A LAYMAN'S GUIDE TO EXPERT OPINION

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ABSTRACT

In this paper I will contrast two views of expert testimony, an authoritarian view and a libertarian view. I will show that the authoritarian view has some problems that the libertarian view can solve. An authoritarian view leads to skepticism about expert testimony, as, on this view, acceptance of expert testimony is blind. It also seems to make scientific revolution inherently unreasonable. Having shown that libertarianism can easily address these problems, I conclude by outlining a way of integrating this view with a broader theory of testimony.

Keywords: Expert testimony; Authoritarianism; Libertarianism

In this paper I will compare and contrast two epistemic views of expert testimony. One view I will call authoritarianism and the other libertarianism.[2] In section one, I will introduce the authoritarian view of expert testimony and raise some challenges to it. In section two, I will lay out the libertarian view and show that it can answer the challenges proposed in section one. In section three, I will consider what each view has to say about the consensus among groups of experts. I consider three problems with the authoritarian view and show how the libertarian view can easily deal with them. In section four I will consider how

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such a view might be integrated within a broader theory of testimony. The overall upshot of the paper will be to make some progress towards understanding, first, the proper epistemic role of expert testimony, and finally, the conditions under which one might be justified in holding a position in spite of expert testimony to the contrary.

Section 1-The Authoritarian View

The notion that we must "*trust* the science" and "believe the experts" is all the rage these days. In some quarters it has become something of a political slogan. One doesn't have to look too hard to find colleagues, friends and family echoing the same authoritarian sentiment. "There are people who know these things, people whose job it is to scour the journals and come to reasonable and principled conclusions that are properly apportioned to the data. You should trust their conclusions. Anyway, who are you to say any different? How could *you* possibly know if they were wrong?" One must admit the *prima facie* force of the sentiment. But what is the *philosopher* to make of it? What are the general epistemic principles that warrant such a sentiment? What is the *general epistemic framework* in which such principles are situated? What are the consequences of such a view? These are important questions that, to my mind, have not been addressed with any philosophical rigor.

What is the essence of the authoritarian view? Clearly the core principle of the authoritarian view is that expert testimony (Φ) to the effect that *p* provides us with a strong reason to believe that *p*.[3] It isn't clear, however how strong a reason Φ gives us, or under what conditions someone might obtain a defeater for Φ. What is clear is that the limit case seems problematic.

In the first place, there is what I will call the objection from scientific progress (OSP hereafter). Authoritarianism seems to make reasonable scientific progress impossible. It seems to entail that all scientific and intellectual progress is necessarily unreasonable at its inception, for presumably all such progress begins with a minority view, often with those lacking the requisite establishment credentials. It is

ironic that the authoritarian view, so intimately connected to scientism, a scientism based on the radical success of science, has the potential, if taken to its logical end, to undermine that very success.

Furthermore, there is what I will call the Layman's Dilemma (LD hereafter). How would the layman ever be in a position to know if he has encountered expert testimony? Is it reasonable for the layman to assess the evidence only until he becomes justified in believing Φ, at which time he has an overwhelming and undefeatable reason to believe *p* based on Φ? Questions of expertise can often be as complicated as the technical issue itself. What constitutes expertise? How do we know when one possesses it? And *which* expertise is relevant? This is to say nothing of the frequent disagreement of experts. How can the layman be competent enough to come to the conclusion that Φ supports *p* in some situation and yet not competent enough to challenge Φ in any way? How could it be that the layman is reasonable in assessing, on his own, complex issues of who does and who does not possess the relevant expertise, only until such a time as he becomes justified in believing Φ, at which time he loses all autonomy, is epistemically helpless against Φ's power and may never have a defeater for E? Perhaps the authoritarian will suggest that the layman isn't competent enough to know when he has encountered expert testimony and that we must have experts about experts? Will this lead to an infinite regress of expert testimony?

