Testimony and Interpretation

Abstract: Testimony can be a source of knowledge. Work on the epistemology of testimony largely assumes that hearers understand what a speaker has testified to. This paper relaxes that assumption, and examines how misinterpretation, or the risk of it, can prevent a hearer from acquiring knowledge. Because unreliability in interpretation can arise in many ways, section 2 considers a variety of such cases. Section 3 sketches some desiderata for a successful account of the role of interpretation in testimony, on which interpretation needn't proceed inferentially through knowledgeable belief about what is said. Finally, section 4 offers a safety-theoretic account of reliable interpretation which explains how and when misinterpretation prevents knowledge.

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1 Preliminaries

14 Testimony can be a source of knowledge. It is not, however, guaranteed to produce knowledge,

even when it is the source of true beliefs. Many find it natural to hold that a habitual liar who

6 happens to tell the truth on one occasion cannot be a source of knowledge on that occasion.

17 Nonetheless knowledge produced by testimony is a common, and interesting, phenomenon

for epistemology. We can rely on what others tell us and, when the conditions in which the

testimony occurs are right, come to know what we have been told.

The recent epistemology literature contains competing answers to the question of what,
exactly, are the conditions under which testimony produces knowledge. With few exceptions,
this discussion occurs under an idealizing assumption, according to which what is testified to is
understood by the hearer. Various testifiers may be more or less reliable, owing to the conditions
under which they acquire their beliefs, and the conditions under which they produce testimony
on the basis of those beliefs. But the literature in general assumes that those who receive

¹In particular, Fricker 2003, and Goldberg 2001, 2004, and 2015, Ch. 4, are exceptional in this regard.

testimony understand the content of what has been testified.² The epistemic question is whether

what has been testified to should be believed.

This paper is about the consequences of relaxing this assumption. Hearers can be unreliable in interpreting testimony, for a number of reasons. The testifier and hearer might not be speaking the same language. Or, even if speakers in general share a language, a testifier might not use that shared language in order to produce a piece of testimony on a particular occasion. Finally, even when speakers are using their shared language on a particular occasion where testimony is produced, there can be multiple interpretations of what the testimony means in their shared language—testifiers can speak metaphorically, non-literally, or use expressions that have incomplete contents. In section 2 we will argue that there are cases where it is clear that a hearer fails to know due to unreliability in interpretation.³

In section 3 we sketch some desiderata for a successful account of the role of interpretation in testimony. We observe that a good theory should not only explain why hearers who do not understand what is being said typically cannot, for that reason, gain knowledge through testimony. It should in addition explain this without requiring that, in successful cases of knowledge by testimony, speakers gain knowledge by first arriving at knowledge of what a testifier has said, and then, on that basis, come to a knowledgeable belief with the relevant content on the basis of that testimony. This would be an overly-demanding and implausible account of successful cases of knowledge by testimony.

Handling this phenomenon does not necessarily require revising existing accounts of the epistemology of testimony. Since our aim is not to canvass every possible approach to testimony

²For example, Burge argues for an a priori, prima facie entitlement "to accept something that is prima facie intelligible and presented [in conversation] as true," acknowledging the novelty of his "claim that we are a priori entitled to rely on our *understanding* and acceptance of something that is prima facie intelligible" (1993, 472, incl. fn. 12; cf. Burge 2013, Chap. 11 for postscripts). Fricker 2006, 229 notes that "mutual understanding" where "a message must be got across and accepted," is a "precondition" for the spread of knowledge by testimony. And Lackey 2008 defends a view on which one can gain knowledge from someone's testimonial statement partly "on the basis of understanding and accepting the statement" (2008, 72). Cf. also Graham 2000b, Audi 2006 42–43, and Sosa 2006/2011, Chap. 7, for similar claims.

³Other possible disruptions may arise due to difficulties over interpreting insinuations or conversational implicatures: see especially Fricker 2012 and Hawthorne 2012. We leave such cases aside.

- here, we will not attempt to demonstrate this. Instead, we will provide in section 4 one account
- of how the phenomenon can be accounted for within a simple, broadly externalist approach to
- knowledge-transmission through testimony. Other approaches that differ in details may be able
- 4 to account for the same phenomena, using their own proprietary resources. We do not claim that
- 5 the framework offered is uniquely able to adequately characterize the role of misinterpretation
- 6 in testimony.
- Central to this discussion is the connection between two components of forming beliefs on the basis of testimony. The first is that reliable interpretation of a testifier requires, at the very least, being in a position to know what it is to which the speaker has testified. Hearers who are not in a position to have this knowledge are typically thereby unable to have knowledge on the basis of the speaker's testimony. The second idea is that in successful cases of testimony, hearers need not *use* their knowledge of what the speaker has said as a premise which they rely on to infer what they come to know. Rather, reliable interpretation operates in the "background"
- of the belief-forming processes deployed by a knowledgeable hearer. To reiterate, in this paper
- we aim to articulate one way to make sense of these ideas, but make no claims to exclusivity.

6 2 Examples

- We begin with examples of when unreliable interpretation prevents knowledge acquisition by testimony. One lesson of them will be that interpretive problems can prevent knowledge by testimony in a variety of ways.
- A crucial feature of any example of this phenomenon is that interpretive problems should be the only barrier to knowledge. That is, as a rough heuristic, it should be plausible that if the interpretive problems were not present, the hearer would have succeeded in acquiring knowledge by testimony. This is only a rough heuristic, but at the very minimum it requires that

⁴One might fill out the details by appealing to quasi-perceptual understanding experiences as the basis for gaining knowledge of what a testifier says (Fricker 2003); or to a kind of "interpretative knowledge" (Sosa 2011, 135–136); or by appealing to the joint agency involved in interpretation presupposed by knowledge transmission (see Greco 2020, esp. Chap. 3). Apart from modeling the safety of such processes in section 4, we shall remain neutral on these details.

- what the testifier intends to convey is true. In addition, it requires us to focus on cases where
- the testifier is not subject to any additional barriers to knowing what the speaker has testified—
- ordinarily, we don't gain knowledge from testifiers who don't know the claims that they are
- 4 asserting. So we will focus on cases where the speaker also *knows* the proposition testified.

5 2.1 False friends

- 6 Begin with a simple case where a hearer fails to interpret a testifier correctly because they do
- 7 not speak the same language, but the hearer does not know this. The word 'angst' has slightly
- 8 different meanings in English and German. In German, 'Angst' expresses a particular worry
- or fear: one can have Angst that is occasioned by a friend's poor health. In English, 'angst'
- has more psychological overtones, conveying a general feeling of anxiety or apprehension.
- An angst-y response to a specific thing—a friend's health, or heights—doesn't make sense
- in English. 'Angst' in German and English are "false friends".

