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ON TESTIMONY AND TRANSMISSION

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ABSTRACT

Jennifer Lackey's case "Creationist Teacher," in which students acquire knowledge of evolutionary theory from a teacher who does not herself believe the theory, has been discussed widely as a counterexample to so-called transmission theories of testimonial knowledge and justification. The case purports to show that a speaker need not herself have knowledge or justification in order to enable listeners to acquire knowledge or justification from her assertion. The original case has been criticized on the ground that it does not really refute the transmission theory, because there is still somebody in a chain of testifiers – the person from whom the creationist teacher acquired what she testifies – who knows the truth of the testified statements. In this paper, we provide a kind of pattern for generating counterexample cases, one that avoids objections discussed by Peter Graham and others in relation to such cases.

1. A CHALLENGE TO TRANSMISSION PRINCIPLES

Knowledge is a production. Those who acquire it independently often have to work at it. Those who hear about something second-hand through testimony or assertion are dependent on those who tell them. It is tempting, on the basis of such observations, to make a general claim according to which if a hearer is to acquire knowledge of p through testimony it must be the case that the speaker possesses knowledge of p. A number of philosophers, such as McDowell (1994) and Audi (1997), have defended such a claim. Robert Audi remarks that "I cannot (testimonially) give you knowledge that p *without* knowing that p ... . Testimonially based knowledge is received by transmission and so depends on the attester's knowing that p" (Audi 1997: 410).[1] The very simple idea here is that if I don't know p, then neither do you just in virtue of my telling you p. I can't give you what I don't have.[2] More formally, Jennifer Lackey characterizes the necessity component of the transmission thesis as follows:

> TEP-N: For every speaker, S, and hearer, A, A knows (believes with justification/warrant) that p on the basis of S's testimony that p only if S knows (believes with justification/ warrant) that p. (Lackey 2008: 39–40)[3]

1 Cited in Lackey (2008: 40). Our italics.

2 Cf. Lackey's (2008: 48) "bucket brigade" metaphor.

3 Graham (2000) also formulates and criticizes this thesis. We use Faulkner's slightly modified version of TEP-N which changes the names of the speaker and hearer to S and A for consistency. See Faulkner (2011: 72, fn. 28).

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It's not hard to imagine, on a first pass, a very simple kind of case that would seem to challenge TEP-N: Consider the following:

> PHONE MESSAGE: Rupert's laptop won't connect to his home wifi, and he suspects it is a problem with the router. As Rupert currently has laryngitis, he writes down some questions for his 8-year-old son Ian to ask when calling the internet provider, who relays instructions to the son, who repeats the message to Rupert. Ian doesn't understand what he has just said. Rupert successfully fixes the internet connection.

In this case, it might be tempting to think that Rupert knows what to do to fix his router, and that, *ipso facto*, TEP-N must be implausibly demanding. Even if we assume that Rupert knows the call center will deliver reliable information and that Ian has a reliably accurate ability to recall and report sentences he has heard, Ian does not understand, much less believe or know, what he hears and reports. Rupert therefore acquires knowledge from the report of somebody who does not have this knowledge himself.

Advocates of TEP-N, however, need not accept this as a genuine counterexample, because they can rule it out as a kind of *hearsay*, as contrasted with genuine testimony. Hearsay is simply the passing along of words of another without taking any independent view of the reliability of the message thereby conveyed. Ian is operating more like a voice message machine than a testifier. Testimony, by contrast, is delivered by one in a position of expertise, understanding p and offering it cognizantly for the uptake, adoption and use of the hearer. If one were to challenge TEP-N, one would need a counterexample on which genuine testimony were provided by one who did not know it, yet yielded knowledge in the one who heard it.

Such counterexamples have been offered. Perhaps the most well-known of them is Lackey's (2008) 'CREATIONIST TEACHER' case.[4] Since this case has generated considerable discussion we will quote it in full:

> CREATIONIST TEACHER: Stella is a devoutly Christian fourth-grade teacher, and her religious beliefs are grounded in a deep faith that she has had since she was a very young child. Part of this faith includes a belief in the truth of creationism and, accordingly, a 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. Indeed, she readily admits that she is not basing her own commitment to creationism on evidence at all but, rather, on the personal faith that she has in an all-powerful Creator. Because of this, Stella does not think that religion is something that she should impose on those around her, and this is especially true with respect to her fourth-grade students. Instead, she 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*," while presenting her biology lesson today. Though Stella herself neither believes nor knows this proposition, she never shares her own personal faith-based views with her students, and so they form the corresponding true belief solely on the basis of her reliable testimony. (Lackey 2008: 48)

4 It should be noted that the case also features in the literature on epistemic norms of assertion, where it is referenced by Lackey as a counterexample to the knowledge norm of assertion. Cf. Williamson (2000).