Authoritarianism seems to open wide the door to skepticism about expert testimony. Because the evidence of the experts is beyond our ken, we are unable to challenge it. But then, for the same reason, our trust in the experts will always be blind.[4 5] To be frank, history is full of examples of experts talking nonsense. Let us take 2 examples. In 1851, the American physician Samuel Cartwright shed light on what he saw as an important illness in his community. He called it Drapetomania. Drapetomania was the mental illness responsible for slaves running away from their masters.[6] Ignaz Semmelweis was a 19th century German physician who advocated hand washing. He believed that the high mortality of women after childbirth was due to unsanitary conditions. Doctors would perform

autopsies and then go directly to deliver babies without washing their hands. Although Semmelweis's views seem obvious to us now, at the time they were met with much resistance among his peers. He was widely mocked and his career and reputation were damaged.[7]

It is easy for us to look back on many of the incorrect and morally abhorrent views of the past, those to do with slavery, hysteria, heliocentrism, phrenology and eugenics (and the accompanying forced sterilizations), and condemn them. But had we been laypeople in that culture, how would we have responded to the authoritarian critics? As laypeople now, how do we know that we are not in a similar situation with respect to some particular topic?

Of course, no one, or almost no one, actually believes in the limit case of radical authoritarianism. The point isn't to attack a strawman, but rather to use the view as a foil to introduce the problems and to outline a possible solution to those problems. I doubt that anyone actually believes that it would have been reasonable for a layman to believe in Drapedomania and to treat a runaway slave as if he had a medical condition. Why? The layman has some epistemic duty, as an individual, to investigate what the experts are telling him. Had he done so, he would have seen it for the clear nonsense that it is. While there is something epistemically virtuous in the authoritarian intuition, it must be tempered with the other, more individualistic, more libertarian epistemic virtues. It is to these virtues that I turn in the following section.

Section 2-The Libertarian View

Let us say that the libertarian view[8] is as follows:

S is justified[9] in believing *p* on the basis of testimony Φ of an expert E if and only if he is justified in believing:

(1) *p really is the view of E*
(2) *p is within the scope of E's expertise*
(3) *Φ is reliably connected to E's expert knowledge*
(4) *S possesses no outside defeater for p*

Let us take each in turn, briefly. Condition (1) is meant to secure our link from the expert to the assertion of proposition *p*. We need to be sure that the expert actually said this, that he intended to say it, and that we have not misunderstood what he said. People can be easily confused or misinformed about what a particular expert has said. Something an expert says may be taken out of context or misinterpreted. He may have misspoken or made a mistake at a particular moment that he wouldn't wish to stand by.

Condition 2 is meant to address the *relevance* of the expertise. Is E's expertise the sort of expertise that can support *p?* This is not always an easy matter. Take, for example, the pandemic, and the various public health policies that have been instituted. When one is considering the various courses of action, clinical doctors, virologists, epidemiologists, biochemical scientists, and even statisticians, they may have something to say about the risks of a certain illness to the public. Economists, sociologists, psychologists and public health experts may also have important insights into the broader ramifications and effectiveness of certain policies. Goldman's evidence type C and D apply here. A layman might take into account here, "Appraisals by 'meta-experts' of the experts' expertise (including appraisals reflected in formal credentials earned by the experts)."[10] Also the evidence from E's past track record on a certain topic might provide good evidence that she has a relevant expertise.

Condition 3 is meant to avoid a situation that might easily undercut an expert's testimony. Of course, this would include cases where an expert has certain financial, political or personal conflicts of interest.[11] It also includes situations where a selection effect may be at work within a group of experts that might give them a particular bias. It might be the case that most Bible scholars believe that 'the Bible is the word of god' (B). It may also be the case that the majority of Bible scholars are fervent Christians, and one might wonder if this undercuts their testimony. Perhaps B isn't reliably connected to their expert evidence base. Perhaps the field itself selects for fervent Christians and so there is only an epistemically accidental connection between the expert's opinion and her membership

in the class of Biblical scholars.[12]

When one thinks about it, this selection effect is quite common. Contemporary philosophy of mind tends to attract people who are interested in the difficult question of *how* to reduce the more mysterious qualities of conscious experience to the brain. Undoubtedly, these people will be people who think that it's possible such a reduction can be made. Those who are compelled by dualistic arguments are unlikely to spend 20 years engaged in what they view as, quite literally, an impossible project.[13]

An additional condition (4) is necessary to capture other defeaters because, it is conceivable, that, for whatever reason, an expert could tell me something that is impossible for me to believe. If a scientist of the relevant ilk were to tell me that the sky is red, or that 2 and 2 is 5, I would simply be unable, with my current noetic structure to accept such a view. I doubt that anyone would think it reasonable to believe such a thing based on testimony alone, even having met conditions 1-3. In such cases the expert will have asked us to discard beliefs that are weightier than his erudite pronouncements. These propositions would belong to what Goldman refers to as the exoteric aspects of an expert's claims, those that are relevant to the truth claims of the expert, and yet fall outside of the body of knowledge that constitutes the expertise.[14] Suppose that a logician shows a layman the following argument:

(A) If 2+2=5 then you are a snowman.
(B) 2+2=5
(C) You are a snowman

Perhaps the validity of the argument is esoteric to the logician's expertise, but the fact that two and two is not five, and that the layman isn't a snowman are exoteric. They are perfectly within the grasp of the layman, and provide sufficient grounds to reject the argument, even if he doesn't have a proper grasp of logical validity.