Imagine, then, a testifier has a friend who is physically present, and the friend is visibly 13 unhappy. The testifier points to the friend and says 'Angst', which is understood by the hearer to be a way of communicating the cause of the friend's unhappiness. Let us suppose that the testifier knows that the friend is afraid of some specific thing—snakes, say—and knows that this fear is the source of the friend's unhappiness. (The speaker does not use any additional words, 17 or speak with an accent, that would put the hearer in a position to know whether the speaker 18 is using German or English.) The friend is also experiencing psychological feelings of anxiety, but these are unrelated to the fear of snakes, and to the testifier's attempt to explain the friend's 20 unhappiness. As a matter of fact the testifier is speaking German, and uses the German 'Angst', 21 intending to communicate (knowledgeably) that the source of the friend's unhappiness is fear of snakes.

⁵Lackey (1999; 2008, esp. Chap. 2) argues that in many cases a hearer can acquire knowledge even when the speaker does not know, and thus that testimony can be a generative source of knowledge (see also Graham 2000a; cf. Graham and Bachman 2020 for an overview). But for our purposes it suffices to focus on cases where the speaker does know.

The hearer who interprets the speaker as using the false friend of 'Angst', namely the English 'angst', to communicate that the friend has a general sort of psychological anxiety, will believe something true on the basis of the testimony. (Recall that, *ex hypothesi*, the friend does have psychological feelings of anxiety, though these feelings are unrelated to the testimony.) By misinterpreting the testifier, the hearer has a true belief but, intuitively, does not have knowledge. If the friend had not had psychological feelings of anxiety, the testimony and process of communication would have been exactly the same, and the hearer would have ended up with a false belief.⁶

2.2 Semantic underdetermination

Even when testifier and hearer are speaking the same language, failures of interpretation are possible. Possible cases involve situations where what the testifier has said is semantically underdetermined, cases where what has been said is determined by context, and cases where the testifier has asserted a non-literal content.

Take semantic underdetermination first: the testifier says 'there was a robbery on the corner of 8th and Main St.'. This testimony is semantically underdetermined in the following way: the definite article 'the', on orthodox views, semantically requires (or presupposes) that there is a *unique* thing which satisfies the description following the article. In this case, it is common knowledge that there is no unique corner of 8th and Main St., since in normal cases the intersection of two streets has four corners. There are a number of competing views of the semantics of the definite article, and how (and whether) the missing content to achieve uniqueness gets filled in.⁷

We will not presuppose any particular view of how the underdetermination in 'the corner' gets resolved. Suppose, however, that the claim which the speaker intends to communicate is that there was a robbery on the northeast corner of 8th and Main St. The hearer, however,

⁶This does not entail that the hearer does not have knowledge, but is a useful heuristic in this case.

⁷See Graff Fara 2001; Soames 2005; and Hawthorne and Manley 2012, esp. Chap. 5.

- does not grasp that intention, and interprets the testifier to have communicated that there was a
- robbery on the southwest corner of 8th and Main St. The cause of this error does not need to be
- a wild guess on the hearer's part; it could be the result of wrongly believing that 'the corner' in
- this sentence anaphorically refers to an earlier mention of the southwest corner of 8th and Main
- ⁵ St. in the conversation.⁸
- In this case, the hearer's belief that there was a robbery on the southwest corner of 8th
- and Main St. is not knowledge, even if there was in fact a robbery on the southwest corner in
- 8 addition to the northeast corner, and so the belief is true. Moreover, the testifier might even
- ⁹ know that there was an additional robbery on the southwest corner. If the testifier had instead
- o intended to testify that there was a robbery on the southwest corner, and the hearer reliably
- interpreted the testimony, then the hearer would have had a knowledgeable belief. But in the
- case described, the hearer doesn't reliably interpret the speaker and so, intuitively, does not
- know that there was a robbery on the southwest corner of 8th and Main St.⁹

⁸Thus eavesdropping is typically a less reliable method of forming beliefs on the basis of people's testimony. This presumably has something to do with the eavesdropper not being appropriately situated within the dynamic processes of joint attention engaged in by the conversational participants, and thus they are less well positioned to interpret all of the conversational cues, including anaphoric references (though we shall remain neutral on the details of such dynamics here).

⁹Related cases might be considered where misinterpretation plausibly does not block knowledge. Case 2: Speaker (S) intends (as in the above case), by asserting 'There was a robbery on the corner of 8th and Main St.' that the robbery occurred on the northeast corner, and thereby expresses that more specific proposition. Hearer (H) misinterprets S's intent as being about the southwest corner, but, due to conversational cues, charitably accommodates S's utterance by interpreting S to have really meant instead the northeast corner, and believes this. In this case H plausibly gains knowledge. Case 3: Same as first case, but H wrongly associates (mentally) the location as being about a different intersection, at which, as H knows, there is only a northeast corner available (perhaps because the sidewalks and curbs on the other corners are not passable due to construction fencing; so nothing could've occurred on the other three corners anyway). On the basis of this association, H forms the belief that a robbery occurred on the northeast corner of 8th and Main St.; in this case too, H plausibly gains knowledge. Finally, Singular 'they': S and H are in a conversation about several people A, B, and C, one of whom, C, prefers 'they' as their pronoun. Earlier in the conversation a speaker has used 'they' to refer all of A, B, and C, so a later use of 'they' could refer to all three of them, or could refer to just C. S then uses 'they' to predicate something true of each member of the group, but a H misinterprets S as only referring to C. Here, the misinterpretation doesn't clearly block H's coming to know that this is true of C (since it is entailed by what the speaker intended that the predicate applies to C).

2.3 Non-literal speech

- 2 A final set of cases involves a testifier who testifies using speech that is to be interpreted non-
- 3 literally. There are various kinds of non-literal speech, including speech that uses language that
- 4 has an idiomatic meaning, and metaphor. The sentence 'Sally has a bee in her bonnet' on its
- 5 literal meaning entails that Sally is wearing something on her head, which has an insect in it.
- 6 The expression 'has a bee in her bonnet' also has an idiomatic meaning, which implies that
- ⁷ Sally is upset. ¹⁰
- Other non-literal meanings are possible, even for expressions that don't have idiomatic
- meanings in English. In a context where it is known that John's children are wild and unruly,
- but unknown to the hearer how many children John has, the testifier might say 'John has three
- Tasmanian devils'. One way to characterize what is communicated is to say that the literal
- content of the testifier's assertion is that John has three large carnivorous marsupials. The non-
- literal content of the assertion, which is what the testifier knows and intends to communicate, is
- that John has three rowdy children. We will not insist that this is the only way to characterize
- the non-literal speech in this case (for example, some may wish to characterize the example in
- terms of speaker meaning and sentence meaning).

