Nested Testimony, Nested Probability, and a Defense of Testimonial Reductionism
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September 2, 2011

In her book *Learning from Words* (2008), Jennifer Lackey argues for a "dualist" view of testimonial justification, according to which the epistemic status of both the speaker and hearer contribute to the hearer's justification in accepting testimony. More precisely, a hearer's justified acceptance of testimony requires both that the speaker's testimony be reliable, and that the hearer have appropriate positive reasons for relying on such testimony.

In affirming the second of these requirements (the "positive reasons thesis"), that the hearer must have appropriate positive reasons for accepting the speaker's testimony, Lackey insists that this does not commit her to *reductionism* about testimonial justification. While she maintains that appropriate positive reasons are necessary for testimonial justification, she claims that they are not sufficient. There can be, she thinks, "asymmetry" between the justificatory status of a testimonial belief and the positive reasons to which reductionists say it must be reduced. For reductionism to be correct, there can't be "any difference between the epistemic status of the *testimonial belief being reduced* and the *positive reasons doing the reducing*" (151). But Lackey thinks there is a difference: there are cases in which a hearer has appropriate positive reasons for accepting a given speaker's testimony, but in which the hearer, nonetheless, would not be justified in accepting this testimony.

Lackey sketches a counterexample (which she calls NESTED SPEAKER) to show that there can be cases of such "asymmetry."[1] But Lackey offers just this one counterexample to reductionism. It is not only the lynchpin in her argument against reductionism, but the lynchpin in her argument for dualism. If any form of reductionism is correct, then her view that the speaker's reliability is necessary for a hearer's justification would likely fail. If a hearer's possession of appropriate positive reasons were truly both necessary and *sufficient* for the justified acceptance of testimony, then provided that a hearer could have appropriate positive reasons even in the absence of the speaker's reliability, the speaker's reliability would not be necessary. So it is important that Lackey's counterexample succeeds. Here I will argue that it does not.

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[1] The counterexample is designed specifically to answer local reductionism, the thesis that a hearer's positive reasons about a specific testifier's testimony are both necessary and sufficient for the justified acceptance of that testimony, as opposed to global reductionism, which concerns reliance on testimony in general. Presumably, however, a version of the same counterexample could apply just as easily to global reductionism, which claims only that positive reasons about the reliability of testimony in general are necessary and sufficient for justified acceptance of any testimony.

Here is Lackey's counterexample to the claim that a hearer's appropriate positive reasons are sufficient for the hearer's justified reliance on testimony:

> NESTED SPEAKER. 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 on a wide range of topics. For instance, each time she has made a personal or professional recommendation to Fred, her assessment has proven to be accurate; each time she has reported an incident to Fred, her version of the story has been independently confirmed; each time she has recounted historical information, all of the major historical texts and figures have fully supported her account, and so on. Yesterday, Helen told Fred that Pauline, a close friend of hers, is a highly trustworthy person, especially when it comes to information regarding wild birds. Because of this, Fred unhesitatingly believed Pauline earlier today when she told him that albatrosses, not condors (as is widely believed), have the largest wingspan among wild birds. It turns out that while Helen is an epistemically excellent source of information, she was incorrect on this particular occasion: Pauline is, in fact, a highly incompetent and insincere speaker, especially on the topic of wild birds. Moreover, though Pauline is correct in her report about albatrosses, she came to hold this belief merely on the basis of wishful thinking (in order to make her reading of *The Rime of the Ancient Mariner* more compelling).

Lackey argues that in NESTED SPEAKER, Helen's testimony gives Fred "excellent positive reasons" to accept the report that albatrosses have the largest wingspans among wild birds. Nevertheless, she claims that Fred does not claim with justification or warrant that albatrosses have the largest wingspans among wild birds. She contends that radical unreliability of Pauline's testimony makes it difficult to see how Fred's belief in her testimony could be produced by a truth-conducive process. Lackey uses this point to support her statement-reliability condition for testimonial justification: a necessary condition for this justification is that the speaker's testimony must actually be reliable (this is in contrast to the less strict requirement that a speaker competently believes or sincerely testifies to the truth of a proposition).