It is also possible, if unlikely, that one could be in a position where he is actually in possession of knowledge that isn't yet available to the

experts in the field. It is possible that this additional knowledge could provide a defeater for the expert testimony.

On the view that I am describing, the definition above captures the epistemic duty of the individual thinker. When confronted with expert opinion, the layman's duty is to examine (1)-(4) *to some extent*. She will have obtained a defeater just in case she sees that one or more of the conditions above is not met for one reason or other.

The libertarian view sees expert testimony as an extension of one's own cognitive faculties, much like a computer or a telescope. In fact, when one considers the conditions under which one would be justified in trusting the pronouncements of a computer program, an x-ray, or a microscope, one sees almost perfect parallels. The subject matter expert, like the computer or the telescope, allows the layman to see farther and faster than he would ordinarily be able to see, but, unlike the authoritarian, the libertarian insists that he must not abandon his responsibility to ensure that he is using these tools properly.

In section 1 we leveled three charges against the authoritarian view, OSP, LD and the skeptical challenge. I want to close this section by considering how the Libertarian fares by comparison. OSP as you will recall, charged that the authoritarian view entails that much, if not all, scientific progress is irrational at its inception. It is known that, many times in history, scientific progress has been made by someone considered to be a layman, who overturns the consensus view on a certain matter. The libertarian view has a perfectly cogent explanation of how a layman may be justified in rejecting the view of an expert. He is justified just in case he sees that the expert testimony has failed to meet conditions (1-4).

Likewise, the libertarian view avoids the horns of the LD. The epistemic libertarian does not view the layman as being capable of working out the complex and subtle issues that allow him to perceive the force and presence of some expert testimony Φ and yet unable to resist, challenge or overthrow Φ in any way once he has discovered it. Neither does the libertarian think that the layman needs to rely on an infinite regress of experts to discover Φ. He discovers, tests, and uses Φ in his

epistemic pursuits in the same manner as he would use a metronome, a stopwatch or a microscope, and he is generally justified in believing the pronouncements of these tools in the same way as he is in trusting the pronouncements of the expert. Expert testimony, on this view, is not a radically different sort of evidence, but rather a tool for discovering, quantifying and summarizing ordinary evidence that is checked and supported in terms of ordinary evidence. Neither does the libertarian view fall prey to the problem of skepticism because, on this view, our trust in the experts is not blind.

Section 3-The Consensus View

I have dealt with the epistemic role of an individual expert in the epistemic life of a layman primarily because it provided a simplified heuristic. However, as anyone can tell you, the matter is rarely that simple. When it comes to expert testimony, there are usually various groups of experts, often in different fields, who often do not agree. How do our respective epistemic theories deal with this situation?

The authoritarian view here will involve a strong deference to the consensus of the experts. Instead of deferring to the individual, in this case, we should defer to the consensus of the relevant group of experts. In the case of a gridlock, we ought to withhold judgment.

Again, it isn't clear how much deference is due, but it is clear that the limited case presents serious philosophical problems. Again, we must admit that there is some intuitive value to the authoritarian principle. There is something right about it. If a group of medical experts tell us, for example, that a certain antibiotic is the best treatment for bacterial pneumonia, then, prima facie, we are faced with a strong piece of evidence that there is good evidence in favor of the treatment. A group of ostensibly capable people, whose business it is to know what that evidence is, has told us that the evidence for the treatment is overwhelming. The best explanation of the fact that the medical experts are saying this is that they think it is true, and the best explanation for why they think it is true is that it is true.

