (process -type) whose reliability can be assessed in *its* turn."<sup>162</sup> Testimonial belief is similar to memorial belief in that both require inputs from a reliable cognitive process; the difference is that testimonial beliefs get their inputs from the cognitive processes of others.

However, this opens the door to a new question: is this similarity is enough to justify the requirement that belief-dependant processes must get their inputs from cognitive processes? This would be an odd question in most contexts, but becomes salient if one has already abandoned OR for the reasons Goldberg offers. Goldberg notes that Reliabilists such as Goldman and Alston require that processes salient to doxastic justification must be (1) cognitive and (2) internal to the believer.<sup>163</sup> That is why the justification of a memorial belief depends on the cognitive processes of the believer. The extendedness hypothesis preserves the first requirement but not the latter. But once (2) is disposed of, we have much less of an incentive to require (1). The OR should reply that the reliability of S's cognitive processes are salient to S's justification not just because they are cognitive, but because they are *her* processes. This indexical is crucial to the requirement of cognition. The justification of S's belief relies on the (cognitive) processes of S just because they are her beliefs, and so her processes are what we are commonly interested in.

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<sup>162</sup> Goldberg (2010), p. 72.

<sup>163</sup> Goldberg (2010), pp. 46-8.

If one denies the requirement that the salient processes don't have to be S's, there is no good reason left to require that the processes be cognitive. As I have shown, Gettier cases can be modified to include testimonial equivalents, and on the extendedness thesis the subject's beliefs will be unjustified even though the corresponding original case would produce justified beliefs. Whether one gets an unreliable 'report' of the time from a clock or human, it would be an unfortunate result to conclude that one's justification differs (potentially wildly) in each case. Similarly, it doesn't seem to make a difference whether S gets his Ford-belief from visual perception or from Nogot's say so; the cases aren't different enough to assign justification in the former but not in the latter.

To recap, the two reasons Goldberg presents that memorial and inferential belief cases are not Gettiered are (i) the compromising factor does not look like ones in standard Gettier cases which are discussed, and (ii) they can be explained in terms of unreliable cognitive processes. I have argued that his presented testimony cases are indeed similar to Gettier cases, and that without the aforementioned cognitive processes actually belonging to the hearer such an appeal to reliable cognitive processes loses its force. In the next section I will examine the implications of this finding.

#### *5.2.5 The Boundary between Cognitive and Non-Cognitive*

The extended hypothesis moves a hearer's epistemic reliance past her own cognition to include the cognitive processes of others when determining

justification. In the previous section I argued that once we move past a believer's skull there is no further reason to focus on processes that happen to be cognitive. I think that this, combined with the fact that the OR can explain nonstandard testimony cases as Gettier cases, means that there is no need to go 'extended.' However, if one were to continue the enterprise, such a theorist shouldn't let what is inside the skulls of others limit her.

To illustrate this, let's examine a case Goldberg presents in favor of extendedness. Franklin reads the morning paper and subsequently come to believe that the President is in Honolulu after reading an article to that effect. The OR will likely say that the reliability with which he assesses testimony will explain why Franklin's belief is likely to be true,<sup>164</sup> but Goldberg offers the following as a better account:

Suppose that *the reporter's* belief that the president is in Honolulu today was acquired first hand, then if we were to ask the reliabilist what renders *this* (the reporter's) belief reliable, the answer would surely cite the reliability of cognitive processing in the reporter's own mind/brain. Given that Franklin himself is relying on this reliability, it is curious that this part of the story simply drops out of the answer to the question of how Franklin's belief achieves its reliability. A better answer . . . would be that, while processes internal to Franklin are relevant to the reliability of his belief, what does the lion's share of the work here is cognitive processing in the mind/brain if the reporter herself (*together with the technologies that enable her to reliably disseminate what she has learned first-hand*) (second emphasis added).<sup>165</sup>

What I will suggest is that reliable technology mentioned here which aids a subject in the formation of belief should not have to lurk in the shadows of parentheses.

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<sup>164</sup> Goldberg (2010), p. 167.

<sup>165</sup> Goldberg (2010), p. 168.

Franklin relied on both the reporter and the tech, so both could be said to play a role in the justification of his belief.

Imagine the printing press malfunctioned, creating newspapers with random sequences of words on them, but amazingly a short paragraph with coherent strings of words about the President being in Honolulu is produced (Franklin only looks at this blurb before leaving for work). Compare this with a case where the reporter has a small stroke while typing the day's stories to send to the printer, resulting in the exact same random words in the exact same order, including the fortuitously structured paragraph about the President. The OR will declare both Gettier cases, but Goldberg will only do same for the former case, not the latter. If this seems to us *ad hoc* (as I believe it should), a clear way to be consistent is to declare both cases equally Gettier cases along with the OR. There is another option, though, for those who are moved by the intuition that processes outside the head of a believer can affect justification, yet want to treat like cases alike. The alternative is to say that *neither* is a Gettier case; Franklin's belief in both cases is the product of unreliable processes, and so ultimately unjustified. That is, embrace a more robust form of extended cognition.

Regarding the possibility extending our cognition into the environment, Daniel Dennett takes a similar position as that suggested above, arguing that that as humans it:

“[I]s our habit of *offloading* as much as possible of our cognitive tasks into the environment itself . . . where a host of peripheral devices we construct

can store, process and re-represent our meaning, streamlining, enhancing, and protecting the processes of transformation that *are* our thinking.”<sup>166</sup>

Similarly Andy Clark and David Chalmers have argued that using reliable instruments to help form beliefs is to take an ‘epistemic action’:

Epistemic action, we suggest, demands spread of *epistemic credit*. If as we confront some task, a part of the world functions as a process which, *were it done in the head*, we would have no hesitation in recognizing as part of the cognitive process, then that part of the world *is* (so we claim) part of the cognitive process.”<sup>167</sup>

These philosophers argue that such external instruments count as ‘cognitive’ processes, but the weaker claim that I am suggesting is that such processes influence the reliability of a subject’s belief whether or not we choose to call the processes cognitive or not. Clark and Chalmers include books, language and culture as proper objects of such credit, which Goldberg would agree with, but they also include instruments such as slide rules, calculators and Filofaxes as well.

This seemingly extreme move becomes quite plausible if we have *already* accepted that processes salient to epistemic justification don’t have to take place inside the subject’s skin, as Goldberg has endorsed. At that point there is no principled difference between cognitive and non-cognitive reliable processes. This means that going beyond a believer’s own cognitive processes to determine doxastic justification will *not* be a unique feature of testimonially-based beliefs. Testimony will not be a unique form of belief acquisition (at least for this reason), as opponents to the Reduction Principle claim.