Misinterpretations of non-literal speech on the part of the hearer are possible. One way for

¹⁰Cases of what Fricker (2007) calls hermeneutical injustice can create situations of misinterpretation perhaps akin to idiomatic cases. In such cases a subject is prevented from generating meanings pertaining to some of their social experiences, owing to structural identity prejudice in the collective understanding, but they are nevertheless trying to communicate the contours of such experiences (as when women did not yet have the conceptual resources to name cases of sexual harassment: Fricker 2007: 149ff.). Where such hermeneutical resources are developing and still disseminating, it will be possible for some speakers to conceptualize such experiences and form the relevant beliefs, while many others as yet cannot; and when the latter are hearers, and the former testifiers, it will be plausible that misinterpretation is part of what blocks a hearer from believing (and thus knowing) the relevant content. (As Fricker notes, often hermeneutical injustice can be compounded by testimonial injustice (2007, 159-160), such as when women, who speak under conditions of identity-prejudicial credibility deficit, try to communicate their experiences of such harassment to men.) On the other hand, reversed cases where the speaker but not the hearer currently lacks the hermeneutical resources might allow for a speaker to intend a content which she herself cannot yet fully grasp, but which that hearer is able to understand. Such cases where a hearer's hermeneutical resources outpace those of the speaker may count as cases which generate knowledge in the hearer without knowledge in the speaker. Our safety-theoretic account in section 4.3 substantiates one way this could be possible, although our focus there is on cases where the hearer misinterprets rather than correctly interprets the testifier.

- this to happen is for the hearer to fail to pick up on the features of conversational context which
- make the non-literal reading salient. Perhaps it is unclear to the hearer whether the testifier has
- intended to pick up on a previous conversational topic of John's family life. The hearer infers
- 4 that the testifier intends to bring up a new aspect of John's home life—the animals he owns—
- and interprets the testimony literally. This interpretation is the wrong one if the speaker simply
- 6 intended to communicate the non-literal meaning of the sentence in this case, namely that John
- 7 has three rowdy children.
- As before, the literal interpretation could in fact be true, and known by the testifier. But
 the hearer still wouldn't know that John owns carnivorous marsupials, if he has misinterpreted
 the speaker. That the misinterpretation, which results from taking the testifier literally, is a
 proposition that is true and known by the testifier is a mere accident. If the testifier said
 'John has three Tasmanian devils' solely as an attempt to communicate with non-literal speech
 some facts about John's children, and would have used the same sentence even if John did not
 own any exotic animals, then the true belief that is the product of the misinterpretation is a
 paradigmatic example of luck. We can stipulate that, in this and other examples, the testifier
 is not so sophisticated so as to give testimony that expresses knowledge on multiple possible
 interpretations.

18 2.4 A second route to the absence of knowledge through unreliable interpretation

These examples of unreliable interpretation are designed to show that knowledge can be absent purely because of an unreliable interpretation by the hearer in a case of testimony. For this reason, it is important that every other part of a typical knowledge-transmitting case of testimony be present: that what the hearer believes is true, and that the testifier know what the hearer comes to believe on the basis of the testimony. There are, however, other ways in which

¹¹Note that although some of our above cases involve inferring from a false belief, this feature cannot, on its own, be the barrier to the hearer's acquiring knowledge, because one can gain knowledge from inferences which are based essentially on a false belief (see for example Hawthorne and Rabinowitz 2017). As our later discussion illuminates, what seems to matter is the safety of the belief.

unreliable interpretation can prevent acquisition of knowledge by testimony.

We will gesture at one here, for the sake of completeness. A hearer might receive a piece of testimony from a knowledgeable testifier, believe the content of the intended testimony, and so come to have a true belief on the basis of what the speaker intended to testify. But even in this case the hearer will not have knowledge, if the hearer has a true belief about the content of what the speaker testified, but does not know that this is the content of the testimony. This is because the failure to know what the speaker has testified, owing to unreliable interpretation, will make the hearer's belief insufficiently reliable as well.

Take a case where a testifier gives a piece of testimony by intending to communicate the literal meaning of the sentence used in the testimony. For example, suppose in the example from section 2.3, the testifier uses the sentence 'John has three Tasmanian devils' to communicate the literal meaning of the sentence. The hearer, moreover, receives the testimony by believing the literal meaning. Assuming the testifier has knowledge, the hearer has a true belief.

However, this is not enough for knowledge if the hearer arrives at the interpretation in an unreliable way. Suppose, for instance, that the hearer has a policy of always believing the literal interpretation of the sentence used to communicate any piece of testimony, no matter what contextual clues are in place to suggest that a non-literal interpretation is intended. In this case, it is intuitive that even if the testifier did intend the literal interpretation of 'John has three Tasmanian devils', but could easily have intended the non-literal interpretation, then the hearer does not know the literal content of the testimony. ¹²

Here the barrier to knowledge is not the actual false belief about what the speaker said, but rather the possibility of a false belief based on testimony. Similar possibilities exist when testifiers could have been speaking a different language, or when semantically incomplete testimony could have been interpreted incorrectly. It is clear that the mere possibility of interpreting a testifier's audience incorrectly should not prevent knowledge; testimonial skepticism would

¹²As subsequent sections make clear, this is not merely a feature of the hearer's policy: perhaps in a community that never uses non-literal speech, the flat-footed policy of believing the literal content of a testifier's assertion can produce knowledge.

- result from such a principle. However, when the possible sources of misinterpretation—we
- have identified the possibility of a non-shared language, semantic underdetermination, and non-
- 3 literal speech as some examples—are realistic sources of error, they can prevent knowledge.
- 4 Characterizing this phenomenon in more detail is one task for the epistemology of testimony.¹³

5 3 Testimony, memory, and inference

- 6 Testimony is often described as a means of knowledge transmission, to be contrasted with a
- source of knowledge generation. 14 In this respect, testimony can be understood along the lines
- 8 of memory, which transmits knowledge gained by a person at one time to that same person at a
- ⁹ later time. Testimony, the thought goes, serves a similarly function when it transmits knowledge
- from one person to another (possibly, but not necessarily, at the same time). When transmission
- is in play, testimony is unlike perception, which is capable of giving a person new knowledge
- which that person did not possess at an earlier time.