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Unlike PHONE MESSAGE, where one might plausibly hold that no genuine testimony was at issue, Lackey's CREATIONIST TEACHER case poses a genuine threat to TEP-N. Stella is not like Ian. She is not merely recording and transmitting a message mechanically. She is explaining and endorsing it as an expert. If we grant Lackey the reasonably uncontroversial claim that knowledge that *p* requires belief that *p*, and secondly, that (*ex hypothesi*) Stella does not believe that "modern-day *Homo sapiens* evolved from *Homo erectus*" then unless we are prepared to deny that Stella's students count as knowing this information she teaches them in a normal schoolroom context, it looks very much like CREATIONIST TEACHER straightforwardly disproves TEP-N. And if it does, then so much for the dependence thesis – and a fortiori, so much for the more general idea that we gain knowledge by testimony because the testifier knows it.

2. A REFORMULATED TRANSMISSION PRINCIPLE

Paul Faulkner grants Lackey that CREATIONIST TEACHER counts against TEP-N but remarks that "... all this shows is that TEP-N is a poor formulation of the moot transmission principle. It shows that speakers can pass on what others know, and that all that matters is that *someone in the testimonial chain possesses knowledge that can be passed on*" (Faulkner 2011: 73). Faulkner's suggestion then is that, while CREATIONIST TEACHER counts against TEP-N, that does not matter much, as the more appropriate (and weaker) formulation of this condition is something like what Lackey attributes to Dummett (1994: 264):

> TEP-N*: For every testimonial chain, A_1, ... , A_n, speaker, A_n, and hearer, B, B knows that *p* on the basis of A_n's testimony that *p* only if the first speaker, A_1, knows that *p* in some non-testimonial way.[5]

Notice that with this "chain-style" view in play, Faulkner can grant Lackey that Stella is the source of the children's testimonial belief that *p and* grant further that the belief the children acquire amounts to knowledge, all while maintaining that "Stella is not the source of the *knowledge* of p" (Faulkner 2011: 73). The source of the knowledge that *p* would instead be some knowledgeable person further up the chain, such as one of the teachers who described hominid evolution to Stella.

This reformulation of the transmission principle does not settle the theoretical dispute. For Faulkner the "crucial point" of TEP-N* is the idea that "to possess testimonially based knowledge is to have the epistemic standing of another explain one's possession of knowledge" (2011: 73).[6] In order to make TEP-N* work as a response to

5 Lackey (2008: 41). We have modified TEP-N* so that the view focuses specifically on knowledge. Cf. Faulkner's preferred formulation of this chain-style transmission necessary condition as "Where A believes that *p* through the uptake of testimony to *p*, A testimonially knows that *p* only if a prior speaker knew that *p*" (Faulkner 2011: 73).

6 Faulkner's reasoning for taking this to be important to preserve is defended in some detail in his (2011) *Knowledge on Trust*. In particular, in Chapter 3, Faulkner insists that reductivists can reject transmission principles (according to which one can acquire testimonial knowledge only if someone prior in the chain possessed knowledge) only on pain of incurring Moran's (2005) "problem of intentionality." Faulkner takes the lesson to be that the "extended body of warrant" is what explains an audience's

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CREATIONIST TEACHER, Faulkner assumes that there can be testimonial chains in which B inherits an epistemic status from somebody else: here, somebody other than the person whose testimony one actually hears. TEP-N* already assumes that the source of knowledge can be somebody else in a chain of testimony. But Lackey has an alternative theory on which no such thing is needed. For Lackey, even though Stella learned her hominid evolution from somebody else, that other person is not the source "at a distance" of Stella's students' knowledge. The reason the students come to know is that the words they hear from Stella are reliable, not that they inherit epistemic properties transmitted by a chain of testimony.

