

INTERNALISM, EVIDENTIALISM AND APPEALS TO EXPERT KNOWLEDGE

Michael J. SHAFFER

ABSTRACT: Given the sheer vastness of the totality of contemporary human knowledge and our individual epistemic finitude it is commonplace for those of us who lack knowledge with respect to some proposition(s) to appeal to experts (those who do have knowledge with respect to that proposition(s)) as an epistemic resource. Of course, much ink has been spilled on this issue and so concern here will be very narrowly focused on testimony in the context of epistemological views that incorporate evidentialism and internalism, and which are either reductivist or non-reductivist in nature. Also, as the main question about testimony addressed here is whether or not testimony can provide any basic justification at all, attention will be narrowly focused on the simple case where one is presented with testimony that something is the case from only one source and on one occasion. It turns out that there are some seriously odd epistemic features of such appeals to expertise that arise both for those who intend to accept internalism, evidentialism and reductivism about justification by testimony and for those who intend to accept internalism, evidentialism and non-reductivism about justification by testimony.

KEYWORDS: testimony, expertise, internalism, evidentialism

1. Introduction

Given the sheer vastness of the totality of contemporary human knowledge and our individual epistemic finitude it is commonplace for those of us who lack knowledge with respect to some proposition(s) to appeal to experts (those who do have knowledge with respect to that proposition(s)) as an epistemic resource. Of course, much ink has been spilled on this issue and so concern here will be very narrowly focused on testimony in the context of epistemological views that incorporate evidentialism and internalism, and which are either reductivist or non-reductivist in nature.¹ Also, as the main question about testimony addressed

¹ See, for example C. A. J. Coady, *Testimony* (Oxford: Clarendon Press, 1992), Elizabeth Fricker, "The Epistemology of Testimony," *Proceeding of the Aristotelian Society* 61 (1987): 57-84, Jonathan E. Adler, "Transmitting Knowledge," *Nous* 30 (1996): 99-111, Tyler Burge, "Content Preservation," *The Philosophical Review* 102 (1993): 457-488, "Interlocution, Perception and Memory," *Philosophical Studies* 86 (1997): 21, and John Hardwig, "The Role of Trust in Knowledge," *The Journal of Philosophy* 88 (1991): 693-708.

here is whether or not testimony can provide any basic justification at all, attention will be narrowly focused here on the simple case where one is presented with testimony that something is the case from only one source and on one occasion. It turns out that there are some seriously odd epistemic features of such appeals to expertise that arise both for those who intend to accept internalism, evidentialism and reductivism about justification by testimony and for those who intend to accept internalism, evidentialism and non-reductivism about justification by testimony.

Following Conee and Feldman's insightful analysis, internalists are, typically, accessibilists and mentalists.² Briefly, internalism is the view that one's justificatory status is a function of states internal to the epistemic agent. Accessibilism is the view that epistemic agents have some sort of privileged access to those states that justify the agent's beliefs, and mentalism is the view that justifiers are mental items. Evidentialism is the view, derived from Locke, Hume and Clifford, that one should never believe anything on the basis of insufficient evidence.³ The conjunction of evidentialism and internalism then yields the view that one should never believe anything without sufficient internally accessible, mental, evidence. Non-reductivism, as it will be understood here, is just the view, derived from Reid, that testimony is a basic source of justification in the sense that it can generate justification and that such justification does not depend on knowledge of the frequency of veracity of testimony. The later condition is crucial for if testimony did require such knowledge, then it would be dependent on induction and thus would ipso facto not be a basic, justification-generating, source. Reductivism will then be understood here to be the view that testimonial justification requires knowledge of the frequency of the veracity of testimony and so on this view the justificatory status of testimony is parasitic on the justificatory status of induction. In light of the problem that these views face concerning the probativity of simple testimony it will be suggested either that externalism allows for a much more reasonable account of the epistemic role of testimony and appeals to expertise in the generation and maintenance of knowledge, or that testimony may simply not be justification-generating at all.

² Earl Conee and Richard Feldman, "Internalism Defended," in *Epistemology: Internalism and Externalism*, ed. Hilary Kornblith (Malden: Blackwell, 2001).

³ See Jonathan E. Adler, "The Ethics of Belief: Off the Wrong Track," *Midwest Studies in Philosophy* 23 (1999): 267-285, Earl Conee and Richard Feldman, *Evidentialism* (Oxford: Clarendon Press, 2004) and Trent Dougherty, ed., *Evidentialism and its Discontents* (Oxford: Oxford University Press, 2011) for perspectives on evidentialism.