My defense of reductionism against this counterexample will consist of showing that while Lackey does show a case in which there are positive reasons for a belief without *some* belief's being justified, it does not show this to be true *of one and the same belief*. Helen's testimony to Fred does not give Fred genuine positive reasons for accepting the claim about the albatross. It does give him positive reason to accept *something* (though not the unqualified claim about the albatross) and this is what creates the illusion that he has a positive reason. So he has some positive reason, but not the *appropriate* positive reason.

We can see why this is true by considering carefully the content of the beliefs involved in a case of testimony. A reductionist account holding that the justifiability of testimony is "ultimately reducible to sense perception, memory, and inductive inference," will reserve a special place for the role of inference. A (local)

reductionist will assume that the judgment of reliability about a particular testifier serves as a premise in an

inference of in the following *rough* form:

> *Rough testimonial reduction inference*
> S is a reliable testifier.
> S testifies that φ.
> φ

Suppose we grant, as Lackey does, that the first premise is fully justified on Fred's part. He has gathered extensive

evidence of Helen's reliability. Likewise we assume he is justified in believing the second premise: all he has to do

is hear Helen say "φ." Should it follow, according to the reductionist, that φ is also justified? Lackey appears to

assume that it should, because she claims as a failure of reductionism the absence of justification for Fred's belief

that the albatross has the largest wingspan of wild birds.

Nevertheless, I now suggest that the reductionist is not committed to the claim that the conclusion of this

inference, φ, should be justified—and I say this in spite of agreeing that on reductionism, there must be asymmetry

between positive reasons and the justificatory status of the belief. This is because the inference pattern described

above is only the *rough* pattern that the reductionist should endorse. A more precise statement of the reductionist

inference pattern should look like this, as involving a conclusion that is *probable* in relation to its premises[2]:

> *Testimonial reduction inference*
> S is a reliable testifier.
> S testifies that φ.
> Probably φ.

It is quite natural to think of beliefs accepted on the basis of testimony as judgments of mere probability. Even if a

Helen has a spotless track record of reporting facts accurately, Fred does not have access to Helen's reasoning or

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[2] In epistemological tradition, probability judgments are almost synonymous with judgments based on testimony. Locke's first example of probability (as against "knowledge") is a testimonial example:
Probability is the appearance of agreement upon fallible proofs. As demonstration is the showing the agreement or disagreement of two ideas by the intervention of one or more proofs, which have a constant, immutable, and visible connexion one with another; so probability is nothing but the appearance of such an agreement or disagreement by the intervention of proofs, whose connexion is not constant and immutable, or at least is not perceived to be so, but is, or appears for the most part to be so, and is enough to induce the mind to judge the proposition to be true or false, rather than the contrary. For example: in the demonstration of it a man perceives the certain, immutable connexion there is of equality between the three angles of a triangle, and those intermediate ones which are made use of to show their equality to two right ones; and so, by an intuitive knowledge of the agreement or disagreement of the intermediate ideas in each step of the progress, the whole series is continued with an evidence, which clearly shows the agreement or disagreement of those three angles in equality to two right ones: and thus he has certain knowledge that it is so. But another man, who never took the pains to observe the demonstration, hearing a mathematician, a man of credit, affirm the three angles of a triangle to be equal to two right ones, assents to it, i.e. receives it for true: in which case the foundation of his assent is the probability of the thing; the proof being such as for the most part carries truth with it: the man on whose testimony he receives it, not being wont to affirm anything contrary to or besides his knowledge, especially in matters of this kind: so that that which causes his assent to this proposition, that the three angles of a triangle are equal to two right ones, that which makes him take these ideas to agree, without knowing them to do so, is the wonted veracity of the speaker in other cases, or his supposed veracity in this. (Book IV, Chapter XV, §1)

interpretation of these facts, and does not know if she has used her own usual reliable methods of interpretation of the facts, even if Helen does know this.