3. THE REVISED CHALLENGE

It looks like whether TEP-N* effectively responds to CREATIONIST TEACHER depends on what side of the line dividing reductivists and non-reductivists[7] in the epistemology of testimony you *already* stand on – and the reductivist side of the debate must deny *any* transmission principle including TEP-N*, *ex ante*.[8] How, then, might we settle the matter?

Consider the following twist on CREATIONIST TEACHER.

> CREATIONIST POST-DOC: A creationist post-doc, Bella, who knows Stella, finds a horde of remarkable fossils, writes up a report (indicating that they prove by scientific standards the claim that "Modern-day *Homo sapiens* evolved from *Homo erectus*.") Bella shows this report to no one but Stella, who then informs the class of that claim.[9]

It would appear that *regardless* of whether one is already a reductivist or a non-reductivist, CREATIONIST POST-DOC counts against TEP-N*. After all, since Bella (a creationist) does not believe her own report, and since she shows it to no one else but Stella, who – herself a creationist – also fails the belief condition, a defender of TEP-N* such as

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acquisition of knowledge. See also Burge (1998: 5) for a similar defense of this idea, where Burge makes the point in terms of a precondition for dependence: depending on an interlocutor for knowledge involves depending "on there being in the chain of sources sufficient justification or entitlement to underwrite knowledge." Cf. Faulkner (2006) for discussion of Burge. We note however that the GRANT SCHOLARS case we develop in §5 provides good reason to abandon this idea. Thanks to an anonymous referee for suggestions on this point.

7 Reductivist positions in the epistemology of testimony insist that testimony is *not* (like, for instance, perception) a *distinctive* epistemic source, and, further, that we do not enjoy a "default entitlement" to accept testimony; positive reasons to do so are required. Non-reductivists, on the other hand, take the opposite stance on these two issues; for non-reductivists, testimony is viewed as a distinctive epistemic source, and accordingly, view the acceptance of testimony as rationalized by entitlement that persists in the absence of any positive reasons. Non-reductivists typically embrace "transmission principles" of some sort, whereas reductivists are going to by default reject such principles.

8 Though this is the standard view (see Adler 2010), note that weak varieties of reductivism can accept some transmission principles. For more on this point, see Graham (2006*b*).

9 Peter J. Graham's "Mr. Jones" case (2006*a*: 112–13) is similar, except that in his case, Jones discovers and reports a "particular matter of fact that no-one has known before" (112) without believing what he says. However, Graham's case is open to the objection that Mr. Jones is not a practicing scientist and does not follow valid scientific methods. Such an objection does not apply to CREATIONIST POST-DOC or the case discussed below.

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Faulkner cannot fall back on the suggestion that someone *prior* in the chain knew what the children count as knowing, and with reference to this knowledgeable individual further back in the chain, argue that only TEP-N (but *not* TEP-N*) is disproven. By comparison, Burge (2013) backs away from his earlier defence of TEP-N* (1993), accepting that this type of counterexample debunks TEP-N*.[10]

4. LINES OF RESPONSE

We now want to consider three lines of response a proponent of TEP-N* might give against CREATIONIST POSTDOC. In Section 5, we propose a kind of modified case that avoids these objections. First let us look at them: *The overdetermination objection*, *Audi's dilemma* and *The indirect testimony objection.*

The Overdetermination Objection: Bella's fossils are, *ex hypothesi*, sufficient by scientific standards for establishing the claim "Modern-day *Homo sapiens* evolved from *Homo erectus*." But any introductory science book will be equally sufficient for establishing this particular claim. This claim is after all part of the background of common scientific knowledge. As such, it is reasonable to expect that Stella *already* possesses overwhelmingly strong testimonial grounds, from knowledgeable informants, for the target claim. An issue of overdetermination arises. Even though *one* source of the piece of testimony in question is not knowledgeable (Bella), *another* source of this same piece of testimony (i.e. any introductory science book, reliable newscasters, other teachers, colloquia speakers) is. Thus, a line for resisting CREATIONIST POSTDOC as a counterexample to TEP-N* materializes: *even if one source of Stella's testimony (Bella) is not knowledgeable*, so long as another of Stella's sources is, then there is a knowledgeable source in the chain. But, CREATIONIST POSTDOC trades on the idea that there was no such knowledgeable source for the piece of testimony in question (since neither Stella nor Bella believed it). Thus, CREATIONIST POSTDOC fails to undermine TEP-N*.