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<sup>166</sup> Dennett (1996), p. 134.

<sup>167</sup> Clark and Chalmers (1998).

This chapter considered and rejected Lackey's dualism and Goldberg's Extendedness Hypothesis, two leading contenders to the more standard reductionist and non-reductionist views of testimonial justification. Chapter Two, Three and Four showed that traditional reductionism and non-reductionism have serious flaws which render most theories in either camp implausible as a correct theory of testimonial justification. In the next chapter, I defend my own account of testimonial justification, a reliabilist reductionist account which avoids the objections we have seen leveled against the views in the last three chapters.



## **Chapter 6: A Reliabilist Reductionist Model of Testimonial**

### **Justification**

The last chapter considered and rejected two promising nonstandard accounts of testimonial justification, Lackey's dualism and Goldberg's extendedness hypothesis. I now turn to the task of developing a plausible theory of testimony which will avoid the problems raised in the past three chapters; this new theory will be a variant of reductionism, but a variant which allows hearers to be justified in believing a report if they can reliably discriminate trustworthy reports from untrustworthy ones. Unlike standard reductionist theories this discrimination will not have to be based on inductive reasoning; any reliable cognitive process of the hearer will do if it is consistently sensitive to the reliability of a speaker's reports. But before the theory is presented some groundwork will need to be done.

In 6.1 it will be shown that non-reductionists must deny that testimonial justification requires a hearer reliability condition like the one presented above. Having shown this, 6.2 will explicate how such a condition is compatible with reductionism and how it will be sufficient to meet the Positive Reasons Principle. In 6.3 I will show the advantages of a reliabilist reductionist account over its rivals; this will be done primarily by showing how the account successfully avoids the criticisms leveled against reductionism while still preserving the strengths reductionist views hold over non-reductionism. Finally in 6.4 the account is fleshed out in greater detail.

## 6.1 Why Non-Reductionism is Incompatible with Reliabilism

In Chapter Three we saw that one of the two core principles of non-reductionism is the Default Justification Principle, which states that testimonial justification is the default state for hearers and requires only that they have no undefeated defeaters for the reliability of a testimonial report. But this principle is criticized for allowing a hearer to be justified in testimonially-based beliefs even if she formed the belief in a gullible and indiscriminating manner. Intuitively such a belief is unjustified, which lends credence to the reductionist claim that hearers must have positive reasons for a particular report's trustworthiness before belief on the report is justified. One possible non-reductionist response to this gullibility objection is to add a requirement that the hearer be a reliable receiver of testimony. In this section, I explore just such a hearer-centered version of externalism which focuses on the reliability of her internal cognitive processes such as process reliabilism.

Some epistemologists seem to imply that, at least in some sense, reliabilism is compatible with non-reductionism. For instance, Audi endorses what he calls a "credible-unless otherwise-indicated view of testimony,"<sup>168</sup> which allows hearers to meet their justificatory requirements merely by lacking reasons to doubt a speaker's credibility. He then notes how his account would be especially plausible on a reliabilist view of knowledge:

"And why indeed must you meet any more than a negative condition: not having any reason to doubt my credibility? . . . This conclusion seems plausible independently of any specific account of knowledge, but it is

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<sup>168</sup> Audi (1997), p. 411.

especially plausible from an externalist, reliabilist perspective. The idea, in part, is that testimony can be (semantically embedded) evidence that plays an intermediary role in a reliable belief-producing process. . . . From the point of view of reliabilism, one way to put main idea here [sic] is to say that normally, reliable grounding of true beliefs is transmissible across testimony.<sup>169</sup>

Similarly, Lackey writes that one of the necessary conditions that a non-reductionist model should embrace is a hearer-reliability condition:

In order to acquire knowledge from the testimony of a speaker, *the hearer in question has to be a properly functioning or reliable recipient of testimony*, where having the capacity for and being appropriately sensitive to defeaters are at least two central components of this broader requirement. . . . So, in the absence of undefeated defeaters, there is a further condition needed to render non-reductionism acceptable. . . . [E]ven if speakers are perfectly reliable testifiers, hearers need to be reliable recipients of testimony.”<sup>170</sup>

Both the location and the domain of the reliable process in question are ambiguous in these quotes. Audi’s claim is consistent with the speaker (rather than processes internal to the hearer) providing all of the reliability needed for testimonial knowledge, while Lackey focuses only on a hearer’s reliable detection of *defeaters* to the report’s trustworthiness. What I want to explore here, however, is the possibility of non-reductionism including a reliability condition (i) internal to the *hearer* (ii) which detects whether a speaker is likely reliable or trustworthy in her telling (above and beyond the presence or absence of defeaters).

It is this kind of reliability requirement on testimonial justification which could answer the Gullibility Objection: (i) is necessary because intuitively the locus of the cognitive work needs to be located in the hearer to escape gullibility (the

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<sup>169</sup> Audi (1997), pp. 411-2.

<sup>170</sup> Lackey (2008), pp. 163-4.

responsibility must be hers, as discussed in 3.2.1), and (ii) is necessary because the objection is raised against non-reductionism even though such views have always endorsed a “non defeater” condition. However, the sort of reliabilist condition which includes both (i) and (ii) is incompatible with non-reductionist accounts, as shown next. This is because of non-reductionism’s commitment to the Default Justification Principle, which allows hearers to be justified as long as they lack any defeaters.

We have already examined many variants of the principle in Chapter 3, but I’ll present a few more to display the different ways it can be stated. Defending the principle, Matthew Weiner argues that “We are justified in accepting anything that we are told unless there is positive evidence against doing so.”<sup>171</sup> Peter Graham states that non-reductionism “holds that a testimony-based belief is justified just in case the hearer has no reason to believe that the speaker is either insincere or unreliable.”<sup>172</sup> And Duncan Pritchard describes non-reductionists as believing that “[j]ust so long as there are no grounds for doubt . . . then one can acquire a justified TBB even whilst lacking independent grounds in favour of that belief.”<sup>173</sup>

The point to highlight from these quotes and other descriptions of non-reductionist accounts is that hearers meet the condition on testimonial justification just in case the defeater condition is met. To be justified in a belief based on testimony, non-reductionism does not require *anything else* from hearers except

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<sup>171</sup> Lackey (2008), p. 156.

<sup>172</sup> Graham (2006), p. 93.