3.1 Analogies with inference: basing

- 14 The role of successful interpretation in producing testimonial knowledge suggests an ana-
- 15 logy with another knowledge-generating process, namely deductive inference. Inference is
- a knowledge-producing process, roughly, when one knows the premises of an argument and
- validly deduces a conclusion from the premises. There are complications: ¹⁵ for example, one
- must retain knowledge of the premises throughout the deduction. If one loses knowledge (or,

¹³It is worth noting that the cases presented here differ from what is at issue in Goldberg 2004. Goldberg is interested in whether hearers could come to know what a testifier has said through a process of 'radical interpretation', which requires scrutinizing the meaning of a string of words on the basis of the ground-level non-semantic facts. It is clear, as Goldberg points out, that hearers are not in general in a position to do this. The argument here is different, since we are granting that speakers are in a position to know what sentences in their language mean, even if they are not in a position to work out what a sentence means from the ultimate grounds of the meaning-facts alone. Even with these assumptions in place, problems of interpretation can arise and prevent knowledge.

¹⁴Cf. Lackey 2008 for arguments that testimony can be generative of knowledge rather than merely transmissive. See Greco 2020 for testimony as transmission of knowledge.

¹⁵Hawthorne 2004, esp. 31–50.

for paradoxical reasons, cannot retain knowledge of the premises and simultaneously know the conclusion), then the derivation from known premises does not produce new knowledge of the conclusion.

More importantly for present purposes is the fact that new knowledge through inference has to be *based* on knowledge of the premises in the deduction. It is not enough to simply know the premises, and to believe the conclusion that is entailed by those premises. One's belief in the conclusion must be based on those premises in an appropriate way, though it may be difficult to adequately define what an appropriate basing relation amounts to.¹⁶ The intuitive idea is, however, clear: one knows that Socrates is mortal when one first knows that all men are mortal, that Socrates is a man, and believes, through syllogistic reasoning involving these premises, that Socrates is mortal. One does not know that Socrates is mortal when one believes this simply out of wishful thinking (say, one does not like Socrates and wishes him to be dead soon). Moreover, one fails to know, even if one also happens to know that all men are mortal, and that Socrates is a man. What is missing is that one fails to base one's belief on the knowledge which entails it.

Knowledge through testimony requires something similar. Simply believing that p when a knowledgeable testifier has said that p is insufficient for knowledge in the same way that believing a conclusion when one knows premises that entail it is insufficient for knowledge. Something similar to a requirement to base one's belief on the testified proposition, or in the proof from the premises, is in place.

To push this analogy further, we should first note one further detail regarding the basing requirement in the inference case. Wishful thinking is one way of believing a conclusion that is entailed by premises one knows, without basing one's belief in the conclusion on those premises. But there are other ways of believing the entailed conclusion in response to known premises, without basing one's belief in the conclusion on those premises *in the right way*. For example, one could have a disposition to believe that Socrates is mortal whenever one has occurrent beliefs that refer to Socrates and mortality. These needn't be the beliefs one actually

¹⁶See Carter and Bondy 2019 for a collection.

has: one would also have believed that Socrates is mortal if one had occurrent beliefs in the claims expressed by 'my best friend is Socrates' and 'the CEO of Purina is mortal'. If, in fact, this disposition produces the belief that Socrates is mortal because one has tokened beliefs in the claims expressed by 'Socrates is a man' and 'all men are mortal', one doesn't base one's belief in the entailed claim that Socrates is mortal in the right way to have knowledge.

A failure to knowledgeably interpret the testifier is in some ways similar to a failure to base one's inference on known premises in the right way. When the testifier knows p and a hearer believes p in response to some testimony from the testifier, it is natural to conclude that the hearer knows p. However, this is not strictly entailed by the circumstances of the hearer's belief-formation, because it is possible for the testimony not to have p as its content. If the hearer mistakenly interprets the testifier as having asserted p, even if the testifier does in fact know p, the hearer's acquired belief in p isn't based in the testifier's knowledge in the right way. 12 All of the instances of misinterpretation in §2 fit this pattern. In each case, the speaker 13 knows some content: that the angsty friend is generally unhappy, that there was a robbery on the southwest corner of 8th and Main St., or that John owns three Tasmanian devils (meaning marsupials). What the speaker actually testifies, in each case, is something else: that the friend has a specific fear, that there was a robbery on the northeast corner of 8th and Main St., or that John has three rowdy children. The hearer's true beliefs are not based on what the testifier actually testifies; rather, these beliefs are beliefs in contents that were not the contents 19 conveyed in testimony. The source of this failure of the hearer to base a belief in the testifier's 20 knowledge is misinterpretation. The hearer either wrongly interprets the testifier as speaking a different language, or misinterprets the way to fill in the underdetermined content of the speaker's testimony, or fails to understand whether the testifier is speaking literally.

24 3.2 Analogies with inference: processes vs. knowledge

There is one further respect in which the analogy with inference is helpful here. Inferential knowledge does not depend on the one who performs the inference knowing that the premises in

the inference entail the conclusion, and believing the conclusion on the basis of her knowledge of the premises plus her knowledge of the validity of the inference. If knowledge of the validity of the inference were required, then a regress threatens:¹⁷ if in order to validly deduce q from p, it is not sufficient to know p, but also that p entails q, one must also know p, that p entails q,

and that p and p entails q entails q, and so on.

Instead, in order to base knowledge of the conclusion on the known premises, one can use a belief forming-process that involves *inferring* the conclusion from the premises. The inferential process of inferring q from p needn't be one which involves the belief that p entails q (what a process of inferring does consist in is not a question we will take up here). Thus someone who knows *John is in the room* and *if John is in the room, then Bob is in the room* comes to know *Bob is in the room* by competently deducing it via modus ponens. Someone who, through inattention or indifference, fails to form a higher-order belief about the validity of the modus ponens inference does not fail to arrive at a new piece of knowledge. All that matters is that the conclusion is believed via a *process* that involves deductively inferring the conclusion from the premises.

Similar points apply to testimony. In a good case, the hearer who learns from testimony properly interprets the testimony she receives from a knowledgeable testifier: a knowledgeable speaker testifies that p, the hearer correctly interprets the testifier has having said p, and comes to know p. What is the role of the correct interpretation in producing the knowledge? The knowledge that the speaker has said p does not need to be a premise in the hearer's reasoning that produces an inference to p. This would be analogous to a requirement that someone who learns a conclusion through a valid modus ponens inference must use the knowledge that the relevant instance is modus ponens is valid as an additional premise. In each case, it is *possible* that one arrives at new knowledge in this way, but we maintain that it is not *necessary* that one uses one's knowledge that the speaker has said p in an inference, just as it isn't necessary that one use one's knowledge that the relevant instance of modus ponens is valid.

¹⁷See Carroll 1895, and Harman 1986.

There is a complication in fleshing out this point. Competing views on the conditions under which testimony produces knowledge divide into what are commonly called *reductionist* and *non-reductionist* views of testimony.¹⁸ We aim in this section to remain neutral between these views (we drop the neutrality in the next section), but some comments are in order to substantiate this neutrality. While proponents of either view can endorse the claim that knowledge of the correct interpretation does not feature as a premise in an inference to the testified proposition that is known, the role of the interpretation will look very different, depending on one's perspective.