Some may object that it is unnecessary to make explicit the modal operator "probably" in the conclusion of this argument, on the grounds that the premises of the inference are likely to be accepted only with probability, themselves. This is likely true, at least for the first premise judging the reliability of S. But the point of including the explicit operator "probably" in the scheme above is that the conclusion here is probable *in relation* to the premises. Even if the premises are certain, the conclusion is less certain than they are. The first premise about the reliability of the testifier is not a claim about the testifier's infallibility. A testifier's general reliability is entirely consistent with the testifier's occasional error.

This point about probability may seem facile, but it has important consequences for our interpretation of Lackey's counterexample. For recall that this is a case of *nested* testimony. As such, when we instantiate our φ, we get the following:

1. Helen is a reliable testifier.
2. <u>Helen testifies that Pauline is a reliable testifier.</u>
3. Probably Pauline is a reliable testifier.

Already there is an important observation to make about Lackey's claim that in the nested speaker objection, there is a difference between the epistemic status of the *testimonial belief being reduced* and the *positive reasons doing the reducing*. It's true that Fred can be justified in believing (1) and (2), and in inferring (3) from these premises. But to note this does not yet imply that he is supposed to be justified in believing that probably the wingspan of the albatross is the largest among the wild birds. That is not the proposition believed in (3).

So let us add some reference to the belief about the albatross to the inference described by the reductionist. We imagine that the premises of the inference will look like this:

1. Helen is a reliable testifier.
2. Helen testifies that Pauline is a reliable testifier.
3. Probably Pauline is a reliable testifier.
4. Pauline testifies that the albatross has the largest wingspan among the wild birds.

What shall be our ultimate conclusion? Remember that the general scheme of the Tesimonial Reduction Inference goes from a judgment about the reliability of a speaker and an observation of a speaker's particular act of testimony, to a conclusion claiming that the speaker's act of testimony is probably true. If one of those premises is itself merely probable in relation to the other premise (i.e., less certain than the other premise, as (3) is in relation to (4) above), then the conclusion will itself be probable in relation to the second premise, i.e.:

Nested testimony about the reliability of a testifier
Probably [S is a reliable testifier].
S testifies that φ.
Probably [Probably φ].

So, since the Testimonial Reduction Inference already contains a probability modifier in the conclusion, this means that the conclusion to be drawn from (1) – (4) will contain a nested probability modifier:

5. Probably [Probably the albatross has the largest wingspan among the wild birds].

Now the reductionist can and should endorse that (5) is a justified belief. It is the belief that reduces to the justifiability of (1) – (4), and the justifiability of the inference drawn from these premises. But notice that (5) is not the unqualified claim about albatrosses originally discussed. It is not even necessarily a *probable* version of that belief. It is a probability judgment about the probability judgment of the albatross belief. There is a positive reason for believing in the nested claim, but not for believing in the unqualified claim. This, I think, explains why the unqualified belief about the albatross might not be justified, as Lackey claims. But then according to my analysis, neither is there a positive reason for believing it. There is positive reason for believing the nested probability claim, but then there should also be justification for believing the *nested* claim. So positive reasons and justification *with regard to the same type of claim* still seem to rise and fall together. The trick is to see the difference between the nested and the unqualified claims: they are birds of a different feather.

Notice that if we were not dealing with a case of nested testimony, there would still be a drop in degree of certainty from premise (2) to the conclusion, but not one so radical as to rule out a justified belief in φ. Depending on our account of belief or acceptance, believing that φ with certainty greater than 50% (what we might call believing that it is probable that φ) might still allow for justified acceptance of the proposition that φ. But to claim that it is probable that some proposition is probable implies a significantly diminished degree of total probability.