<sup>173</sup> Pritchard (2004), p. 328. He prefers to use the labels ‘defaultist’ or ‘credulist’ rather than non-reductionist.

that they lack defeaters (however that condition gets cashed out), and the ability to reliably distinguish trustworthy reports from untrustworthy ones (absent such defeaters) counts as “something else.” Some non-reductionists may explicitly note that their account does not require that hearers have inductive or inferential reasons to think a speaker is trustworthy in order to be justified, but importantly this is just one of a variety of possible ways for a hearer to gauge speaker trustworthiness. Reflective, inferential reasons are indeed one such way, but reliable, subpersonal cognitive processes are another.

The Default Justification Principle allows testimonial beliefs to be justified even if a hearer has no positive reasons to think a speaker is trustworthy, where “reasons” here will include more than just inferential reasons. And this is neither a historical accident nor mere semantics; there are substantive advantages for non-reductionism to adopt this Principle. For instance, non-reductionists commonly consider it a priority to explain how small children can acquire knowledge on the basis of testimony. Because children lack the ability discriminate between trustworthy and untrustworthy testifiers, their testimonial beliefs would fail to meet the reliability requirement of most versions of reliabilism, and hence they would regularly fail to acquire testimonial knowledge from even their parents and teachers.<sup>174</sup>

But this flies in the face of commonly held intuitions. If Tommy’s mother tells him that there is juice in the cup and he believes her, this appears to be a case

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<sup>174</sup> For an excellent discussion of this issue, see Goldberg (2008).

of successful knowledge acquisition. This conclusion stands even though Tommy would have believed anyone who gave a similar report, even Uncle Frank the pathological juice liar. In order to avoid this difficulty and preserve the intuition that children can know things from the reports of others, non-reductionists typically build no such reliability requirement into their theories, instead relying on a more inclusive Default Justification Principle which details conditions for justification that even small children can meet.

There are many examples of early writers in the literature defending this intuition. As presented in 3.1.1, Reid's principle of Credulity is motivated by a desire to show that children can obtain testimonial knowledge, as he did from his parents and tutors:

I believed by instinct whatever they 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 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.

For Reid, there is overwhelming pragmatic need for children to know on the basis of testimony, and from this pragmatic need he allows for knowledge acquisition regardless of the child's discriminatory powers. As one of the first contemporary defenders of non-reductionism, Coady argues that children must have an ability to obtain testimonial knowledge or else the entire enterprise of language acquisition will not get off the ground. In order to learn, for example, that *that thing* on the mat is designated by 'cat', an infant must be able to successfully gain the knowledge from the testimony of the teacher. For this reason, the standards of testimonial

knowledge and justification must be low or humans could never have developed language.<sup>175</sup>

In a similar vein, Mark Webb cites the following as one of the reasons to embrace non-reductionism: reductionism “would entail that a child, who has as yet formed no general beliefs about people’s veracity, who, indeed, may not yet even have the concepts of veracity or deceit, cannot be justified in trusting her parents’ utterances,” and “[t]his way lies skepticism.”<sup>176</sup> Audi also presents the ability of small children to acquire testimonial knowledge as a feature of his non-reductionist account over reductionism:

We may surely speak of [a child’s] learning - that the milk spills when tipped, that the stove is hot, and so on - and learning (in general) implies knowledge. If, as seems a reasonable assumption, gaining testimonially based knowledge normally requires only having no reason to doubt the attester’s credibility, then the view proposed above encounters no difficulty. If a tiny child perhaps *can* have no reason for doubt, at least the child has none; nor need there need *be* any reason, since much testimony is highly credible.<sup>177</sup>

These quotes show the importance that influential non-reductionists have placed in preserving the intuition that children can have testimonial knowledge, and this intuition becomes problematic if a hearer reliability requirement is in play. The Default Justification Principle exists in part so that non-reductionist models can preserve this intuition and avoid the skeptical problems which arise if the many testimonial beliefs one acquired as a child do not count as knowledge. Small children arguably have neither (i) good inferential positive reasons nor even (ii) a

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<sup>175</sup> Coady (1992), pp. 86-92.

<sup>176</sup> Webb, “(1993), p. 263.

<sup>177</sup> Audi (1997), p. 415.

less reflective type of truth-tracking reliability for their testimonial beliefs, and so if a non-reductionist view wishes to allow them testimonial knowledge, the Default Justification Principle must not require either (i) or (ii).

## 6.2 Why Reductionism is Compatible with Reliabilism

The last section highlights the inability for non-reductionism to include a hearer-reliability requirement for testimonial justification; this is due to its endorsement of the Default Justification Principle. In this section I show that such a hearer-reliability can fulfill reductionism's Positive Reasons Principle. As we saw in Chapter Two, most reductionist theories assume that testimony reduces primarily to induction, and thus they describe the positive reasons needed for justification in terms of beliefs that can serve as premises in an inductive inference.

For example, returning to a quote of Fricker's from 2.1.2 about the two ways one can describe the nature of validity conditions (or V-conditions) for testimonial knowledge:

There are two broad options for epistemology here. It may be held that acceptance of the deliverances of the link-belief that . . . what one is told is so is only ever knowledge if it is supported by independent knowledge, in turn empirically based, that the V-conditions of the link are fulfilled on that occasion. . . . Or it may be held that a subject of the link has a presumptive right to believe its deliverances as such, in effect assuming that its V-conditions are fulfilled, but without any need to think about whether they are so, nor to possess evidence that they are. . . . We may say that knowledge gained through a link is inferential (since it must be backed by a substantial justification) in the first case, and direct (since no non-trivial justification for it is needed) in the second.<sup>178</sup>

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<sup>178</sup> Fricker (1995), p. 398.



With the testimonial design space carved up thusly, Fricker makes her case for reductionism:

(D)oes not mere logic, plus our commonsense knowledge of what kind of act an assertion is, and what other people are like, entail that we should not just believe whatever we are told, without critically assessing the speaker for trustworthiness? We know too much about human nature to want to trust anyone, let alone everyone, uncritically. . . . How can the [Presumptive Right] principle be an acceptable norm to guide us in our doxastic response to what others tell us? How can we embrace the non-reductive position?<sup>179</sup>

Again, the argument here is that we have two options regarding testimonial justification: reductionism or non-reductionism. Reductionism requires that one have (i) empirically-based, independent reasons (ii) derived through inferences that the testimony is reliable. In contrast, non-reductionism has no such requirement; one has a presumptive right to believe without doing any such cognitive work. But given all the ways we know the formation of such beliefs can go wrong (deception, error and the like), trusting others uncritically is a bad epistemic norm; certainly not one which can result in justification. Therefore, we should reject non-reductionism in favor of reductionism.