According to the reductionist view, in order to know something by testimony, one must possess non-testimonially based positive reasons for believing the testimony, reasons grounded in basic sources such as perception, memory, and inductive inference. On the basis of these, 11 which will include facts about the nature of the testimony and its circumstances, one must be in a 12 position to support inferentially the testified claim. By contrast the non-reductionist, who thinks 13 of testimony as a basic source of justification, denies this: one can know something by testimony without being able to infer it from what one knows about it by non-testimonial sources. For a non-reductionist, it will be very natural to accept the thesis we have endorsed: if knowledge 16 from testimony doesn't require inference from any non-testimonial premises, then it shouldn't require inference from a set of premises that include the (known) claim that the content of the testimony is such-and-such. As with other components of the non-reductionist account, it will 19 need to provide details on the conditions under which testimony produces knowledge. 20

From a reductionist's point of view, the conditions under which testimony produces knowledge include the hearer having knowledge of some facts from non-testimonial sources. But
even a reductionist will not require that one must antecedently know *all* of the non-testimonial
facts about the occasion of testimony. So the reductionist is not committed to holding that the
non-testimonial facts that a hearer must infer the testified proposition from include the fact that
the speaker testified that such-and-such. Suppose one is a reductionist who holds that, in order

¹⁸See Coady 1992; Fricker 1995; and Lackey 2006, among others.

to learn from testimony, one must know that the testifier is sufficiently reliable, has no reason to lie, and has expertise in the area of testimony. There is no obvious reason for a non-reductionist of this kind to hold that in addition to knowing these facts, one must also know that, on this

occasion, the speaker testified that such-and-such is the case.

To return to an earlier example: a hearer learns from a testifier's utterance 'there was a robbery on the corner of 8th and Main St.'. Since this is a case where the English sentence underdetermines the content conveyed, a misinterpretation of what the testifier has said is not outside the realm of possibility. Suppose, however, that the present case is not like this, and it is clear from conversational antecedents that the northeast corner of 8th and Main St. is under discussion, and so when the testifier asserts 'there was a robbery on the corner of 8th and Main St.', the hearer understands that it is the northeast corner that is at issue. Perhaps, as the reductionist holds, one must know that the testifier is well-placed to know about crime in the relevant area of town, and use this to infer that what the testifier said is true. But simply from the fact that the hearer has successfully learned from the occasion of testimony, it does not follow even on the reductionist view that the grounds from which she might inductively infer must include the claim that the testifier's assertion has the content *there was a robbery on the northeast corner of 8th and Main St.*¹⁹

This points to the following parallel between inference and interpretation in testimony. Knowledge gained through these sources must be based on a competent inference from premises, or on a reliable interpretation of the testifier. But, in each case, one needn't know the proposition that corresponds to the reliable inference or interpretation, and deploy it as a premise in an inference to the proposition one comes to know. That is, when one learns q by

¹⁹If we did hold that this is necessary for testimonial knowledge, we would be committed to some unintuitive claims about the lack of knowledge in hearers who receive testimony from reliable testifiers. Suppose the hearer, in response to the features of the conversational context, believes that there was a robbery on the northeast corner of 8th and Main St., but fails to form the belief that the testifier meant that there was a robbery on the northeast corner of 8th and Main St. Thus, the hearer is not able to infer what she learns from the testifier from a set of beliefs which include the premise that, in saying 'there was a robbery on the corner of 8th and Main St', the testifier meant that there was a robbery on the northeast corner of 8th and Main St. This is not necessarily a barrier to knowledge, for intuitively, the hearer can learn from that testimony without making this inference. A reductionist is not forced to deny any of this.

- modus tollens, one needn't know the conditional if: [p and (if p then q)] then q, and infer q from
- this premise plus the premises p and if p then q. Likewise, if one learns p by testimony, one
- needn't know the semantic fact the testifier said that p and infer p from this, perhaps alongside
- 4 other known facts about the circumstances of the testimony.
- To summarize: there are two points of analogy between interpretation and inference in
- 6 producing knowledge. (i) Being an unreliable interpreter or inferrer can prevent one from
- 7 having knowledge on the basis of testimony or inference. This means that even if one in fact
- ⁸ believes the true proposition that follows from premises one knows, or that is communicated
- by a knowledgeable testifier, one fails to know if one does not base one's belief in the premises
- or testimony in the right way. (ii) In order to acquire knowledge on the basis of testimony or
- inference, one does not need to know, and reason from, the facts about what the speaker meant,
- or facts about what the premises imply. In the next section we will sketch one model of the role
- of interpretation in arriving at knowledge by testimony, which preserves both of these lessons.

4 A model: interpretation and safety

- 15 Here we will present one simple model of how knowledge by testimony depends on reliable
- interpretation. This model is externalist and non-reductionist, and so is not neutral between
- 17 competing theories of how knowledge is acquired through testimony. Some of these competing
- theories will be able to accommodate observations that are similar to those we make here.²⁰
- But there is no guarantee that all will, and so the role of interpretation in testimony may be a
- deciding issue between competing theories. We return briefly to this point in the conclusion.

21 4.1 Safety sketched

- 22 The starting point for the model we develop here is the idea that knowledge requires one to have
- 23 a true belief that is believed in an appropriately reliable way,²¹ and that the appropriate notion

²⁰Perhaps Longworth's (2016) 'entertaining view' can do so.

²¹See Goldman 1986, Goldberg 2010, among others.

of reliability is to be understood in terms of safety. 22 A belief b held by a subject s is safe just

in case in all "nearby" worlds w, or worlds that could easily have obtained, if s has the belief b

in w, then s's belief b is true in w.

Some immediate refinements are needed for this picture: first, in order for the belief b to

be safe, it must also be that beliefs that are similar to b are true, if held. Even if one correctly

guesses that 49 + 118 = 167, one does not know the relevant mathematical fact, since one could

easily have believed a similar but false mathematical claim.