But is it *always* the best explanation? And is the layman really *never* in a position to see that it sometimes isn't or at least might not be? Again, here we must temper authoritarian virtue with more libertarian values. Let's outline the libertarian position as follows:

S is justified in believing *p* on the basis of the consensus testimony Φ of a group of experts E if and only if he is justified in believing:

(1)* *p really is* the consensus view of the experts
(2)* *p* is within the scope of E's expertise
(3)* Φ is reliably connected to E's expert knowledge
(4)* S possesses no outside defeater for *p*

Again, S would acquire a defeater for *p* just in case he became aware that one or more of these conditions was not met. If S were to become aware, for example, that there was a great deal of media censorship on a particular issue this might give him a reason to question condition (1)*, and thus might give him a defeater for Φ. Or if he saw that severe personal and professional penalties were being applied to dissenting experts for no other apparent reason than that they disagreed with the orthodox view, then this might also give S a defeater via questioning (1)*. How can we be sure that we actually know what the consensus view is on a topic if many experts are not allowed to speak?

Censorship might also call into question condition (3)*. How can we know if Φ is reliably connected to the knowledge base of the experts if those who disagree are not allowed to speak? In such a case, an artificial consensus may have been created by terrifying anyone who dares to disagree with a certain view, or by taking away their right to speak on the topic.

People often underestimate the difficulty involved with determining how the consensus of the experts ought to inform a reasonable mind. It is difficult to know, at any given time, with any certainty, what the consensus view is within a field, or if there is one. It is also difficult to know what field or fields are relevant to a discussion or how to adjudicate the disputes

that may arise between them. I think here, the problems raised above, LD and OSP, or their analogues, will be even more pressing.

LD, the Layman's Dilemma, or it's analogue here, is that either the layman is able to work through the complex issues of determining if there is a consensus, what the consensus view is, what the relevant expertise is, and if the consensus view is reliably connected to the expert knowledge base or not. If he is, then he seems just as competent to assess a group of experts and determine if what they are saying makes sense. It seems absurd that he would be competent as a rational thinker only until he discovered the truth about some expert consensus, at which time he loses all rational ability to dissent from it.

OSP, or the objection from scientific progress, stated that the authoritarian epistemic view left no room to explain the rationality or epistemic permissibility of scientific revolutions. We know that science progresses rapidly, often by overturning old theories. By definition, a scientific revolution occurs when a small group of people, or even an individual, bucks a consensus. All revolutionary theories will, at some point be held by a minority. There was a time, perhaps, when the theory of biological evolution was held only by Darwin, or general relativity only by Einstein. There were times in history when the heliocentric model would have been a minority view. Yet in each case the majority were wrong and the minority were right. Authoritarianism provides no answer to the reasonably skeptical question: How do we know, we are not in the same situation now?

The libertarian view handles these objections easily. Our trust in the consensus need not be blind or undefeatable. The consensus view must be viewed as significant, but fallible, and subject to defeaters any time it runs afoul of conditions (1)*-(4)*. When such defeaters become apparent to the layman, it is reasonable for him to ignore the consensus view. In fact, it may be that the layman has a duty, epistemically or morally, to defy the consensus.

I would be remise not to say something of the moral dimension here. We need not look far to find historical examples of slavery and

oppression that have operated with the full support of the establishment experts. There was a time when the abuses of the Eugenics movement, with its forced sterilizations, was said to be supported by the best science of the time. The authoritarian view comes then, not only with an epistemic danger, that it may lead its adherents into a mare's nest of the faddish false beliefs of a particular time, but with a potential *moral* hazard-that unquestioning and authoritarian people may follow establishment experts into some horrific moral atrocity.

Milgram experiments[15] have shown that people are quite susceptible to the blind obedience to authority, and the majority will commit grossly immoral actions if a perceived authority commands them to do so. It is imperative then, not only epistemically, but morally that we endorse a theory that encourages a healthy skepticism of expert testimony.[16]

Section 4-Towards Integration

Like Goldman, I believe that we can make progress on this issue of expert testimony without resolving some of the more fundamental issues in the epistemology of testimony.[17] However, it seems clear that the answers we give to it will have to be shaped by the constraints of how that answer might fit with more general theories of testimony. In what follows, I briefly outline how libertarianism might fit within a broader view of the epistemology of testimony.