2. Grave Decisions, Ignorance and Testimony

Consider a typical and simple kind of case where agent A lacks knowledge of some proposition p , or $\neg K_A p$. For example, let us suppose that John does not know if *Amanita phalloides* is poisonous or not, and that he desires to resolve this issue because he needs to know if he can safely ingest a large example of that fungi. So, relative to his question concerning the toxicity of that variety of mushroom, John wants to bring it about that either $K_{\text{John}}(\textit{Amanita phalloides}$ is poisonous) or $K_{\text{John}}\neg(\textit{Amanita phalloides}$ is poisonous). Further suppose that John is smart enough not to simply eat the mushroom in order to acquire direct evidence concerning its toxicity. As a result of his ignorance, let us then suppose that John consults a person supposed to be expert mycologist, Mike.⁴ Mike, being an expert knows that *Amanita phalloides*, the death cap, causes cyclopeptide poisoning which can result in death and which is characterized by the following gruesome pathology:

- (i) A long latent period of up to 24 hours between the ingestion of the mushrooms prior to the onset of the first symptoms.
- (ii) The occurrence of diarrhea, abdominal cramps, nausea and vomiting.
- (iii) A 24 hour period of remission of the symptoms noted in (ii), followed by
- (iv) possible liver and kidney failure, and consequent death.⁵

So, ex hypothesi, $K_{\text{Mike}}(\textit{Amanita phalloides}$ is poisonous) and $\neg K_{\text{John}}(\textit{Amanita phalloides}$ is poisonous).

Consider, however, John's epistemic position in this typical kind of appeal to expertise and where we keep in mind that John is utterly ignorant of the answer to his question. If he is, in fact, utterly ignorant of the correct answer concerning the toxicity of *Amanita phalloides*, then he presumably seeks the advice of Mike because John believes that Mike knows the correct answer, i.e. that

⁴ So in this case we have what Alvin Goldman refers to as a case of novice/expert testimony. Discussion here shall be, for the most part, limited to these sorts of cases. Also, as the concern here is with the simple question of whether single case testimony can ever justify belief, we will not be concerned with cases where the novice is faced with multiple sources that assert p . This issue is addressed at length in Alvin I. Goldman, "Experts: Which Ones Should You Trust?" *Philosophy and Phenomenological Research* 63 (2001): 85-110 and in George N. Schlesinger, "Why a Twice Told Tale is More Likely to Take Hold," *Philosophical Studies* 54 (1988): 141-152 and L. Jonathan Cohen, "Twice Told Tales: A Reply to Schlesinger," *Philosophical Studies* (1991): 197-200.

⁵ See Gary Lincoff. *Toxic and Hallucinogenic Mushroom Poisoning: A Handbook for Physicians and Mushroom Hunters* (New York: Van Nostrand, 1977).

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$B_{\text{John}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]$. But, it is also clearly true in this example, following Hintikka, that $\neg K_{\text{John}}K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous})$ because if he did, then he would not be ignorant of the matter of the toxicity of *Amanita phalloides*. Hintikka's principle that underwrites this is as follows:

(HP) $K_A K_{BP} \supset K_{Ap}$.⁶

For the purpose of clarity, keep in mind, also, the contrapositive of HP:

(CHP) $\neg K_{Ap} \supset \neg K_A K_{BP}$.

HP is a desirable principle to satisfy as it implies that if A knows that B knows that p, then A knows that p *and* A then knows that B is an expert concerning p. However, with respect to the case we have been considering, if John knew that Mike knew that *Amanita phalloides* is poisonous then John would know that Mike knows that *Amanita phalloides* is poisonous is true. Consequently, since on the standard analysis of knowledge we cannot know what is false John would know that *Amanita phalloides* is poisonous. However, ex hypothesi, he does not know that *Amanita phalloides* is poisonous and so he does not know that Mike knows that *Amanita phalloides* is poisonous as is made especially clear by CHP.

However, it does not seem obviously necessary that John needs to satisfy HP with respect to the proposition that *Amanita phalloides* is poisonous in order to know that Mike is an expert and, hence, to make it rational to rely on Mike's testimony. So the following rationality condition for testimony is too strong:

(T1) If agent A is rational in relying on B's assertion that p, then $K_A K_{BP}$.

All that John appears to need to know is that Mike knows *whether* or not *Amanita phalloides* is poisonous, i.e. $K_{\text{John}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]$. Consider then the follow condition on the rationality of relying on testimony:

(T2) If agent A is rational in relying on B's assertion that p, then $K_A(K_{BP} \vee K_{B\neg p})$.