Second, only those false beliefs in nearby worlds that are formed by *similar processes* to the one by which b was formed (by s in w) can prevent b from being known. One actually believes that Caesar crossed the Rubicon on the basis of what one has read in history books. Suppose, however, that it could easily have been that one met a convincing conspiracy theorist, who would have made a compelling case that the accounts of the late Roman Republic in history books have been fabricated. The nearby possibility of false beliefs in this situation is compatible with knowing that Caesar crossed the Rubicon. Believing on the basis of what one reads in history books is a very different process of belief-formation than believing conspiracy theorists. 23

A final clarificatory point concerns what counts as a "nearby" world. At a first pass, these are worlds that could easily have obtained: if one resolves to believe p if a fair coin lands heads, and to believe $\neg p$ if the coin lands tails, then if the coin lands heads, there is still a nearby world where one believes $\neg p$. (Moreover, the belief in this nearby world will be very similar—the belief in p is similar to the belief in p—and will be formed by a similar method—relying on the coin landing heads is similar to relying on the coin landing tails.) However, there need not be a plausible analysis, in non-epistemic terms, of what constitutes a nearby world. Instead,

²²Sosa 1999, Williamson 2000, Pritchard 2005. See Rabinowitz 2011 for an overview.

²³Reliabilists such as Goldman will hold that the method of reading history books is a distinct method from that of relying on testimony from a speaker, and so one believes that Caesar crossed the Rubicon by using a method that is reliable. Another way of implementing the idea is to treat different processes that produce beliefs as more-or-less similar. Two belief-formation episodes might both rely on testimony, which is prima facie, but not conclusive, reason to hold that they are the products of similar processes. What matters is not whether the processes fall under a general description (such as 'testimony' or 'perception') but whether the individual instances that produce the beliefs are sufficiently similar.

we may need to rely on intuitions about whether one knows in a particular case, in order to settle whether certain possibilities where one believes falsely count as nearby worlds.²⁴ This means that a safety condition on knowledge cannot serve as a proper analysis of knowledge in the traditional sense; it does not prevent the condition from illuminating central features of knowledge.

In this framework there is a distinction between what has been called ²⁵ locally reliable and globally reliable belief-forming processes, or methods. Roughly, a process is locally reliable if it will in fact, in the actual environment, produce a safe belief, if it is given safe inputs. For example, an abductive inference that the future will resemble the past is, in environments like ours, true in all nearby worlds if it is based on beliefs about past regularities that are true in all nearby worlds. The process of believing by an inference like this is locally reliable. This does not mean that the inference is guaranteed to produce knowledge: there are distant possible-but-not-actual environments where similar inference would yield a false belief because it is possible that the laws of physics are radically different. A process is globally reliable only if, in every possible context in which it is deployed, it yields a safe belief if its inputs are safe. Deductive inference is the paradigm case of a globally reliable belief-forming process. In what follows we operate under the assumption that very little knowledge rests on globally reliable processes, and in general we acquire knowledge by utilizing locally reliable processes.

19 4.2 Testimonial safety

Return to knowledge gained by testimony, setting aside for the moment the role of interpretation in gaining such knowledge. In a simple case where a testifier knows p and testifies to a hearer, the hearer can know p on the basis of this testimony, for the following reason. Since the testifier knows p, the testifier's belief in p is safe—roughly the testifier could not have easily have falsely

²⁴Williamson 2000, Chap. 5. Analogous points apply to settling whether a belief in a nearby world, and the process by which it is formed, count as sufficiently similar.

²⁵Goldman 1986, 44–46, and especially Goldberg 2010, 12, and 50–54. Cf. also Plantinga 1993 and Bergmann 2006 on proper functionalist views.

believed p. When the hearer hears the testimony, and believes p on the basis of the testimony,

the hearer's belief will, in a normal case, be free from the risk of error in the same way.

This is a picture on which the hearer needn't know that the speaker knows p, or base

her belief in the testimony on her beliefs about any specific facts involving the testifier and

testimonial environment, in order to acquire knowledge of p by testimony. In many cases, the

hearer's belief, based in the testimony of a knowledgeable testifier, can be safe even if the hearer

is not aware of the conditions that make the belief safe.

24

However, this skeletal outline of a (externalist, non-reductionist) picture of how knowledge can be acquired by testimony leaves several details to be filled in. These correspond to the refinements of the notion of safety that are relevant to knowledge, which we sketched above. The most obvious detail that needs filling in concerns the process by which one might come to acquire similar beliefs in nearby worlds. Suppose one believes a knowledgeable testifier, who testifies that p. But, one is not in a position to distinguish the knowledgeable testifier from those who don't know and, moreover, it could easily have been that one heard, and so believed, $\neg p$ on the basis of the testimony of an ignorant testifier. In that case, one would have had a false belief in a claim that is very similar to p. Is it formed by a process that is similar to the process by which one actually believes p?

There are multiple ways to answer this question within the simple framework sketched here.

One answer is that believing the ignorant testifier is a very similar process of belief-formation
to the process of believing a knowledgeable testifier. In this case, whether one can know by
testimony will depend on certain local features of one's external environment, including whether
there are any ignorant would-be testifiers that are nearby. Call this a *knowledge-ignoring* view
of the similarity-relation on processes one might use to form a belief by testimony.

The alternative to a knowledge-ignoring view is a *knowledge-sensitive* view of the relevant

²⁶It is important, in giving this answer, to not rely on the intuition that, since one cannot tell what distinguishes the knowledgeable from the ignorant testifier, the processes must be similar. The kind of externalist view we are sketching here will in general reject a test for process-similarity that requires accessibility of the distinctness of processes.

processes. On this view, even if there are ignorant testifiers one could easily have believed, one can still know that p, if one relies on the testimony of someone who knows p. According to the knowledge-sensitive view, believing someone who knows that p is a very different belief-forming process from the process of believing someone who does not know whether p. Thus on the knowledge-sensitive view, successfully coming to knowledge by testimony does depend on some features of the external environment, including whether one is believing a knowledgeable testifier. But it does not depend on whether there are other, non-knowledgeable testifiers around: even if one could easily have formed a false belief by believing one of them, that belief would have been formed by a sufficiently different process. Thus on this approach, the nearby presence of an ignorant testifier does not threaten the status of one's actual true belief as knowledge.

We will not try to settle the question of whether a knowledge-ignoring or a knowledgesensitive view of the processes at work in formation of beliefs by testimony is correct here.

Instead, we simply note it as one issue that is undecided by the general framework. Similar
issues arise when one focuses on the role of interpretation in producing (or failing to produce)
testimonial knowledge.

16 4.3 Interpretive safety

Begin with a case where one forms a true belief by testimony, but has in fact misinterpreted the testifier. These cases are fairly straightforward, in the framework presented here. Since one has misinterpreted the speaker, one typically could have easily have formed the exact same belief, in the exact same way, but believed falsely.²⁷ Analogously, when one believes something true by an invalid inference, one does not know for similar reasons. One could easily employ the same method (invalid inference) with the same premises, and come to believe something false. Believing what a speaker has not testified to, even if it is a misinterpretation of what a knowledgeable speaker did say, is typically not a way to come to know what one was not in a position to know beforehand.

²⁷Though the cases from fn. 9 look atypical in this regard.