It seems to me that the most natural fit for the libertarian view of expert testimony is within the information transfer view put forward by Peter Graham (2000). Graham considers the view put forth by Thomas Reid that there is an important analogy between the epistemology of perception and the epistemology of testimony.[18] On this view, when someone comes to know something by testimony, what is transferred to the hearer is information. This view contrasts with other transfer views, like those of Plantinga or David Owens, on which the target of transfer is the epistemic warrant or justification that the testifier has for a belief.[19] [20]

In setting forth the view, Graham defends two major propositions:

> (IN) H comes to know that P by accepting that P only if H's basis for believing that P – H's internal, cognitive state of taking S as having stated that P – *carries the Information* that P.
>
> (IS) If H's basis for believing that P – H's internal, cognitive state of taking S as having stated that P – *carries the Information* that P and H justifiably accepts that P then H comes to know that P.[21]

The view makes sense of the intuition that expert testimony ought to be weighted very heavily in epistemic considerations. Expert testimony carries information that would be otherwise difficult for us to obtain, and, under certain conditions, this information is more reliable than which comes to us via the layman.

I see two main avenues to weld the theory here expressed to Graham's information transfer view. The first and perhaps most obvious entry point is in the 'justifiably accepts' condition in (IS). It might be that something like conditions (1)-(4) or (1)*-(4)* above well describe the justifiability condition in (IS).[22]

The second avenue comes by way of Graham's perceptual analogy. Perceptual knowledge, says Graham, requires that:

> ...one's belief that *p* is based on adequate grounds. Adequate grounds are those that *establish the fact* that *p* or *guarantee the truth* that *P*... One way to understand adequate grounds is in terms of *information carrying*. Information carrying is due to a law-like correlation or counterfactual dependence between a signal – an event, condition, of state of affairs – and another event, condition, or state of affairs. The rings of a tree, for example, carry the Information or *indicate* the age of the tree. Footprints of a certain sort in the snow carry information about wildlife in the vicinity. All of this,

> however, is *relative* to circumstances, to the local conditions that obtain. When a signal carries the Information that P it is a guarantee *in the circumstances* that P. Certain tracks or marks in the snow would not be there *unless* local wildlife were there...[23]

It may well be that when one considers those adequate grounds relative to the circumstances of expert testimony, one might well come up with conditions identical to or closely resembling conditions (1)-(4) or (1)*-(4)* above. One might find that these conditions constitute the state of information conveyance described in (IN), the law like connection between the expert's testimony and the information that gives rise to the expert's testimony. It may be that the defeaters one acquires when one runs afoul of (1)-(4) or (1)*-(4)* can best be thought of as a breakdown of information conveyance.

There are many questions that remain here about the relationship between the theories. To address them in any sufficient detail is beyond the scope of the present work. The point is that, intuitively, there is *at least one* general view of testimony within which my views on expert testimony seem to fit quite naturally.

Conclusion

I have proposed a general theory here of the proper epistemic role of expert testimony. On this view, expert testimony is a tool that must be used carefully and inspected often by the user. I have described, in rough outline, at least, the conditions under which someone might reasonably disagree with expert opinion. I have contrasted this view with a more extreme authoritarian view whose core tenant is deference to an expert or a group of experts. I have done this not to use the authoritarian view as a straw man, but because this view seems to be fairly commonplace. Furthermore, when one considers these more authoritarian viewpoints, it simply isn't clear when, if ever, someone might have a reasonable disagreement with an expert. If there is a principled place, to the left of

libertarianism, but short of the limit cases of extreme authoritarianism that we have been discussing, where one might draw the line of reasonable disagreement with the experts, then I am unable to see it, and invite those of a more authoritarian persuasion to present it.

Clearly, expert opinion is of great value, and a reasonable person ought to place a great deal of weight on it. Clearly *some* deference is due to an expert. What is not clear is how much and under what conditions. This paper attempts to give an answer to these questions, subject of course, to correction by the experts.

ENDNOTES

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[2] I chose the term 'libertarianism' as an epistemic parallel to the political notion of individual freedom and responsibility based on the concept of natural rights laid out by Nozick, Locke, etc. or, to take things further still, by Ludwig von Mises and Murray Rothbard. See, for example, Robert Nozick (1974) Anarchy, State, and Utopia; Ludwig von Mises (1940) Human Action; and Murray Rothbard (1962) Man, Economy and State. The view emphasizes the rights of the individual and freedom from centralized government control. The parallel, as I see it, involves the discussion over individualism and collectivism. To what extent should authority, political or epistemic, be decentralized? The views are highly controversial, and terms like 'liberal' and 'libertarian' are often used in varied and confusing ways. The point here is not to take a position on the views themselves or the way in which the terms ought to be used so much as to point out a helpful analogy between questions involving the role and function of political and epistemic authority.