First, we must note, however, that T2 is clearly still unreasonably strong as requiring A to *know* that B knows whether or not p is true would rule out virtually every actual appeal to expert testimony on the grounds that we are rarely justified in believing such things to the degree that they count as bona fide knowledge.

⁶ Jaakko Hintikka, *Knowledge and Belief* (Ithaca: Cornell University Press, 1962), 61. Also, see Adler, "The Ethics of Belief" for a defense of a slightly modified version of HP.

So let us consider the more important and much weaker claim: $B_{\text{John}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]$, that John merely *believes* that Mike knows whether or not *Amanita phalloides* is poisonous. This is a reasonable rendering of the claim that John believes that Mike is an expert concerning the toxicity of *Amanita phalloides*. We can then weaken T2 as follows:

(T3) If agent A is rational in relying on B's assertion that p, then $B_A(K_{\text{B}p} \vee K_{\text{B}}\neg p)$.

Suppose then that Mike were to tell John that *Amanita phalloides* is poisonous and John satisfies T3 with respect to the proposition that Mike is an expert. Recalling also that $\neg B_{\text{John}}K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous})$ & $\neg B_{\text{John}}K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})$, that John believes neither than Mike knows it is poisonous or that it is not poisonous, we then know, at least, the following list of relevant facts about our situation:

1. *Amanita phalloides* is poisonous.
2. $\neg K_{\text{John}}\neg(\textit{Amanita phalloides} \text{ is poisonous})$.
3. $\neg K_{\text{John}}(\textit{Amanita phalloides} \text{ is poisonous})$.
4. $K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous})$.
5. $B_{\text{John}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]$.
6. $\neg B_{\text{John}}K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous})$.
7. $\neg B_{\text{John}}K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})$.
8. Mike tells John that *Amanita phalloides* is poisonous.

At least *prima facie* it should be clear that John's mere, unsupported, belief is not sufficient to rationally establish that Mike really is an expert on this matter and that T3 is thus too weak to support the contention that given 1-8, internalism and evidentialism John knows that *Amanita phalloides* is poisonous. If John is rational in appealing to Mike's expertise and thus can come to know or believe *justifiably* based on Mike's testimony, then John must have some sort of justification, either of the reductive or non-reductive sort, for his belief that Mike is really an expert on this issue.

In the immediate case at hand, it is easy to see why this is so. As far as John knows, Mike's testimony is no more liable to be correct than that of a randomly selected person from the population and, given the potential gravity of his choice, he needs to especially careful in formulating his belief. *Pace* Burge and Hardwig then, according to most reductivists it would (at least *prima facie*) seem that is not

enough that John simply *trusts* Mike without some reason to believe that Mike is knowledgeable about the toxicity or non-toxicity of *Amanita phalloides* if he is to come to have bona fide knowledge on the basis of Mike's testimony, at least if one wants to retain some standard form of evidentialism.⁷ Moreover, from a practical perspective, it would seem that John *should not* blindly trust Mike as if Mike is wrong John may die a horrible death.⁸ But, as we saw earlier, it is also unreasonable to require that John *know* that Mike is an expert. What we can reasonably expect, however, is that, in accord with evidentialism, John's belief that Mike is an expert must be justified, $J_{\text{John}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]$, and that his belief is so justified by sufficient evidence *e*. This yields the following rationality condition for accepting testimony:

(T4) If agent A is rational in relying on B's assertion that *p*, then there is sufficient evidence *e* available to A and relevant to $B_A(K_{\text{BP}} \vee K_{\text{B}\neg p})$ such that $J_{\text{B}}(K_{\text{BP}} \vee K_{\text{B}\neg p})$ on the basis of *e*.

But, problems then begin to creep up on those who wish to defend evidentialism, internalism and the view that testimony provides justification. These problems can be made acute by pondering the following question. What internally accessible mental items of evidence, i.e. what beliefs, could John conceivably have that would make it rational for him to regard Mike as an expert on the *specific* issue of the toxicity or non-toxicity of *Amanita phalloides*, and which would allow John to satisfy T4 with respect to that issue from his position of complete ignorance? In looking at this question, it will be shown that given internalism and evidentialism, the only plausible ways to satisfy T4 in such circumstances would require either satisfying HP, thereby rendering the appeal to expert testimony in such epistemic systems paradoxically superfluous, or by ceding the standard form of evidentialism and thus inviting incoherence. The former problem arises for reductivists because such testimony sufficiently supported by evidence will run afoul of HP. The latter problem arises for non-reductivists like Burge who hold that justificatory dependence on testimony is warranted a priori and thus cannot be evidential in the standard sense.⁹

⁷ See Burge, "Content Preservation," "Interlocution, Perception," and Hardwig, "The Role of Trust."