The problem with Fricker's formulation of the issue is that the two positions she presents here are not the only options available. When she states that "the menu in epistemologies of testimony seems, then, confined to this exhaustive dichotomy: accept or reject the PR thesis,"<sup>180</sup> there is a third option. It is possible to reject the PR thesis (which I have called the Default Justification Principle), and yet still embrace the Positive Reasons Principle without requiring that those reasons be

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<sup>179</sup> Fricker (1995), p. 400.

<sup>180</sup> Fricker (1995), p. 399.

inferential.<sup>181</sup> This results in a very different theory of testimonial justification from the kind envisioned by Fricker. Hence, Fricker presents us with a false dichotomy when she sets up the choice as between accepting the PR thesis on the one hand, and both (i) and (ii) on the other.

The acceptance of this false dichotomy may well have helped promote the belief that reasons on a reductionist account must be inferential, but as I have shown, there is no reason to read any such requirement into the position. Other sources of positive grounding such as reliable cognitive processes can fulfill the condition just as easily, allowing one to embrace the Reductive Principle and (i) without being committed to (ii). But as we also saw in that chapter, the Reduction Principle of reductionism is most plausibly understood as saying that testimony reduces into *some* other source(s) of justification or knowledge. There is no requirement for this source to be induction; testimony could just as easily be thought to reduce to perception, memory or introspection. If it isn't reduced to induction exclusively, the positive reasons that testimonial justification will require need not be limited to inferential reasons alone. Consequently, the Positive Reasons Principle can easily allow for non-inferential, non-inductive sources of evidence or warrant, and its denial (the Default Justification Principle) must deny the need for *any* such reason, inferential or otherwise.

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<sup>181</sup> Greco makes a similar point in (2012).

This kind of non-inferential evidence is just the sort that reliabilism often countenances; for instance, Greco describes this “reliability as evidence or grounds” in the following way:

First, simple reliabilism explains why not all evidential relations are inferential. . . [T]he most general characterization of the evidential relation is as follows: A cognitive state (such as a belief or experience) is evidence for another cognitive state if and only if being in the first state tends to confer positive epistemic status on the second state. If reliabilism is true, then the way that this works is through reliable cognitive processes. . . . According to reliabilism, [inference] is one way in which a belief can be evidentially grounded, since using an inference-rule can be one way in which belief may reliably formed. But if reliabilism is true, then that is not the only way that an evidential relation can be manifested. For there might be other cognitive processes – that is, processes other than employing an inference rule from belief to belief – that ground one cognitive state in another in a reliable way.<sup>182</sup>

Greco here notes that a hearer’s salient reliable process of coming to accept testimony could provide a kind of evidence or warrant for testimonially-based belief. Any requirement for a reliably functioning hearer will fall under reductionism’s Positive Reasons Principle and will be antithetical to non-reductionism’s Default Justification Principle.

To summarize, a hearer reliability requirement for testimonial justification is compatible with the motivations behind reductionism but not with those behind non-reductionism. The Positive Reasons Principle requires hearers to have reasons/grounds/evidence for a speaker’s trustworthiness, but inference is not the only possible source of such evidence. This is underscored by the fact that the Reduction Principle says that testimony must reduce to other belief-forming processes, but does not specify that inductive reasoning must necessarily be this

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<sup>182</sup> Greco (2000), pp. 167-8.

process (or necessarily one of many processes) for any given reduction. Non-reductionism's Default Justification Principle is the denial of the Positive Reasons Principle; it states that no positive evidence is needed for justification. But since a hearer's reliable cognitive processes count as positive evidence, it entails that reliability is not needed for justification. Thus, if a theory advocates hearer reliability as a condition for testimonial justification, that theory is endorsing the Positive Reasons Principle and denying the Default Justification Principle. Depending on its other commitments, such a theory may be classified as reductionist, a hybrid or something different entirely, but it will not be a non-reductionist account. But now that we are clear about the different ways that positive evidence can be understood, the path to a more attractive form of reductionism opens up.

### **6.3 Advantages of a Reliabilist Reductionist Account**

I am now in a position to argue that the best account of testimony will be a reductionist account; more specifically a reliabilist, noninferential reductionist account. This conclusion falls out of my endorsement of both the Positive Reasons Principle and Reduction Principle, the two core theses of reductionism. A commitment to the former principle avoids the Gullibility Objection that plagues non-reductionist models, as shown in Chapter 3.2.1. My theory avoids the distasteful result of ascribing justification (and knowledge) to people who believe indiscriminately, because such people fail to have positive evidence for their

beliefs. However, this evidence does not have to be inferential; it is enough that an agent form her belief through a reliable cognitive process (and that there is no reliable cognitive process which would produce a defeater), such as a Goldmanian account would require.<sup>183</sup> Giving testimonial beliefs the kind of default justification that non-reductionists espouse rightly strikes us as an odd departure from the justificatory requirements of many other kinds of belief such as perception, memory and the like. Reliabilist accounts are much less strict than internalist views of justification when it comes to a believer's cognitive burden, but even they require that an agent's cognitive processes be reliable, truth tracking instruments.

This reliability requirement should be applied to testimony as well; the standards for testimonial justification should be at least as high as (say) the standards for perceptual justification. Reliabilist theories of perception are relaxed enough to even allow non-human animals to possess perceptual knowledge. For example, a lizard doesn't engage in much reflection when forming his beliefs, but on a reliabilist view his beliefs can still possess justification, even rising to the status of knowledge. However, his visual beliefs will only be properly grounded if his eyesight is reliable, even if the viewed object is large, nearby and clearly presented in under good lighting conditions.<sup>184</sup> When creating a model for testimonial justification or knowledge, it is particularly implausible to grant proper grounding to a hearer's testimonial beliefs even if whatever internal process

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<sup>183</sup> If process reliabilism is thought insufficient as an account of justification or knowledge, one can easily adapt a virtue reliabilist variant of my account along the lines advocated by, say, Greco, Plantinga or Sosa.

<sup>184</sup> For a great discussion of the methodology behind reliabilism as it relates to animal knowledge, see Dretske (2000).

testimony is the input of proves to be wildly unreliable. The Default Justification Principle sets the bar for testimonial justification in humans even lower than reliabilists set the bar for perceptual justification in lizards; this is why the Gullibility Objection is as potentially devastating as it is.