Audi's dilemma: As Graham (2006a) notes, Audi (2006: 29–30) thinks that anyone who appeals to a case like CREATIONIST POSTDOC to argue against TEP-N* will face a kind of dilemma. The dilemma is as follows: if the students base their belief entirely on the testimony of the non-believing teacher, then they fail to count as knowing, given that the testimony is unsafe – Stella, we may assume, will teach *anything* the school requires of her, regardless of whether she thinks it is false. On the other hand, if we stipulate that the children have additional reason to believe that a teacher at that school would teach claims only if true, then they *do* count as knowing – however, in this case their beliefs would not be *entirely* testimonial in nature. Take either side of *Audi's Dilemma*, and it seems CREATIONIST POSTDOC fails to count against TEP-N*.

The indirect testimony objection: This objection, advanced in a recent paper by Sebastian Kletzl (2011), aims to show that CREATIONIST TEACHER does not count against TEP-N* – though the line Kletzl takes also has the resources to insist that CREATIONIST POSTDOC fares no better, given that (as Kletzl argues) Stella will ultimately count as possessing knowledge. The thrust of Kletzl's point can be made by an

10 Thanks to an anonymous referee for drawing our attention to Burge's more recent position. See §6 for discussion of Burge's (2013) postscript to *Content Preservation.*

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appeal to an analogy. Suppose Stella is lecturing instead on Plato's *Parmenides*; Kletzl submits that "it is perfectly normal for her to put some sentences in the form 'S said *p*' and other sentences in the form 'p' … She is talking about the dialog throughout the lecture, even if some of her assertions have the form 'p'" (Kletzl 2011: 3). Deny this, Kletzl says, on pain of claiming that by oscillating between these constructions, a lecturer on the *Parmenides* actually oscillates between direct and indirect testimony throughout. A better way (Kletzl claims) of locating indirect testimony than by looking at content alone is by reference to the justificatory source. For example, if asked to justify *p*, Stella (in lecturing on the *Parmenides*) points to the dialogue. Her statements are accordingly *indirect assertions*: given that she will justify her statement *p* by appealing to the relevant source (Plato in the *Parmenides*), her statements are best understood as of the form "S asserted that *p*" *even when* she just says "*p*." The same goes for CREATIONIST TEACHER (and by extension, CREATIONIST POSTDOC). If asked to justify her statement, she will "refer to the assertions of other persons" (e.g. the evolutionary authorities or textbook authors). Now, if the deep structure Stella's statement "Modern-day *Homo sapiens* evolved from *Homo erectus*" is actually "*According to X*, modern-day *Homo sapiens* evolved from *Homo erectus*," then Kletzl thinks we have a story to tell for how Stella counts as knowing what she asserts. The view he offers is:

> Nt_i: For every speaker, A, and hearer, B, B knows that *S asserted that p* on the basis of A's testimony that *S asserted that p* only if A knows that *S asserted that p*. (Kletzl 2011: 3)

So, by construing Stella's claim as a kind of indirect testimony and then allowing that Stella counts as knowing what she asserts (in virtue of knowing *that* the relevant evolutionary experts asserted that modern-day *Homo sapiens* evolved from *Homo erectus*), it turns out that the case no longer qualifies as a counterexample to TEP-N*.[11]

5. A RECIPE FOR MORE POWERFUL COUNTEREXAMPLES

Consider now the following case:

> GRANT SCHOLARS: Let ϕ represent the name of a particle that was, until recently, merely a *theoretical postulate*. Aside from the fact that a prominent scientific theory T predicts the existence of ϕ, there has been no observational evidence of ϕ. Suppose further that observational evidence of ϕ would be compelling evidence against religious tenet *R*.[12] Suppose now that we have got three esteemed and very capable particle physicists, A, B and C, each of which (i) is, like Stella, devoutly

11 Perhaps the students could then even use this knowledge (that the proponents of evolutionary theory said *p*) to acquire knowledge of the proposition *p*. This might not be covered by standard accounts of knowledge through testimonial transmission, however. It would be a case of hearsay in the legal sense of "repeating something one heard another say," which is usually restricted as evidence in court. Hearsay in this sense contrasts with legal testimony. (Contrast McDowell 1994, in which hearsay is used as a synonym for testimony.)