⁸ See Elizabeth Fricker, "Against Gullibility," in *Knowing from Words*, eds. Bimal K. Matilal and A. Chakrabarti (Dordrecht: Kluwer, 1994) for a related point.

⁹ Burge, "Content Preservation," "Interlocution, Perception."

3. The Failure of Internalist Evidentialist Reductivism

Clearly John's internal evidence cannot be that Mike has correctly answered John's question concerning the toxicity of *Amanita phalloides* in the past (either by demonstration or by having told John) and, hence, that John knows that *Amanita phalloides* is toxic in accord with HP, because then John would then already know or be justified in believing that *Amanita phalloides* is poisonous. Again, ex hypothesi, he neither knows nor is justified in believing this. Moreover, John's evidence cannot be testimonial evidence about Mike's expertise either without inviting a viscous regress with respect to Mike's testimony that *Amanita phalloides* is poisonous.¹⁰ To see the latter point suppose that Jim tells John that Mike is an expert on the matter of the toxicity of *Amanita phalloides*. So suppose that $K_{\text{John}}\{K_{\text{Jim}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]\}$. But on what basis can John reasonably believe what Jim says? The natural answer is that Jim possesses some relevant expertise, i.e. knowledge concerning Mike's mycological expertise and that Jim's testimony establishes this. So we might suppose that John's belief about Jim's testimony settles the issue. However, because John does not know anything about *Amanita phalloides* this prevents him from being able to justify his belief that Mike is an expert with respect to *Amanita phalloides* without further appeal to authority, his ignorance also obviously prevents him from knowing that Jim is a good judge of Mike's expertise qua *Amanita phalloides*. How, absent knowledge of the relevant matter of fact concerning *Amanita phalloides*, could John be sure that Jim knows that Mike possesses the relevant knowledge in question?

The best that we could say is that $B_{\text{John}}\{K_{\text{Jim}}[K_{\text{Mike}}(\textit{Amanita phalloides} \text{ is poisonous}) \vee K_{\text{Mike}}\neg(\textit{Amanita phalloides} \text{ is poisonous})]\}$, but this is not sufficient given the normal internalist concept of justification to make John's appeal to Mike rational without having good reasons to support John's appeal to Jim and these reasons cannot be either further testimony about Jim (say that of Diane) if one is a reductivist or reasons that imply that John knows or is justified in believing that *Amanita phalloides* is poisonous. So it seems that if John is ignorant with respect to the issue of the toxicity of *Amanita phalloides*, then it appears to be *impossible* for him to coherently appeal to testimony in a way that would yield an epistemically satisfactory, i.e. justified, answer to his query on reductivist and internalist theories of justification so understood. In other words for internalist

¹⁰ See Frederick F. Schmitt, "Justification, Sociality and Autonomy," *Synthese* 73 (1987): 43-85 for a similar point.

evidentialists of the reductivist sort it seems as if one must already know the fact in question if one is to be justified in appealing to expert authority.

To put it more clearly, what John would need to know is that Jim's (expert) testimony concerning Mike's mycological knowledge that is supposed to establish the expertise of Mike on the matter of the toxicity of *Amanita phalloides* is likely to be true. But, if John cannot tell whether Mike is really an expert because he is ignorant of the toxicity of *Amanita phalloides*, then he will also not be able to tell if Jim's claim that Mike is an expert concerning the toxicity of *Amanita phalloides* is warranted. As a result, it seems clear that testimony cannot be a basic epistemic source for internalist evidentialists of this sort as iterated appeals to testimony invite viscous regress absent some knowledge, or justified belief, concerning the proposition in question. The only apparent source of evidence that could justify John's belief that Mike is an expert on this sort of internalist evidentialist view would be for him to acquire Mike's knowledge about *Amanita phalloides* thus, paradoxically, rendering the appeal to expertise epistemically superfluous.

This crucial point can be seen most easily by employing the standard probabilistic account of confirming evidence. Suppose that John acquires confirming evidence e for the belief that Mike is an expert about $(p \vee \neg p)$. Evidence e then will have to be evidence that Mike is to be relied on in the matter of $(p \vee \neg p)$. So $JB_{\text{John}}(K_{\text{Mike}p} \vee K_{\text{Mike}\neg p})$ because, where $T_{\text{Mike}p}$ is the claim that Mike's testimony that p is true, $P(T_{\text{Mike}p} | e) > P(T_{\text{Mike}p})$ and so e confirms $T_{\text{Mike}p}$. Suppose also that Mike's testimony is evidential, such that his telling John that p is evidence for John's belief that p . So $P(p | T_{\text{Mike}p}) > P(p)$ and so $T_{\text{Mike}p}$ confirms p . If both of these things are true, then it is a trivial result of the probability calculus that $P(p | e) > P(p)$ and that e confirms p . As a result, if $JB_{\text{John}}(K_{\text{Mike}p} \vee K_{\text{Mike}\neg p})$ on the basis of evidence e , given the only legitimate candidates for what e could be HP will be satisfied in a way that makes Mike's testimony superfluous. This is not, of course, terribly surprising given a reductivist view of testimony and given Bayes' theorem.