Whether the total probability is higher or lower than 50% depends, of course, on the values of the two independent probability estimates. So suppose that Fred has 99% confidence in *anything* that Helen says about anything, and that Helen has 99% confidence in anything that Pauline says about anything. Then the value of "probably (probably φ)" will be about 98%. That would surely yield a justified belief in φ. But probably neither of these confidence levels is ever so high as this, and this is why the justification in believing φ without qualification will probably vanish. Even if Helen is confident in Pauline's testimony about a great many everyday matters, it is doubtful that Helen would say that Pauline is right about 99% of the things she says—especially on matters such as

ornithology. Who among us can say of even our best friends that they are right 99% of the time and on any subject? It would only take 70% confidence on the part of both Fred and Helen for the total probability to dip below 50%, and 70% is extremely optimistic for a reliability judgment unqualified as to subject matter.

Some may object that if nested testimony about the reliability of a testifier does not yield a positive reason for belief, many of our beliefs which we take to be based on positive reasons might not have such reasons, a recipe for skepticism. Suppose, for example, that Wendy is not a medical expert, but needs to find a doctor to treat her arthritis. Likely she will ask a trusted friend, Sally. Sally recommends Dr. Burge. According to my analysis of the inference scheme above, Wendy has no positive reason to believe Dr. Burge's testimony about the proper treatment for her arthritis, because the probability of his claim about the treatment diminishes too much. In fact I am willing to bite this bullet, but I don't think it generates the skepticism that the objector would allege. If Wendy is a responsible believer, she will look for other reasons to believe Dr. Burge before accepting his prescription. If other trusted testifiers independently vouch for Dr. Burge (including especially other doctors from whom she gets a second opinion), this increases the probability of the claim substantially. Furthermore, whether or not she seeks a second opinion, Wendy should ask Dr. Burge to explain his prescription. The better she judges him as having done this in terms she can understand, the further the probability of his claim increases. There is no reason for the reductionist, who conceives testimonial justification along broadly foundationalist lines, to discount elements of justification that derive from coherence considerations.

Recognizing that nested testimony, *ceteris paribus*, leads to the eclipse of justified belief in φ is consistent with the attitude we normally take towards hearsay, a type of testimony that is surprisingly underanalyzed in the literature on the epistemology of testimony. Rule 801(c) of the United States Federal Rules of Evidence defines "hearsay" as "a statement, other than one made by the declarant while testifying at the trial or hearing, offered in evidence to prove the truth of the matter asserted." The Rules of Evidence exclude most forms of hearsay evidence from legal proceedings, on the premise that hearsay testimony can prejudice a jury, which we can interpret as meaning that it does not conduce to the justification of beliefs. But hearsay is another form of nested testimony. Only this time, it's the second premise that includes the nesting:

> *Nested testimony about an act of testimony (hearsay)*
> S is a reliable testifier.
> S testifies that [T testifies that φ].
> Probably [T testifies that φ].
> Possibly [Probably φ].

Admittedly, in a typical case of hearsay, we do not even have any premise about the reliability of T, and for this reason I represent the conclusion as not being even a probability judgment, but a mere possibility. The lesson, however, is that even if we did have a premise with a judgment of T's reliability, this would still count as a form of hearsay, and still be inadmissible—at least in court—even though it is a probability about a probability:

> S is a reliable testifier.
> T is a reliable testifier.
> S testifies that [T testifies that φ].
> Probably [T testifies that φ].
> Probably [Probably φ].

So the vast majority of cases of nested testimony—and of hearsay—will not yield unqualifiedly justified beliefs in the proposition φ to which they testify. So Lackey's counterexample to the reductionist fails, because it is not an example of the genuine asymmetry she claims it to be: it is not an example of a recipient of testimony who has positive reason to believe a given proposition without believing the *same proposition* with justification. Testimonial reductionism may still have some life left in it, and Lackey's dualism needs a stronger defense.

References

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