More interesting cases involve those where one has actually believed what a knowledgeable testifier has said, but is an unreliable interpreter, in the sense that one could easily have believed something the speaker did not say. Suppose that, in some of the nearby worlds where one misinterprets the testifier, what one believes is also false. Does this show that the risk of misinterpretation prevents knowledge? That is, does it show that, even if one actually believes p on the basis of a knowledgeable testifier having testified p, one does not know if one is an unreliable interpreter?

Here a simple application of a safety-based model suggests that the answer is 'yes'. If there is a nearby world where one misinterprets the knowledgeable speaker, then there is a nearby world where one believes falsely. Hence one fails to know.²⁸

This simple picture ignores several refinements over what it takes for a belief to be at risk of being false, in the relevant sense. Take someone who in fact interprets an utterance of 'there was a robbery on the corner of 8th and Main St.' correctly, and correctly believes it to mean that there was a robbery on the northeast corner of 8th and Main St. However, let us suppose that the hearer could easily have misinterpreted the utterance—perhaps by failing to pick up on conversational cues that the testifier intends to speaker about the northeast corner—and would have falsely believed that there was a robbery on the southwest corner of 8th and Main St.

This does not necessarily force us to conclude that the hearer does not know in the actual case, but the details will mirror the choice-point we face in how to characterize belief-producing processes in cases of testimony more generally. It is possible to hold that the process that leads to a correct interpretation is sufficiently dissimilar from the process that results in a misinterpretation. After all, the first process involves things like the hearer knowing that certain earlier conversational cues determine the correct interpretation; the second process does not.

²⁸Compare Sosa (2011, 135–136): "We must interpret our interlocutors, so as to discern the thoughts or statements behind their linguistic displays. ... Interpretative knowledge of what a speaker thinks (says) is thus instrumental knowledge that uses the instrument of language. Language is a double-sided instrument serving both speaker and audience. Hearers rely on the systematic safety of the relevant deliverances. Not easily would the speaker's utterance deliver that the speaker thinks (says) that such and such without the speaker's indeed thinking (saying) that such and such. ... If any of this is put in serious enough doubt, the supposed instance of testimony will be disqualified as a source of knowledge about its direct content, for that audience at that time."

This way of characterizing the similarity-relations between the processes allows us to hold that the hearer knows, despite the risk of a misinterpretation. It resembles in this respect the knowledge-sensitive approach to the relation between processes in the ordinary testimony case, since it takes features of the testimonial environment which are directly tied to the epistemic status of participants to generate substantial differences between processes that might have been used. Those that have no problem with a knowledge-sensitive individuation of processes might be happy with this result.

However, others who are inclined to use a knowledge-ignoring characterization of the (relevant) differences between processes might be tempted to treat the risk of misinterpretation more seriously. The resulting view holds that the fact that the hearer relies on her knowledge of what occurred earlier in the conversation does not necessarily mean that in scenarios where she fails to rely on this knowledge, she is using a process that differs substantially. This yields the result that beliefs formed by a misinterpretation of this kind are not ipso facto irrelevant to whether the hearer in the actual case has knowledge by testimony.

Regardless of how we come down on the details on this question, the details matter only 15 for how much the risk of misinterpretation prevents testimonial knowledge, and not whether misinterpretation is relevant to testimonial knowledge. Some hearers might be in a position to know the salient facts about their conversational context, which make a particular interpretation the right one. However, they fail to rely on this knowledge, instead intuitively arriving at 19 a particular belief as a result of the utterance of the testifier. In many cases, where the 20 communicative environment is friendly, this is not a barrier to knowledge. (English-speakers 21 who hear 'Timbuktu is in Africa' and come to believe that Timbuktu is in Africa don't fail to know simply because they have not tokened additional beliefs about their conversational 23 environment before forming this belief.) But when misinterpretation is a real possibility, such 24 quick belief-forming processes introduce risk that may be incompatible with knowledge. In these cases, even when a hearer does use a correct interpretation of a knowledgeable speaker, the risk of a failure to do so will not involve a process that can be distinguished by the absence

- of a knowledge-state somewhere in the process.
- Thus a simple safety-based model of knowledge by testimony will deliver the result that,
- at least in cases involving quick, unreflective interpretation, unreliable interpretation can be a
- barrier to knowledge. For those who are not sympathetic to knowledge-sensitive approaches,
- 5 it will be natural to hold that the epistemic consequences of unreliable interpretation are even
- 6 more widespread.

7 4.4 The role of inference

- 8 Reliable interpretation is needed to secure knowledge by testimony, since unreliable inter-
- 9 pretation typically introduces the risk of false belief. But this doesn't mean that one needs
- to have prior knowledge of the correct interpretation of a speaker's testimony, and use this
- knowledge to infer the content of the testimony, in order to eliminate the risks that arise from
- misinterpretation.²⁹
- Of course one way to eliminate these risks is to form explicit, knowledgeable beliefs about
- what the testifier has said. If the testifier utters 'there was a robbery on the corner of 8th and
- Main St.', and thereby says (owing to intentions and features of the conversational context) that
- there was a robbery on the northeast corner of 8th and Main St., a hearer can know, in some
- 17 circumstances, the following claims:
- The testifier said that there was a robbery on the northeast corner of 8th and Main St.;
- What the testifier said (in this circumstance) is true.
- 20 From these premises, the hearer can deduce that there was a robbery on the northeast corner of
- 21 8th and Main St., and so if the premises are known, the conclusion is known as well.
- The point here is that this is not *necessary*, in every case, for forming a true belief on the
- basis of testimony. Suppose one hears the testifier utter the sentence 'there was a robbery on

²⁹Thus our approach agrees with the non-inferentialism of Fricker (2003, 341–342), though she posits quasi-perceptual understanding experiences as the basis for gaining knowledge of what a testifier says.

the corner of 8th and Main St.', and without performing any inferences, comes to believe what
they testified, namely that there was a robbery on the northeast corner of 8th and Main St. If
the hearer is responding to the features of the testimonial environment that make this the correct
interpretation, and is not guessing, then the process by which she arrives at a testimonial belief
is "locally" reliable. It produces a true belief in all nearby worlds—although it is possible to
be misled about the features of the testimonial environment, and misinterpret the speaker, this
only occurs in distant worlds—and so produces knowledge. The hearer in a sense understands
the speaker, and knows what was said. But the knowledge does not take the form of a premise
that she derives her testimonial from, and does not even need to take the form of a prior piece of
knowledge, that the hearer has before arriving at knowledge of the fact that the testifier conveyed
through testimony.