Bayes theorem can be usefully formulated as follows: $P(p | e) = P(p)P(e | p)/P(e)$. Consider the case at hand. We have $P(p | T_{\text{Mike}p}) = P(p)P(T_{\text{Mike}p} | p)/P(T_{\text{Mike}p})$. Assuming that 8 is true $P(T_{\text{Mike}p}) = 1$, and assuming that 2 and 3 are true $P(p) = .5$. Substituting we get the following expression: $P(p | T_{\text{Mike}p}) = .5P(T_{\text{Mike}p} | p)$. In accordance with the reductivist view, it is then clear that the reasonableness of John's believing that p on the basis of Mike's testimony hinges entirely on the value of $P(T_{\text{Mike}p} | p)$ and thus on John's evidence that Mike is a reliable guide to the truth that p . By the definition of conditional probability and substitution, $P(T_{\text{Mike}p} | p) = P(T_{\text{Mike}p} \& p)/.5$. Substituting we then

get $P(p | T_{\text{Mike}p}) = P(T_{\text{Mike}p} \& p)$. Given the reductivist view that testimony is not independently probative the value of $P(T_{\text{Mike}p} \& p)$ will then reduce to $P(p)$ because on this view $T_{\text{Mike}p}$ and p will be probabilistically independent. Mike's telling John that p is true has no evidential significance with respect to p . Relative to John, who is *ex hypothesi* ignorant about p , $P(p) = .5$ and any rational, i.e. probabilistically coherent, alteration in that value will be the result of John's own direct evidence e that p is true, or $P(p | e)$. On the reductivist view all of the confirmatory work then will be done by the evidence e that John has for p simply because confirmation is transitive and the effect of $T_{\text{Mike}p}$ simply falls out because it is not independently probative. Perhaps disturbingly, this throws into question relatively substantial portions of our system of supposed knowledge as we regularly rely on epistemic authority *without* acquiring the relevant knowledge possessed by the relevant experts, without acquiring the direct justifications for our beliefs in propositions vouched for by supposed experts.

One possible and even then only partial solution open to internalist evidentialists of this sort is that John's belief that Mike is an expert qua the toxicity of *Amanita phalloides* can be supported by John's having directly acquired justified beliefs, say via perception, about Mike's expertise on closely related issues, such as his knowledge of the toxicity of, for example, *Amanita bisporigera*, which is also toxic. This sort of appeal would include appealing to inductive evidence concerning Mike's expertise as if John is really ignorant of the facts concerning the toxicity of *Amanita phalloides*, then his prior evidence concerning Mike's expertise cannot be that Mike correctly answered this question in the past as that would, again, imply that John already knew or was justified in believing that *Amanita phalloides* is toxic.

So, such appeals must involve the extrapolation of direct evidence concerning Mike's expertise on issues other than that of the toxicity or non-toxicity of *Amanita phalloides*. This sort of appeal would include appealing to inductive evidence concerning Mike's expertise as if John is really ignorant of the facts concerning the toxicity or non-toxicity of *Amanita phalloides*, then his prior evidence concerning Mike's expertise cannot be that Mike correctly answered this question in the past as that would, again, imply that John already knew that *Amanita phalloides* is toxic. However, this does not work in all cases, as John may not, in point of fact, actually have direct evidence concerning Mike's expertise on the toxicity or non-toxicity of mushrooms other than *Amanita phalloides*. Moreover, it is not at all clear that Mike's expertise concerning the toxicity or non-toxicity of *Amanita bisporigera* has evidential significance with respect to his expertise on the toxicity of *Amanita phalloides*. The sort of evidential

extrapolation principle required to underwrite this view seems dubious to say the least. It would have to take the form of some sort of principle to the effect that justified belief about A's expertise with respect to p support belief about A's expertise with respect to issues relevantly similar to p. Consider the following charitable rendering of such a principle, where $\text{Sim}(x,y)$ establishes a relevant similarity relation between propositions:

(EEP) $\text{JB}_{\wedge K_B p} \supset \text{JB}_{\wedge K_B q}$, for all p, q such that $\text{Sim}(p, q)$.