For this reason, reductionism's Positive Reasons Principle is more attractive than non-reductionism's Default Justification Principle. It is also the case that the Reduction Principle is more plausible than the Uniqueness Principle. Non-reductionism holds that testimony is a unique, distinctive type of justification (or type of knowledge, or epistemic process), and in proposing a new kind of justification, the onus is on it to provide evidence for why we should think testimony does not merely reduce to a more familiar kind. Given that the burden of proof is on non-reductionism to show the distinctiveness of testimony, my project has been negative on this issue. A variety of possible defenses for the Uniqueness Principle, nine total, have been considered and rejected in the last three chapters. It is beyond the scope of this dissertation (and likely beyond the scope of epistemology) to give a positive account of exactly which processes or justifiers testimony reduces to and how, so I rest my case on the principle of parsimony. The arguments which have been provided so far are insufficient to posit a completely new sort of justifier for the domain of testimony.

Having argued that my reductionist theory, perhaps unsurprisingly, avoids the criticisms leveled against non-reductionism better than a non-reductionist account, all that remains is to show how my view can successfully handle the

objections brought against reductionist views. The first such objection, as examined in Chapter Two, is that it is implausible that agents can gather enough evidence to ground beliefs about the sincerity and accuracy of testifiers that would be needed to form a proper argument for a report's trustworthiness. To recap, reductionism requires that agents possess positive reasons for the reliability of a testifier in order to be justified in believing him. On most such theories this means that she must have collected the data needed to rehearse an inductive argument which can ground a determination of the rough competency and sincerity of the speaker. This often means that the hearer has personally verified enough cases of testimony in the salient domains to provide an adequate sample size; personal verification is needed because it would be viciously circular to use the outputs of testimony to form a conclusion about the reliability of testimony. But it can be reasonably objected that given time and skill constraints, an agent will not have done the epistemic legwork required for an adequate sampling in the great majority of domains, and therefore agents will lack the kind of evidence reductionists deem necessary to get the justificatory process off the ground.

My noninferential reductionist account avoids this Lack of Evidence Objection presented in 2.2.1 by simply denying that agents need to reason to any conclusion about speaker reliability to be justified in their testimonial beliefs, so this sort of evidence doesn't need to be collected and utilized in this fashion. The Positive Reasons Thesis can be satisfied in other ways than inductive reasoning; an agent whose cognitive processes reliably track the truth for the testimonial domain

in question can be justified in believing a report for that reason. Still, I leave open the possibility that being a reliable hearer in this way may include (or be bolstered) by assessments of the competency and sincerity levels of others; it is plausible to think that this is one way those belief-forming faculties can be refined and improved with training and experience. And my theory better accounts for how agents can collect a robust sampling of reports matching up to the facts. This is because on my reliabilist framework it becomes fair game to circularly ground testimony on the basis of other testimony.

This can also address what was the strongest problem case in 2.2.1: how to verify the competency of experts in a field when one is not oneself an expert in that field. For example, when Stephen Hawking tells me that the universe is expanding, the problem for a traditional reductionist is that, given my woeful ignorance about astrophysics, it is not even possible in theory for me to collect evidence of his general competency in that domain.<sup>185</sup> I also can't rely on the fact other physicists vouch for his expertise, because trusting their reports in this regard would require that I know *their* competence level in astrophysics. This is because their own competence in the field is directly relevant to whether or not they could accurately determine Hawking's competency.<sup>186</sup> But if we are reliabilists regarding testimony,

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<sup>185</sup> At least not without devoting a great deal of time and effort learning the science myself.

<sup>186</sup> For the same reason, the traditional reductionist cannot appeal to any societal institutions of accreditation as a way that hearers can become exposed to evidence that an expert can be trusted. Any such institution will rely on a hierarchy of experts in that field to properly accredit those who pass through, but this only serves to push the problem back. Even if I learn that Hawking has degrees from Oxford and Cambridge and multiple awards in astrophysics, if those new pieces of evidence are to serve as reasons for me I still need non-testimonial evidence that those who bestowed his degrees and awards were sufficiently competent to have correctly recognized his ability. A similar point is made in Schmitt (1987).



then the fact that Hawking is trusted amongst his peers can increase my grounds that he is competent (and thus increasing the likelihood his statement is trustworthy). Because I am not using those peer reports as anything like premises in an argument with the conclusion that he is competent, issues of circularity won't undermine their ability to increase my justification. In this way, learning that others trust a certain speaker can increase our own grounds in her trustworthiness, and subsequently increase the reliability of our testimonial belief-forming process as well.

A second criticism against reductionism that we examined in 2.2.2 is the Cognitive Impossibility Objection: even if agents *could* in most cases personally fact check a proper sampling of reports needed to accurately calculate a testifier's level of trustworthiness, the cognitive burden in actually making such a highly complex calculation is too excessive to reliability yield correct results. Again, to make this sort of calculation an agent must know the both general likelihood that a speaker (i) is sufficiently competent on the topic in question, and (ii) sincere in conversational contexts of the kind in question. But this will require agents to not only correctly assess the proper contexts which any received report belongs to, but additionally be able to crunch these likelihoods from a fairly massive number of potentially salient variables and data points. This would be excessively difficult for agents even if given a good deal of time to work out the needed likelihoods, and yet hearers routinely form many justified testimonially-based beliefs in the span of a single conversation. This provides strong evidence that the reductionist model fails

to explain how agents gain knowledge from testimony, unless the reductionist simply embraces widespread skepticism and accepts that the vast majority of our testimonial beliefs are not justified.

Closely related to the above criticism and discussed in 2.2.3, the Psychologically Implausible Objection argues that we have good reason to think that agents do not in fact reason about these sorts of likelihoods when accepting testimony in the majority of cases. When I form the belief that my colleague is having a bad day on the basis of her say so, my belief seems to be the product of an unconscious, effortless, automatic process rather than the product of any sort of probabilistic analysis or similar reasoning process. Also, when people are asked to give even a rough calculation of a speaker's competence or sincerity level for any given report, much less a calculation of overall trustworthiness which takes both likelihoods into account, they have a hard time doing so. This indicates that not only are we bad at this kind of reasoning, but also that we are also quite unused to engaging in it. For these reasons, the critic concludes that reductionism demands a justificatory process which is both wildly ineffective (leading again to skepticism) and not actually employed.