12 Following Murray and Rea (2008), we are assuming something like the plausible "potential conflict" model of the relationship between religion and science. Religious claims and scientific claims *sometimes* stand in conflict with one another. A paradigmatic example here features competing claims about the age of the earth.

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religious and believes religious tenet *R*, and (ii) has been awarded tremendously generous research grants by a religiously affiliated funding body, *God and Truth*. While *God and Truth* has given the generous research funds to A, B and C because they are both brilliant *and* religious, there are no strings attached to the research money. With their (extremely) generous funding, each sets up a highly sophisticated laboratory setting, expecting to demonstrate on scientific grounds that ϕ is not observed in ideal conditions. As it turns out, though, A observes ϕ. A submits the paper detailing this finding to *Nature*, which sends the paper to the two most qualified experts: B and C. B and C, through their funding, are able carefully to repeat A's experiment conditions and verify the result and the paper is accordingly accepted. Stella, in her elective upper-level high school physics class, teaches the result: that ϕ exists, confirming T and effectively disproving *R*. In this case, not only did Stella not believe what she says, but neither did A, who published the paper, nor did B or C, who refereed the paper at *Nature*.

In GRANT SCHOLARS, we have a situation with a structure similar to CREATIONIST POSTDOC – a putative counterexample to TEP-N* – but, as we will now show, GRANT SCHOLARS avoids all three of the objections to CREATIONIST POSTDOC considered in the previous section.[13] First, let us take a look at the *overdetermination objection*.

The overdetermination objection was (essentially) that, in CREATIONIST POSTDOC, the piece of testimony Stella offers her students was one for which Stella possessed a knowledgeable source, *even though* Bella (also a source for Stella of the same piece information) failed to count as knowing. In GRANT SCHOLARS, the situation is different. The piece of testimony is not overdetermined for Stella by some knowledgeable source. No one in the chain knows non-testimonially that that ϕ exists, confirming T and effectively disproving *R*[14]. Moreover (unlike in CREATIONIST POSTDOC), the testimony Stella offers her students (that ϕ exists, confirming T and disproving *R*) has plausibly passed the scrutiny of scientific consensus (unlike the situation in which the exclusive source for the information is Bella's testimony).

GRANT SCHOLARS also avoids *Audi's Dilemma*. Recall that Audi worries that if the students base their acquired belief entirely on testimony, then since the teacher would teach what she does merely because she is told to teach it, regardless of whether she thinks it is false, then the testimony is unsafe, and the students fail to know. On the other hand, if the students know that teachers at that school reliably teach only what is true, then the students know what Stella tells them but their knowledge is not entirely testimonially based. We offer two reasons why GRANT SCHOLARS is not troubled by this dilemma. Firstly, in GRANT SCHOLARS (and unlike in CREATONIST POSTDOC) Stella is teaching an upper-level elective course on particle physics. She is not required to teach the result from the article in *Nature*. She is allowed to select other relevant material on particle

13 We can suppose the editor of *Nature* is also religious, like A, B and C and Stella. Thanks to Duncan Pritchard and Jesper Kallestrup for this suggestion.

14 One might resist this claim by insisting that Stella is basing her assertion *partly* on what the editors of *Nature* (and the scientific community) take to be supported by the evidence. But this point can be granted. After all, it would admittedly be strange to say that Stella's appreciation that the scientific community endorses the verdict of articles that pass editorial scrutiny at *Nature* does not factor at all into her endorsement of what she asserts. However, even granting this, it remains the case that no one on the relevant chain possesses non-testimonial knowledge that that ϕ exists, confirming T and effectively disproving *R*. The original sources do not know, because they fail the belief condition. Moreover, no-one further down the chain has non-testimonial knowledge that that ϕ exists, confirming T and effectively disproving *R*.

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physics (whereas Stella, in CREATIONIST POSTDOC, is *supposed* to teach that *Homo sapiens* evolved from *Homo erectus*, regardless of what she thinks about it). So, in this respect, the actual reasoning Audi gives for supporting the claim that Stella's testimony would be unsafe, threatening CREATIONIST TEACHER and CREATIONIST POSTDOC, does not apply *mutatis mutandis* to GRANT SCHOLARS. This much is enough to diffuse the dilemma. However, we note also that, following Graham (2006*a*: 115), there is a more general line of reply available. The second horn of Audi's dilemma would be capable of demonstrating that in virtue of accepting that teachers reliably only teach what is true, the students' knowledge is not entirely testimonially based, on pain of overgeneralization. By Audi's lights, it would seem that almost no classroom-based testimonial knowledge is proper testimonial knowledge. But classroom-based testimonial knowledge is *paradigmatically* proper testimonial knowledge.