But, such a principle is doomed to intolerably vague with respect to the similarity relation and it seems obvious that this principle simply does not always hold. For example, Mike may never have even heard of *Amanita bisporigera* and so would know nothing about its toxicity even though we may suppose that he knows that everything there is to know with respect to *Amanita phalloides'* dangerous toxicity.

A second possible, but ultimately unsatisfactory, solution apparently open to internalist evidentialists of this sort would be to appeal to justification as coherence.¹¹ This would, in effect, appear to render moot any need for a principle like EEP. What an internalist evidentialist of this sort might be inclined to say is that the problem of establishing the bona fides of appeal to expert testimony indicates is that while internalism, mentalism and evidentialism should be retained, accessibilism can be ceded. Of course, this is due at least in part to the well-known problem of our inability to effectively compute coherence.¹² But, nevertheless, such a view would prima facie appear to allow that John is justified in believing Mike's testimony that *Amanita phalloides* is poisonous provided his believing Mike's testimony yields a more coherent total belief state than that produced by his believing that *Amanita phalloides* is not poisonous. But, it is hard to see how John can be reasonably sure that accepting Mike's testimony or any testimony does, in fact, yield the more coherent belief system if John is truly ignorant of the facts concerning the issue of the toxicity of *Amanita phalloides*.

Moreover, it is not at all clear that this sort of tactic would underwrite a general principle to the effect that we should a priori accept testimony, even of the aggregate sort, as evidentially significant. It may be true that taking testimony at face value produces the most coherent belief system, but testimony may not, even generally, be true. Whether accepting testimony as a source of evidence

¹¹ Bovens and Hartmann appear to defend such a view in Luc Bovens and Stephan Hartmann, *Bayesian Epistemology* (Oxford: Oxford University Press, 2003).

¹² See Hilary Kornblith, "The Unattainability of Coherence," in *The Current State of the Coherence Theory*, ed. John W. Bender (Dordrecht: Kluwer, 1989) and Paul Thagard, *Coherence in Thought and Action* (Cambridge: MIT Press, 2000).

produces a more coherent system of beliefs is a matter of fact to be determined a posteriori if we take coherence justification to be truth-indicative. The connection between justification and truth cannot be fixed by coherence without appeal to further evidence concerning the frequency of veracity of testimony. Nevertheless, such general facts about testimony do not appear to be able to underwrite John's believing that Mike knows the answer to the specific question of the toxicity or non-toxicity of *Amanita phalloides* without implying that John already knows that *Amanita phalloides* is toxic.

What are we then to conclude about appeals to expertise and testimony? If we accept internalism and evidentialism and reductivism, it would seem to be the case that such appeals may simply be epistemically worthless when we begin from a position of complete ignorance concerning some matter of fact. As a result, it may simply turn out that from a position of total ignorance, the only way to credibly resolve such an epistemic dearth is to seek direct evidence from a sufficiently reliable source. It also suggests, in accord with more skeptical intuitions, that we may not, in point of fact, have as much knowledge as we suppose because testimony may not provide justification. The most promising option open to internalist evidentialists who also accept reductivism might then be to claim that what we possess based on authority in far greater numbers are propositions that we merely *accept* (i.e. propositions that we entertain for pragmatic reasons without epistemic justification), especially in cases where the consequences of making a mistake are not too practically dire.¹³ What, in turn, this suggests more generally is that pragmatic and contextual factors might play a useful role in demarcating testimonial *acceptance* from justified beliefs based on testimony. To achieve the latter sort of epistemic states without falling prey to viscous regress we are required to establish, by appeal to direct evidence, that the testimony comes from an expert source in order to avoid falling prey to the inability to discriminate *Ad Verecundiam* pseudo-justifications from legitimate appeals to authority. Curiously, this does appear to render such appeals epistemically superfluous, and so shows that the allegedly overlooked centrality of testimony in epistemologies that accept these three principles will be spurious.¹⁴

In order to avoid such worries what other defenders of the epistemic basicity of testimony have done is to attempt to cast cases of pragmatic

¹³ This, of course, would be no comfort to Jamesians who reject evidentialism and argue that *belief* can be rational despite one's having insufficient evidence in sufficiently grave cases. What this discussion suggests is that James is, perhaps, confusing acceptance and belief.