These last two objections show, I think quite successfully, that most forms of reductionism are untenable. However, because my own account denies that testimonial beliefs must be supported by any kind of inductive argument utilizing likelihoods, objections in this vein will not apply to my view. Hearers do not have to actively engage in probabilistic calculations to assess a speaker's trustworthiness

in order to have positive evidence that a report can be accepted; they can derive sufficient warrant through other, less reflective sources. If hearers do not have to process the data collected from past reports in order to form the kinds of inferences criticized above, testimonial justification lacks the overly strict requirements which would make it impossible to achieve in practice, and my account will not fall prey to the Cognitive Impossibility Objection. To conclude, the reductionist view that I am suggesting avoids the criticisms leveled against most reductionist and non-reductionist accounts. The next section describes the view in greater detail.

#### **6.4 Positive Reasons for Trustworthiness on a Subpersonal Account**

Reliabilism can explain how an agent can be justified in her perceptual beliefs without understanding how they operate. Similarly, accepting reliabilism in the domain of testimony allows us to deem a reliable consumer of testimony justified in her beliefs even if she lacks any understanding of how she comes to her belief that *S* is trustworthy when asserting *p* while *T* is not when asserting *q*. The following example will illustrate this: upon noticing that her friend looks sad, Sue asks Sam how he is doing. Sam replies “I had a rough morning,” on the basis of which she subsequently forms the belief that Sam had a rough morning. It should not surprise us that Sue is bad at explaining how she determined that Sam was trustworthy in his report any more than it should surprise us that she is bad at

explaining how she determined (and formed the belief) that her perceptual experience was trustworthy when she formed the belief that Sam was sad.<sup>187</sup>

Determining that Sam was trustworthy was not a conscious or reflective process for Sue,<sup>188</sup> which is why she might fumble or confabulate while trying to retrospectively defend her trusting of Sam if pressed. And in both cases, the fact that she can't give such an explanation when asked does not in any way compromise or defeat the justification she possesses in her beliefs that Sam had a rough morning and that Sam was sad. It is enough to meet the evidential requirements of the Positive Reasons Principle that one's testimonial belief was formed by a reliable cognitive process; one should not be additionally required to defend why her belief is reasonable to hold.

Even though this positive evidence is in part grounded by background experience which indicates that certain traits or contexts influence the chances that speakers will be competent or sincere, this fact does not speak against its noninferential nature. Experience can lead one to internalize facts about various phenomena and later use those facts in an automatic, non-reflective way to form beliefs. Over time, experience can habituate one to associate certain non-verbal cues in a person with their being sad; using a certain tone of voice, or displaying

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<sup>187</sup> A demand for this kind of explanation is different than a demand to be able to explain why she trusted that Sam was sad; she can easily explain this by saying "he was acting depressed" or "he seemed down," just as she can easily explain why she trusted that Sam had had a rough morning by saying "Sam told me so." What is much harder is to meet a demand to explain why the processes that formed those beliefs are *themselves* trustworthy.

<sup>188</sup> Though determining that a person is trustworthy *can* in some cases be achieved through conscious, reflective means, even if it is not necessary to be justified in a testimonial belief. Similarly, one could consciously try to determine that one's senses are reliable or that the environment is hospitable to perceptual belief-formation, if one wished.

certain facial expressions, for instance. And while it is plausible that, during social development, linking these non-verbal cues to a state of sadness might have originally required an inductive inference, a mature agent can eventually perceive directly (automatically, unreflectively, etc.) that someone is sad without going through any reasoning process. Even if it were the case that Sue had to learn from experience that vague reports of recent personal hardship from friends are reliable, this no more grounds her testimonial belief that “Sam had a rough morning” in induction than her perceptual belief that “Sam is sad” is grounded by induction.

On my account, agents do not engage in the sort of inferential reasoning or consideration of likelihoods that the evidence suggests is unlikely, and so avoids the Psychologically Implausible Objection. However, even if we do not employ calculations of likelihoods to inductively determine a speaker’s trustworthiness, this does not mean that similar kinds of calculations might not be going on the subpersonal level. Indeed, while my theory can be neutral on this issue, there are theoretical benefits for concluding that part of what might contribute to the reliability of whatever processes output testimonial beliefs are calculations of this sort. Once we move away from the view that agents compile and utilize these likelihoods through a process of reasoning, this possibility loses much of its counterintuitiveness.

It is possible that there exist in agents subpersonal processes which can estimate probabilities of competence and sincerity in the same way as experienced baseball players can successfully track the movement of, and move to intercept, a

fly ball. The inability to consciously engage in anything remotely akin to the kinds of conscious mathematical calculations which would be needed to reflectively calculate the projected end point of a baseball in flight, especially within the time needed to act on the knowledge, is happily irrelevant. Players can still possess the ability to determine where the ball will end up, with great success. And like the ability to catch a fly ball, accuracy and sincerity-tracking abilities can improve in an agent with time and experience, becoming increasingly reliable with practice. Also, by framing these processes as reliable, improvable skills my account is compatible with the view that knowledge is creditworthy belief. As others have noted,<sup>189</sup> an agent can be credited for an achievement even when their (reliable) success was brought about by natural abilities not under their conscious control. In the same way, a hearer who successfully forms a true belief on the basis of her reliable competence and sincerity-tracking processes deserves credit for her achievement.

This analogy gives my reductionist account a framework by which hearers can become more competent, reliable recipients of testimony with practice, where this improved reliability is explained by the honing of subpersonal processes of competency and sincerity-detection of speakers. Apart from the skills necessary to notice and respond to any defeaters present (which may or may not require conscious consideration), the above subpersonal skills provide the kind of positive reasons or evidence for speaker trustworthiness that reductionism demands for testimonial justification. In keeping with reductionism, the justification these

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<sup>189</sup> For example, Sosa (2007), Ch. 2, Riggs (2007), and Greco (2010), Ch. 2.

processes provide is not unique to testimony. For example, cues for both a speaker's expertise and honesty can often be displayed by perceptual cues in her body language and tone of voice: a steady, confident intonation (fallibly) indicating competence, a defensive posture indicating deceptiveness, etc. If agents can form beliefs about a person's emotional state through subpersonal perceptual processes, it should be similarly plausible that other psychological features relevant to a speaker's trustworthiness (such as uncertainty, embarrassment, avoidance, etc.) can be discerned through subpersonal processes as well.