Regarding Kletzl's *indirect testimony objection*: we wish to note upfront that Kletzl's argument that Stella knows what she (indirectly) asserts can be resisted by denying *either*:

(i) that Stella's assertion in GRANT SCHOLARS (e.g. that ϕ exists, confirming T and disproving *R*) is better understood as an *indirect* assertion to the effect that "*According to A* ϕ exists,[15] confirming T and disproving *R*"; *or*
(ii) that Nt_i is a reasonable transmission principle for indirect assertions.[16]

Our strategy will be to first suggest a plausible line against (i) and then to show that *even if we grant* (i), we should still resist the conclusion that Stella knows what she (indirectly) asserts.

Firstly, here, the case against (i): a plausible way to resist Kletzl's claim that we should construe Stella's assertion as indirect will be by appealing to a difference in what Lackey (2011) calls the "institutional roles" occupied by science teachers and teachers of works of fiction, as in Kletzl's case of the *Parmenides*. It is plausible to suspect that while indirect assertion is commonplace when discussing what is recognized by teacher and student as a work of fiction, the norms permitting indirect assertion here do not carry over to assertions in a scientific context. At least, the point could be pressed that quite a bit more is needed to see why it would. Relatedly, in the context of a science classroom, students are inclined to infer "*p*," rather than (for instance) "*p*-according-to-some-narrative." The speaker also knows this, yet does nothing to qualify her claims. This is a further reason to resist the idea that the features of Kletzl's *Parmenides* case apply, mutatis mutandis, to cases in a science classroom setting.[17]

But even if we grant Kletzl, (i), a kind of "defeater" problem persists: The issue is that Stella's would-be knowledge of what she indirectly asserts is subject to an undefeated

15 Cf. "A asserted p." The construction "According to S, ϕ" is tantamount to "On S's view, ϕ." That S does not believe ϕ is a defeater for the claim that, on S's view, ϕ.

16 As further strategy for resistance, notice that Kletzl's Nt norm might be resisted on the grounds that it inherits the alleged problems with the more general schema of which it is an instance; that is, replace "S asserted that p" in Kletzl's Nt with "p," and it is just the familiar principle that testimonial knowledge acquisition requires prior knowledge in the chain. One sympathetic with GRANT SCHOLARS will thus not be inclined to accept Nt from the outset. Regardless of whether it is true, then, it could be argued that one wishing to advance the indirect testimony line to diffuse the GRANT SCHOLARS counterexample could not *rely* on Nt.

17 Thanks to Peter Graham for helpful comments on this point.

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factual defeater – viz., that neither the author of the *Nature* article nor the experts who reviewed it *actually believed* that "ϕ exists, confirming T and disproving *R*." So, *even if* we construe Stella's testimony in GRANT SCHOLARS as a kind of indirect testimony, it is not at all clear that we can grant Kletzl that she knows what she asserts indirectly.[18]

Unlike CREATIONIST TEACHER and CREATIONIST POSTDOC, GRANT SCHOLARS turns out to be a *bona fide* counterexample to the necessity component of the transmission thesis – construed *either* in the strong form TEP-N or (as we have shown) in the weaker, more plausible form, TEP-N*. Accordingly, the transmission of epistemic properties thesis – a thesis comprised of the necessity and sufficiency components – is false.

GRANT SCHOLARS is not unique. We can easily imagine other cases exhibiting a similar pattern. For example, a legal example can be devised exploiting potential differences between ordinary standards of legal evidence and the idiosyncratic standards possessed by the speaker:

> ALT-KARAMAZOV: Suppose, contrary to Dostoevsky's actual novel, Dmitri killed his father. The circumstances suggest that Dmitri is guilty, and he is, but nobody has yet formulated a definitive judgment because the evidence has not yet been presented in full. Katerina, Dmitri's fiancée, is testifying in the trial. After hearing the other witnesses produce strong evidence against Dmitri, she tells her own story, which is also incriminating, and on cross-examination she is asked if the evidence suggests that Dmitri has committed the crime. She does not believe in Dmitri's guilt even when considering all the evidence together. But under the circumstances she says yes, the evidence suggests he is guilty, because she can see that that is what the court will conclude. Suppose a member of the public enters the courtroom at that point for the first time and hears her say this, thereafter forming the belief (and coming to know) on this basis that the evidence suggests that Dmitri is guilty.