¹⁴ See Robert Audi, "The Place of Testimony in the Fabric of Knowledge and Justification," *American Philosophical Quarterly* 34 (1997): 405-422 on the overlooked role of testimony.

acceptance in an artificially positive light by appeal to an exceptionally weak standard of justification, a standard so weak that it is in fact no standard at all. This brings us to the second possible option open to internalist evidentialists discussed earlier. Perhaps internalism and evidentialism can be maintained if one is willing to simply reject reductionism and accept that testimony is a basic, justification-generating, epistemic source. Doing so would seem to imply that our reliance of testimony does not require our establishing the frequency of veracity of various testimonial sources and so might well avoid the problem of the superfluosity of testimony by treating testimonial warrant as an a priori matter.

4. The Failure of Internalist Evidentialist Non-Reductivism

In this vein Burge and Hardwig would have us accept that all testimony is justificatory absent some reason to believe otherwise, absent any defeaters with respect to that testimony, and the only apparent reason they seem to do so is in order to avoid having to draw the conclusion that we possess far less knowledge than we might suppose.¹⁵ This is troubling in and of itself as it rather clearly begs the question against the skeptic, but as we shall other problems arise for non-reductivist version of internalist evidentialism as well. To begin, consider Burge's infamous trust principle:

(TP) A person is a priori entitled to accept a proposition that is taken to be presented as true and that is seemingly intelligible to him, unless there are stronger reasons not to do so.¹⁶

Now surely this would amount to a rejection of evidentialism if we read "reasons" as epistemic reasons and so would be unacceptable to the many garden-variety internalists who accept mentalism and accessibilism. Nevertheless, Burge argues that this is the essence of the non-reductivist view and that testimony is basic in the sense that it does not require appeal to other sources of justification (induction in particular) in order to provide justificatory support. The core idea behind this view is that testimony is a basic source of evidence capable not only of generating and increasing justification, but also of generating knowledge independent of empirical concerns and it seems as if this will be true presumably even if we are unaware of TP.¹⁷

¹⁵ See Burge, "Content Preservation," "Interlocution, Perception," and Hardwig, "The Role of Trust."

¹⁶ Burge, "Interlocution, Perception," 45.

¹⁷ So the view Burge endorses seems as if it is a sort of deontological internalist view and so does not include accepting accessibilism. It is not clear to me whether he endorses mentalism or not.

Putting the deeply controversial issue of whether testimonial justification can generate knowledge aside, it seems to be clear that if this position is maintained, then evidentialism, as it is ordinarily understood, must be given up and, as a result, this view amounts to nothing more than capriciousness about justification by testimony. This point can be usefully seen by once again adopting the standard probabilistic theory of justification as confirming evidence. Consider the case where we suppose that $J_{\text{John}}(K_{\text{Mike}p} \vee K_{\text{Mike}\neg p})$ because of TP and that, as a result, $J_{\text{John}p}$. But in the case we have been looking at, prior to Mike's testimony that p , $T_{\text{Mike}p}$, John is ignorant of the truth about $(p \vee \neg p)$ and so relative to John $P(p) = .5$ if he is rational. By Bayes' theorem $P(p|e) = P(p)P(e|p)/P(e)$ and to violate either this theorem or the principle of conditionalization that governs probabilistic belief updating is to invite probabilistic incoherence and is thus ipso facto irrational.¹⁸

Given the explicit constraints endorsed by non-reductivist internalist like Burge, it is easy to see that it is not possible that $T_{\text{Mike}p}$ could raise the probability of p relative to John from his stipulated state of ignorance. Consider John's state after Mike's testimony in terms of Bayes' theorem: $P(p|T_{\text{Mike}p}) = P(p)P(T_{\text{Mike}p}|p)/P(T_{\text{Mike}p})$. $P(T_{\text{Mike}p}) = 1$ if we simply stipulate 8 and assume that it is true that Mike tells John that *Amanita phalloides* is toxic. We also know that if 2 and 3 are stipulated as true then, provided he is rational, relative to John $P(p) = .5$. Substituting this information in our application of Bayes' theorem then yields: $P(p|T_{\text{Mike}p}) = .5P(T_{\text{Mike}p}|p)$. As a result, the only way that John's justification for his belief that p can alter from the initial state of ignorance is due to the posterior probability in that expression, $P(T_{\text{Mike}p}|p)$. The problem is then that the posterior probability in question is a conditional probability about the frequency of truth of Mike's testimony that p conditional on the truth of p ! But, non-reductivists are *committed* to the view that testimony is a basic form of justification and that this basicity is to be understood as the ability to generate justification *without appeal to inductive frequencies about the veracity of testimony*. So the choice is clear and forced, internalists cannot be both non-reductivists and evidentialists.¹⁹ Essentially, in rejecting reductionism non-reductivists of the internalist sort open themselves to the charge that any alteration in the probability of a proposition

¹⁸ On conditionalizing and incoherence see Paul Teller, "Conditionalization and Observation," *Synthese* 26 (1973): 218-258 and Bas Van Fraassen, *Laws and Symmetry* (Oxford: Clarendon Press, 1989).