Other competency and sincerity indicators will require more complex explanations; for instance, I would be justified in unreflectively accepting what Stephen Hawking purports to be basic facts about physics even if I can't detect a calm, confident tone from his speech generator which would normally indicate a speaker's competency level. This is because he has other traits to indicate this (such as his reputation and area of expertise) which are not surface level cues.<sup>190</sup> This won't provide evidence that testimonial justification is unique, though. Whatever it is that allows agents to internalize these testimonial correlations, the process appears remarkably similar to the internalization of correlations in other areas. Becoming habituated to conjoin "considered an expert in domain X" with "competence in domain X" will occur regardless of whether the expertise is

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<sup>190</sup> Certain technical fields like physics are an interesting case when so much of the truths in their domain are highly unintuitive from our folk-knowledge of the world. Perhaps this means that a large number of reports in those domains will always have common-sense defeaters, forcing our full conscious attention before we can justifiably form beliefs from testimony. Still, simpler cases exist, and if Hawking explains to be that mass affects gravity, I'm likely to immediately form this belief without hesitation in a way that I wouldn't if my four-year-old nephew had exclaimed the same thing.

knowledge-related (i.e. physics) or skill-related (i.e. basketball), and will affect my behavior accordingly.<sup>191</sup> Becoming habituated through experience to the fact that agents are more likely lie in certain contexts (i.e. past criminal record) looks very similar to the process used to learn that our senses become more likely to betray us in certain contexts (i.e. in poor lighting). The experiences which provide evidence for these correlations will be different, but there is no evidence of any substantive epistemic differences in the processing of these experiences themselves. For this reason, the account is also compatible with the view that testimonial justification reduces down to the justification of other belief forming processes.

In summary, non-reductionism has two deep flaws: it licenses the formation of gullible and indiscriminating testimonial beliefs, and it needlessly creates a new and superfluous category of epistemic justification. To avoid the former criticism, a correct theory for testimonial justification should require that hearers have positive reasons that a speaker is trustworthy before accepting her report. To avoid the latter criticism a theory should cleave to simplicity and define testimonial justification in terms of already existing sources of justification, such as perception, memory and reason. Advocating the (i) Positive Reasons Principle and (ii) Reduction Principle, reductionism does both. Where traditional reductionist theories go wrong, though, is in defining those positive reasons as inferential which can then be placed into an inductive argument. By relaxing this unnecessary restriction and allowing the

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<sup>191</sup> Once internalized I will begin to act in ways which unreflectively utilize this information, becoming disposed to believe that Hawking's assertions about physics will be accurate, and becoming disposed believe that LeBron James' unblocked shots will be accurate.



outputs of reliable cognitive processes to provide the requisite positive evidence,  
reductionism no longer falls prey to charges of skepticism and implausibility.

## Bibliography

- Adler, Jonathan E. 1994, "Testimony, Trust, Knowing." *The Journal of Philosophy* 91, pp. 264–75.
- \_\_\_\_\_. 1996. "Transmitting Knowledge." *Nous* 30, pp. 99–111.
- \_\_\_\_\_. 2002. *Belief's Own Ethics* Cambridge, MA: The MIT Press.
- Audi, Robert. 1994. "Dispositional Beliefs and Dispositions to Believe." *Nous* 28, pp. 419-434.
- \_\_\_\_\_. 1997. "The Place of Testimony in the Fabric of Knowledge and Justification," *American Philosophical Quarterly* 34:4, pp. 405-22.
- \_\_\_\_\_. 2006. "Testimony, Credulity, and Veracity," in *The Epistemology of Testimony*, edited by Jennifer Lackey and Ernest Sosa. Oxford: Oxford University Press.
- BonJour, Laurence. 1980. "Externalist Theories of Epistemic Justification." *Midwest Studies in Philosophy* 5, pp. 53–73.
- \_\_\_\_\_. 2002. *Epistemology: Classic Problems and Contemporary Responses*. Lanham, MD: Rowman and Littlefield Publishing Group.
- Chisholm, Robert. 1966. *Theory of Knowledge* (1st ed.). Englewood Cliffs, NJ: Prentice Hall.
- Clark, Andy and David Chalmers. 1998. "The Extended Mind." *Analysis* 58:1, pp. 7-19.
- Coady, C.A.J. 1992. *Testimony: A Philosophical Study*. Oxford: Oxford University Press.
- Dennett, Daniel. 1996. *Kinds of Minds*. New York: Basic Books.
- Dretske, Fred. 2000. "Two Conceptions of Knowledge: Rational vs. Reliable Belief," in *Perception, Knowledge and Belief: Selected Essays*. New York: Cambridge University Press, pp. 80-112.
- Elgin, Catherine Z. 2002. "Take It from Me: The Epistemological Status of Testimony." *Philosophy and Phenomenological Research* 65, pp. 291–308.

- Faulkner, Paul. 2002. "The Social Character of Testimonial Knowledge." *The Journal of Philosophy* 97:11, pp. 581-601.
- \_\_\_\_\_. 2002. "On the Rationality of our Response to Testimony." *Synthese* 131, pp. 353-70.
- \_\_\_\_\_. 2006. "On Dreaming and Being Lied To." *Episteme* 3, pp. 149-59.
- \_\_\_\_\_. 2007. "What Is Wrong with Lying?" *Philosophy and Phenomenological Research* 75, pp. 535-57.
- Fricker, Elizabeth. 1994. "Against Gullibility," in *Knowing from Words*, edited by K. Matilal and A. Chakrabarti. Amsterdam: Kluwer Academic Publishers, pp.125-62.
- \_\_\_\_\_. 1995. "Telling and Trusting: Reductionism and Anti-Reductionism in the Epistemology of Testimony." *Mind* 104, pp. 393-411.
- \_\_\_\_\_. 2002. "Trusting Others in the Sciences: *A Priori* or Empirical Warrant?" *Studies in History and Philosophy of Science* 33, pp. 373-83.
- \_\_\_\_\_. 2006a. "Testimony and Epistemic Autonomy," in Jennifer Lackey and Ernest Sosa (eds.), *The Epistemology of Testimony* (Oxford: Oxford University Press), pp. 225-50.
- \_\_\_\_\_. 2006b. "Second-Hand Knowledge." *Philosophy and Phenomenological Research* 73, pp. 592-618.
- Goldberg, Sanford. 2006. "Reductionism and the Distinctiveness of Testimonial Knowledge," in *The Epistemology of Testimony*, edited by Jennifer Lackey and Ernest Sosa. Clarendon Press: Oxford.
- \_\_\_\_\_. 2008. "Testimonial Knowledge in Early Childhood, Revisited." *Philosophy and Phenomenological Research* 76:1, pp. 1-36.
- \_\_\_\_\_. 2010. *Relying On Others*. New York: Oxford University Press.
- Goldman, Alvin. *Epistemology and Cognition*. Cambridge: Harvard University Press (1986).
- Graham, Peter. 2006. "Liberal Fundamentalism and its Rivals," in *The Epistemology of Testimony*, edited by Jennifer Lackey and Ernest Sosa. Oxford: Oxford University Press.