Brothers Karamazov is regarded as a literary classic by some legal scholars because it points up tragic differences between standards of evidence among intimates (and the faithful) and those rightly holding in a court of law (Posner 2009: 225). Here we exploit this theme to create a case parallel to GRANT SCHOLARS. The shared elements are that (a) the speaker possesses information that could count as evidence for the claim testified, (b) the speaker delivers testimony in a context suggesting expertise (scientific or legal contexts, for example), and she delivers this testimony to apt recipients, and (c) the speaker herself does not believe, accept or know the statement testified because her own standards of evidence deviate from those normally adopted in the context. In scientific and legal contexts, at least, testimony appears to be able to generate knowledge in the recipient of testimony that does not absolutely depend on the knowledge of the testifier.

6. CONCLUDING REMARKS

Lackey argues on the basis of her cases that what matters for testimonial knowledge is the reliability of the speaker's statements, rather than the speaker's epistemic or doxastic state. Epistemic properties are not uniformly transmitted. Instead, according to Lackey, new epistemic properties can arise through testimony. A person can come to have knowledge through testimony even though nobody, including the testifier, previously had

18 Thanks to an anonymous referee for helpful suggestions on this point.

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knowledge.[19] GRANT SCHOLARS implies that assertions of valid scientific results do not require the credence of the asserter in order to produce knowledge in a hearer. This is congruent with the idea that scientifically valid methods of acquiring knowledge do not depend for their validity on the credence of those who carry them out. Lackey holds that it is the *competence* of the testifier that confers reliability on her statements. Competence can be spelled out in various ways linking statements (in a particular context) with the truth.

Graham (2000) holds an even more minimal view about the necessity of speaker belief for transmission of knowledge. The core of his account is that information that p is available to a hearer as a result of a speaker's testimony solely in virtue of features of H's "internal, cognitive state of understanding S as having asserted that p." For him, it is purely the comprehension of the listener that matters for knowledge acquisition. All that is needed is that the testimonial signal safely "carries the information that p." Even wind blowing through the trees, sounding like speech, could do this so long as for whatever reason under these circumstances it would not sound like p unless p were true.

However, not everybody has gone along with Lackey and Graham to conclude that there is no across-the-board dependence of epistemic properties in the recipient of testimony on those of the testifier. Tyler Burge, in a recent postscript (2013) to "Content Preservation" (1993), claims that in cases such as those discussed above, where no single person in a chain of testimony possesses all the ingredients of knowledge, it can nonetheless be the case that "the knowledge that the students gain resides, collectively, in the antecedent chain" (2013: 257). He notes that mathematical proofs and scientific explanations often generate knowledge this way because knowledge is created collectively even though "no individual has full control of the explanation or the proof" (2013: 257). By positing collectively possessed knowledge, Burge maintains a version of TEP-N. One may worry that this is dogmatic: we need a strong, independent reason to hold that knowledge must be present somewhere in the chain – if not in any of the individual links, then in the chain considered as a whole. Scientific instruments that deliver their readings in natural language can generate knowledge in their users, without our needing to insist that the instrument "knows" or "accepts" the statement asserted. Why should human testimony be different? For Burge (2013), reliability of human testimony is non-accidental because it is linked to the rationality of psychological capacities of comprehension that enable faculties of reason in our natural social environment. On this view, some version of the transmission principle may play an important role in explaining why we have testimonial knowledge-acquisition in the first place.

The merits of Burge's view are worthy of fuller discussion on another occasion. For now we can conclude that any formulation of the underlying idea that testimonial knowledge somehow depends on the work of others will need to take into account cases in which none of those who have done that work or asserted it have knowledge of what they testify, but testimonial knowledge in the hearer results nonetheless.[20]

19 Important to Lackey's 'dualist' approach in the epistemology of testimony, she does not move from this insight to the view that we should embrace orthodox reductivism. See her Nested Speaker case (2008, Ch. 5).

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