¹⁹ The other possibility is simply to reject the standard probabilistic theories of justification, but this seems to be an unreasonably high price to pay in order to maintain the basicity of testimony.

justified solely on the basis of testimony is nothing more than an arbitrary re-assignment of a prior probability $P(p)$ to some value greater than .5 and so must ipso facto be probabilistically incoherent as it does so independent of evidence and, more worrisome yet, in doing so it also runs afoul of endorsing Moorean contradictions of the following form: I believe that p , but I have insufficient evidence that p .²⁰

If all of this weren't bad enough, accepting TP would also be an exceedingly stupid epistemic policy for someone in a situation like John's to follow. John's intention is, *ex hypothesi*, to eat the mushroom if he is told that it is not toxic and to refrain from eating it if it is toxic. So John needs to be very careful and as a result needs to adopt sufficiently stringent standards of evidence with respect to Mike's expert testimony.²¹ He needs to adopt standards that exceed those required for mere acceptance of a proposition, the state of entertaining a proposition as a basis for action or reasoning, and sufficient for at least well-justified belief.²² Bare acceptance appears to require only that one adopt a proposition as a basis for acting or reasoning, whereas rational acceptance may require only weak pragmatic justification, but rational belief requires epistemic justification, especially when there are pragmatic reasons to suppose that rational acceptance is too weak given the agent's contextual situation.²³ Bare trust then is insufficient for establishing belief for internalist evidentialists, although it may well play a role in fixing acceptance. The defenders of the epistemic basicity of testimony who are internalists appear simply beg the question against the skeptic and to concede evidentialism in order to maintain internalism and non-reductivism and they do in a way that is patently irrational from both the epistemic and pragmatic perspectives.

²⁰ See Adler, "The Ethics of Belief" on this point.

²¹ See Fricker, "Against Gullibility," on this point.

²² See L. Jonathan Cohen, *An Essay on Belief and Acceptance* (Oxford: Clarendon Press, 1992), Michael J. Shaffer, "The Privacy of Belief, Morality and Epistemic Norms," *Social Epistemology* 20 (2006): 41-54, "Three Problematic Theories of Conditional Acceptance," *Logos & Episteme* (2011): 117-125, "Doxastic Voluntarism, Epistemic Deontology and Belief-contravening Commitments," *American Philosophical Quarterly* 50 (2013): 73-82, "Epistemic Paradox and the Logic of Acceptance," *Journal of Experimental and Theoretical Artificial Intelligence* 25 (2013): 337-353, "A Thoroughly Modern Wager," *Logos & Episteme* 8 (2017): 207-231 (2017), and Robert Audi, "The A Priori Authority of Testimony," *Philosophical Issues* 14 (2004): 18-34 for discussion of the difference between belief and acceptance.

²³ Another possibility is that one might suppose that pragmatic reasons might raise S 's degree of belief that p and lower his degree of belief that $\neg p$, but Zemach has shown that it is not possible to maintain this view because practical reasons *cannot* increase the probability of a belief. See Eddy Zemach, "Pragmatic Reasons for Belief?" *Nous* 4 (1997): 525-527 for details.

5. Conclusion

Given the inadequacies of both of these views something obviously has to give. On the one hand, the most reasonable suggestion for those who wish to retain some substantive role for testimony in epistemology would perhaps be to cede internalism proper, the view that one's justificatory status is a function of states internal to the epistemic agent, and mentalism, the view that justifiers are mental items, in favor of a view that incorporates externalism, and perhaps some weaker form of evidentialism and/or accessibilism.²⁴ For example, establishing the epistemic bona fides of expert testimony is neither problematic nor is testimony incoherent or superfluous for garden-variety reliabilists. On such views Mike's testimony that *Amanita phalloides* is poisonous is reliable and John should believe it just in case he has reason to believe that Mike is reliable. He will have good accessible reasons to believe that Mike is reliable just in case he has evidence that supports the view that Mike is reliable in this regard and he will have good evidence to the effect that Mike's testimony is reliable just in case that evidence was produced by a reliable source. On the other hand, one might just be tempted to reject the view that testimony ever provides justification and that, irrespective of what Mike says, John should seek some direct evidence about the toxicity of the *Amanita* before ever considering ingesting it.

²⁴ Steup discusses of the compatibility of externalism and accessibilism in Matthias Steup, "Epistemic Duty, Evidence and Internality," in *Knowledge, Truth and Duty*, ed. Matthias Steup (Oxford: Oxford University Press, 2001).