- Greco, John. *Achieving Knowledge: A Virtue-theoretic Account of Epistemic Normativity*. Cambridge University Press, New York (2010) pp. 76-80.
- \_\_\_\_\_. 2012. "Recent Work on Testimonial Knowledge." *American Philosophical Quarterly* 49:1, pp. 15-28.
- Hardwig, John. 1985. "Epistemic Dependence." *The Journal of Philosophy* 82, pp. 335-49.
- \_\_\_\_\_. 1991. "The Role of Trust in Knowledge." *The Journal of Philosophy* 88, pp. 693-708.
- Hastorf, A.H. and H. Cantril. 1954. "They saw a game: A case study." *Journal of Abnormal and Social Psychology* 49:1, pp. 129-134.
- Hinchman, Edward. 2005. "Telling as Inviting to Trust." *Philosophy and Phenomenological Research* 70:3, pp. 562-87.
- Hume, David. 1992. *An Enquiry Concerning Human Understanding*. Oxford: Oxford University Press.
- Kant, Immanuel. 1979. "Ethical Duties towards Others: Truthfulness." *Lectures on Ethics*, translated by Louis Infield. Indianapolis, IN: Hackett Publishing Company, pp. 224-35.
- Lackey, Jennifer. 1999. "Testimonial Knowledge and Transmission." *The Philosophical Quarterly* 49, pp. 471-90.
- \_\_\_\_\_. 2003. "A Minimal Expression of Non-Reductionism in the Epistemology of Testimony" *Nous* 37, pp. 706-23.
- \_\_\_\_\_. 2005a. "Testimony and the Infant/Child Objection." *Philosophical Studies* 126, pp. 163-90.
- \_\_\_\_\_. 2005b. "Memory as a Generative Epistemic Source." *Philosophy and Phenomenological Research* 70, pp. 636-58.
- \_\_\_\_\_. 2006a. "The Nature of Testimony." *Pacific Philosophical Quarterly* 87, pp. 177-97.

- \_\_\_\_\_. 2006b. "It Takes Two to Tango: Beyond Reductionism and Non-Reductionism in the Epistemology of Testimony," in Jennifer Lackey and Ernest Sosa (eds.), *The Epistemology of Testimony* (Oxford: Oxford University Press), pp. 160–89.
- \_\_\_\_\_. 2006c. "Knowing from Testimony." *Philosophy Compass* 1, pp. 432–48.
- \_\_\_\_\_. 2008. *Learning from Words*, Oxford University Press: New York.
- Lehrer, Keith and Thomas D. Paxson, Jr. 1969. "Knowledge: Undefeated Justified True Belief." *The Journal of Philosophy* 66:8, pp. 225–37.
- Lipton, Peter. 1998. "The Epistemology of Testimony." *Studies in History and Philosophy of Science* 29, pp. 1–31.
- Lyons, Jack. 1997. "Testimony, Induction and Folk Psychology." *Australasian Journal of Philosophy* 75:2, pp. 163–78.
- McDowell, John. 1993. "Knowledge by Hearsay," in *Meaning, Knowledge and Reality*. Cambridge: Harvard University Press, pp. 414–43.
- Moran, Richard. 2006. "Getting Told and Being Believed," in *The Epistemology of Testimony*, edited by Jennifer Lackey and Ernest Sosa. Oxford: Oxford University Press pp. 272–306.
- McMyler, Ben. Forthcoming. "Testimony, Trust and Authority." Oxford University Press.
- Pritchard, Duncan. 2004. "The Epistemology of Testimony." *Philosophical Issues* 14 pp. 326–48.
- Reid, Thomas. 1983. *Inquiry and Essays*, edited by R. Beanblossom and K. Lehrer. Indianapolis: Hackett Publishing Company.
- Riggs, Wayne. 2007. "Why Epistemologists are so Down on Their Luck." *Synthese* 158:3, pp. 329–44.
- Ross, Angus. 1986. "Why Do We Believe What We Are Told?" *Ratio* 28:1, pp. 69–88.
- Schmitt, Frederick F. 1987. "Justification, Sociality and Autonomy." *Synthese* 73:1, pp. 43–85.

- Schmitt, Frederick F. (ed.). 1994. *Socializing Epistemology: The Social Dimensions of Knowledge*. Lanham, MD: Rowman & Littlefield.
- \_\_\_\_\_. 1999. "Social Epistemology," in John Greco and Ernest Sosa (eds.), *The Blackwell Guide to Epistemology*. Oxford: Blackwell, pp. 354–82.
- \_\_\_\_\_. 2006. "Testimonial Justification and Transindividual Reasons," in Jennifer Lackey and Ernest Sosa (eds.), *The Epistemology of Testimony*. Oxford: Oxford University Press, pp. 193–224.
- Sosa, Ernest. 2006. "Knowledge: Instrumental and Testimonial," in Jennifer Lackey and Ernest Sosa (eds.), *The Epistemology of Testimony*. Oxford: Oxford University Press, pp. 116–23.
- \_\_\_\_\_. 2007. *A Virtue Epistemology*. New York: Cambridge University Press.
- Van Cleve, James. 2006. "Reid on the Credit of Human Testimony." *The Epistemology of Testimony*, edited by Jennifer Lackey and Ernest Sosa. Oxford: Oxford University Press, pp. 50-74.
- Webb, Mark Owen. 1993. "Why I Know About As Much As You: A Reply to Hardwig." *The Journal of Philosophy* 90, pp. 260-70.
- Weiner, Matthew. 2003. "Accepting Testimony." *The Philosophical Quarterly* 53, pp. 256–64.
- \_\_\_\_\_. 2005. "Must We Know What We Say?" *The Philosophical Review* 114, pp. 227–51.
- Williams, Bernard. 2002. *Truth and Truthfulness*. Princeton: New Jersey.
- Williamson, Timothy. 1996. "Knowing and Asserting," *The Philosophical Review* 105, pp. 489–523.
- \_\_\_\_\_. 2000. *Knowledge and its Limits*. Oxford: Oxford University Press.
- Wolterstorff, Nicholas. 2001. *Thomas Reid and the Story of Epistemology*. Cambridge: Cambridge University Press.
- Zagzebski, Linda. 1994. "The Inescapability of Gettier Problems." *The Philosophical Quarterly* 44:174, pp. 65-73.
- \_\_\_\_\_. 2012. *Epistemic Authority: A Theory of Trust, Authority and Autonomy in Belief*. Oxford: Oxford University Press.