[3] My use of the term "authoritarian" is less rigid than others. I mean only views that weigh expert testimony very heavily. Lackey describes the authoritarian view as one on which "…the testimony of experts is not one piece of evidence to be weighed with other evidence the hearer might have; rather, experts provide preemptive reasons for belief in the domain of their expertise. Moreover, beliefs formed on the basis of expertise on this view can be justified via the sort of conscientious reflection discussed above" (Lackey 2018, 232). Coran Stewart (Stewart 2019, 2-3) describes that Authoritarian view as one in which expert testimony is preemptive. "When a layperson believes *p* on the basis of expert testimony that *p* in the way described here, the layperson allows the expert's reasoning to stand in for her own in the attempt to reach the truth

as to whether *p*. The layperson gives up deliberating on the matter herself" (Stewart 2019, 3). These would be rather extreme forms of what I am calling authoritarianism. Lackey argues that one may not be able to obtain a defeater for a belief based on expert testimony. Stewart, argues, contra Lackey, that one might only acquire a defeater by undercutting the expert testimony that the belief is based on. There are other views, however, that Lackey and Stewart might consider non-authoritarian, or adviser views, that would be considered authoritarian views in my sense, if they put enough weight on expert testimony, and enough emphasis on deference to expert testimony.

4 John Hardwig, "The Role of Trust in Knowledge," *The Journal of Philosophy* 88, no.12 (1991): 693.

5 Alvin Goldman, "Experts: Which Ones Should You Trust?" *Philosophy and Phenomenological Research* 63, no.1 (2001): 86.

6 Samuel A. Cartwright, "Report on the Diseases and Physical Peculiarities of the Negro Race," *The New Orleans Medical and Surgical Journal*, (1852): 707-9.

7 Imre Zoltán, "Ignaz Semmelweis," *Encyclopedia Britannica*, August 9, 2021. https://www.britannica.com/biography/Ignaz-Semmelweis.

8 The libertarian view here is very much in the spirit of Lackey' advisor view on which expert testimony that *p* does not provide a preemptive reason to believe in *p*, but rather her testimony provides evidence and guidance that should be considered along with one's total evidence (Lackey 2018, 238-9). As I said above, however, there are adviser views that would be considered authoritarian in my sense, if they put enough weight on expert testimony or on the deference to experts.

9 There may, of course, be other senses of 'justified', but I believe these conditions identify an important concept in the epistemology of expert testimony.

10 Goldman, ibid, 93.

11 This is Goldman's evidence (D), see Goldman, 93.

12 Absent condition 3, it is easy to use such examples to construct Gettier cases, see Gettier 1963.

13 Or think also of the philosophy of religion, where the majority (perhaps 70-80%) are Theists (Weinberg 2019). It is possible that this majority is explained, not so much by the status of the arguments in that field, but by the fact that those with atheistic or agnostic intuitions do not often view the topic to be worth the time and effort that it requires to obtain an expertise in the field.

14 Goldman, ibid, 94.

15 Stanley Milgram, "Behavioral Study of Obedience," *Journal of Abnormal and Social Psychology* 67, no. 4 (1963): 371–8.

16 For more on the morality of epistemology see William K. Clifford, "The Ethics of Belief," in *The Ethics of Belief and Other Essays*, ed. T. Madigan (Amherst, MA: Prometheus, 1877), 70–96.

17 Goldman, ibid, 89.

18 Peter Graham, "Conveying Information," *Synthese* 123, no.3 (2000): 366-7.

19 Jennifer Lackey, "Learning from Words," *Philosophy and Phenomenological Research* 73, no. 1 (2006): 77.

20 Lackey here presents difficult counterexamples to the transmission of epistemic properties. The information view avoids these counterexamples. For Lackey, what matters to testimonial knowledge is the competence of the speaker, which is to be understood in terms of the reliability of her statement. Lacky says that the "reliability of the statement in question can, in turn, be fleshed out in any number of ways." (Lackey 2006, 95) One could imagine it's being fleshed out in terms of the information theoretic framework laid out by Graham.

21 Graham, ibid, 365.

22 Graham demurs on the topic of Justification but does believe that an additional epistemic condition will be necessary, in addition to information conveyance, in order to achieve knowledge on the basis of testimony. Cashing out this justification condition in terms of conditions (1)-(4) or (1)*-(4)* above does not address any questions about an awareness condition, or about the presence of reasons or the absence of defeaters that might arise in a proper defense of the view here sketched. See Ibid, 368.

23 Ibid, 366.

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