Instead, the understanding of what the testifier has said can take the form of an available piece of knowledge, which the hearer would acquire, if she considered the subject. For example, a hearer who is asked what the testifier meant in saying 'there was a robbery on the corner of 8th and Main St.' counts as understanding the testifier if she is able to arrive at the knowledge that the speaker meant that there was a robbery on the northeast corner of 8th and Main St, after considering the question.³⁰

This understanding of what the testifier meant can, in principle, be based partly on the hearer's knowledge which she acquired by testimony. One way to know that the speaker meant that there was a robbery on the northeast corner of 8th and Main St. is to reason from the following premises:

- 22 (1) There was a robbery on the northeast corner of 8th and Main St.;
- 23 (2) The testifier uttered 'there was a robbery on the corner of 8th and Main St.'
- 24 If one reasons to the conclusion that the testifier's utterance meant that there was a robbery on

³⁰Being in this position feels comparable to what some prefer to call "propositional justification" (or *ex ante* justification, as in Goldman 1979); we shall leave it to those with such preferences to decide whether that terminology is apt in this case.

- the northeast corner of 8th and Main St., then in the right circumstances where the inference
- 2 is locally reliable, one can come to know what the speaker meant. The inference is not a
- deductive inference, and so is not guaranteed in all circumstances to generate knowledge of
- what the testifier has said.³¹ In order to have a deduction, one would need to know that one
- 5 knows the first premise on the basis of the speaker's testimony. If one knows
- 6 (1*) I know that there was a robbery on the northeast corner of 8th and Main St.;
- 7 (2*) The knowledge in (1) is based on the testifier's utterance 'there was a robbery on the corner of 8th and Main St.',
- then one can deduce that the utterance meant that there was a robbery on the northeast corner of 8th and Main St. This requires higher-order knowledge of what one knows on the basis of testimony. In some cases, it may be hard to come by this higher-order knowledge. It may be better to rely simply on a merely locally reliable inference involving first-order facts, rather than to ascend to the higher-order premises (1*) and (2*) in order to use a deductively valid (and hence globally reliable) inference.

In either case the reasoning relies on the knowledge in (1) or (1*) one has acquired from the speaker's testimony—and so, the explicit knowledge of what the speaker meant is in a natural sense posterior to the knowledge arrived at by testimony. That one has this knowledge, or can easily acquire it, is a necessary condition for arriving at knowledge by testimony; hearers who do not know what a testifier has said cannot learn from them. What is not necessary is that one use this knowledge, in order to arrive at the testimonial knowledge. This is both an intuitive claim about specific cases, and a consequence of a use of locally reliable belief-forming processes in the model sketched here.

³¹We shall assume that it is better regarded as abductive in this case.

5 Conclusion

We have argued that misinterpretation—or even simply the risk of misinterpretation—can prevent one from acquiring knowledge by testimony. Further, we have sketched how this phenomenon highlights some respects in which testimonial knowledge is like inference, in that it requires the relevant beliefs to be based on a particular source. A simple model where knowledge requires a certain kind of reliability highlights some further features of the role of interpretation in producing testimonial knowledge: it can be the result of a process that is locally reliable, and does not need to rest on prior knowledge of what the testifier has said. A few additional notes about this picture are worth making, in closing.

First, one can ask what the role of interpretation is in other models of testimonial knowledge.

We have not argued that there are no other alternatives for capturing the phenomenon; instead
the safety-based model presented here serves only to illustrate some central features of the
interpretation. This does not imply that other models cannot accommodate the same features or
cannot contain new insights.

However we can trace some general outlines of potential speed bumps for accounts of testimonial knowledge that differ substantially from the externalist-friendly account we are working with here. We have relied heavily on the notion of a locally reliable process to explicate the kind of process a hearer can use to arrive at testimonial knowledge, without explicitly tokening thoughts about what the testifier meant. To the extent that a non-externalist view will not hold that (some analogue of) locally reliable processes are epistemologically relevant, the view in question will have difficulty explaining the role of interpretation in testimonial knowledge.

Second, some accounts of the epistemology of testimony are framed in terms of when a hearer is *justified* in accepting a claim on the basis of testimony, rather than when the hearer *knows*. Similar questions will arise for the justificatory status of beliefs formed by unreliable interpreters. For example: a hearer might wrongly interpret a use of 'angst' to mean what a false

friend of the term in another language means. In some versions of this case, the hearer does this
because she has excellent but misleading evidence that the testifier was using a false friend of
'angst'. But in other cases, the hearer will do this without responding to any particular piece
of evidence; the interpretation process is "automatic" in many cases and in some instances this
automatic process may misfire. If all of the other conditions for a justified testimonial belief
are in place, the justification-centric theorist will need an answer to whether such hearers have
justified beliefs.

A final issue concerns the relative importance of interpretation in testimony. Even if it is possible, in the kinds of cases we have described, for a risk of misinterpretation to make a difference to whether a hearer has knowledge on the basis of testimony, one might think that events like this are relatively rare, and moreover are uninteresting compared to other issues that arise in the epistemology of testimony. Whether it is a frequent occurrence that the possibility of misinterpretation has epistemological consequences is an empirical question, which we have not tried to answer. Nonetheless, we have argued that misinterpretation raises some structurally important issues for the epistemology of testimony, since avoiding it requires a kind of knowledge—knowledge of what is said—which does not need to feature as a premise from which one infers one's testimonial knowledge. These structural features on their own make cases of misinterpretation interesting test cases for the epistemology of testimony.

An additional point to make on this front is that the epistemological consequences of misinterpretation, even if rare, arise in especially important settings. What the law says is a fraught question; the relevance of the intent of the framers of the law, and the role of law in regulating public behavior, make legal interpretation a more complicated question than interpretation of ordinary speakers.³² Another case where interpretation is difficult, but especially important, is the interpretation of written revelation within various religious traditions. While scriptural sources purport to give information from a knowledgeable source about God, the afterlife, and

³²For two starkly opposed approaches, compare Dworkin 1986 and Scalia 1997.

- how to live, many traditions also acknowledge that interpretation is not easy.³³ For instance
- Maimonides³⁴ holds that much of scripture must be interpreted non-literally, on the grounds
- 3 that many literal interpretations conflict with demonstrations that God is a simple being.
- Regardless of the details (whether simplicity considerations require discerning non-literal
- meanings, or whether framers' intentions are relevant to the content of the law), these are cases
- where knowledge of what scripture says, or what the law says, is important, and where there are
- 7 potential barriers to knowing from risks of misinterpretation which are not at all far-fetched. In
- 8 these cases it would be well worth investigating the details of how the risks of misinterpretation
- 9 can be avoided. This is a project for another time.

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³³See, e.g., Wolterstorff 1995, esp. Chap. 13.

³⁴Maimonides 1963 [ca. 1190], Book 1, Chap. XX

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