## **Evidence of expert's evidence is evidence\***

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## ABSTRACT

John Hardwig has championed the thesis (NE) that evidence that an expert *EXP* has evidence for a proposition *P*, constituted by *EXP*'s testimony that *P*, is not evidence for *P* itself, where evidence for *P* is generally characterized as anything that counts towards establishing the truth of *P*. In this paper, I first show that (NE) yields tensions within Hardwig's overall view of epistemic reliance on experts and makes it imply unpalatable consequences. Then, I use Shogenji-Roche's theorem of transitivity of incremental confirmation to show that (NE) is false if a natural Bayesian formalization of the above notion of evidence is implemented. I concede that Hardwig could resist my Bayesian objection if he intended (NE) as a more precise thesis that only applies to communityfocused evidence. I argue, however, that this precisification, while diminishing the philosophical relevance of (NE), wouldn't settle the tensions internal to Hardwig's views.

Hardwig (1985, 1991) maintains that our epistemic reliance on experts is typically blind, in the

sense that when we acquire reasons to believe a proposition P because an expert asserts P, we

typically don't know, and often couldn't possibly know, the evidence that the expert has for P.

Consider for instance an expert *EXP* and a proposition *P* about facts within her expertise domain.

(*EXP* could be an astrophysicist and *P* a hypothesis about black holes.) Take the proposition:

(E) EXP has asserted P in the role as an expert.

Also consider a layman, or an expert in an area different from EXP's, LAY. According to Hardwig,

in ordinary contexts, *E* is for *LAY* evidence for the proposition:

(*K*) *EXP* has evidence for *P*. (Cf. 1985: 137)

And this is so even if the evidence that LAY would think EXP has for P were unknown or—because

of LAY's lack of appropriate training and skills-inaccessible and even ungraspable to LAY. (Cf.

1985: 339 and 1991: 699). Hardwig claims that LAY's learning E can give LAY reasons for

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believing *P* and, provided *P* is actually true, *LAY*'s learning *E* can also make *LAY* know that *P*.<sup>1</sup> I find these propositions *prima facie* plausible, so I will grant them.

Hardwig claims, however, that *E* itself 'does *not* constitute evidence for the truth of *P*. For [LAY's] reasons for believing that *P* are not evidence for the truth of *P*' (1985: 337), where evidence for *P* is 'anything that counts towards establishing the truth of *P*' (336). Succinctly, according to Hardwig:

(NE) For LAY, E is not evidence for P.

Hardwig is certainly right in claiming that our reliance on experts is typically blind in the sense explained at the beginning of this paper. I doubt, however, we should assent to Hardwig's more radical thesis (NE), according to which an expert's testimony that *P* doesn't generally count as evidence for *P* for a non-expert hearer. In this paper, I first show that (NE) engenders tensions within Hardwig's overall view of epistemic reliance on experts and makes it imply unpalatable consequences. Then, I make a case against (NE) that exploits an important result of Bayesian epistemology. I concede that Hardwig could still hold to a precisification of (NE) in the face of my Bayesian criticism. I argue, however, that this precisification, while reducing the philosophical relevance of (NE), wouldn't resolve the tensions internal to Hardwig's views.

Before proceeding, let me suitably restrain the application domain of (NE). *Reflexive* predictions are those that directly cause or contribute to cause the truth (or falsehood) of what they predict (cf. Romanos 1973). Reflexive predictions are quite common in social sciences. Here is an example: consider the proposition that (P') the stock market is about to enter a *bearish* period (i.e. a period of falling prices). Imagine that expert *EXP*', a leading financial economist, publicly asserts P'. Also suppose that *LAY* learns that:

(*E*') *EXP*' has publicly asserted *P*' in the role as an expert. Ordinarily, *E*' counts for *LAY* as evidence for the proposition that:

<sup>&</sup>lt;sup>1</sup> Whereas Hardwig (1985: 348-349) is uncertain about the truth of this second thesis, Hardwig (1991: 699) cautiously endorses it. I return to this issue below.

## (K') EXP' has evidence for P'.

It is a well-known fact that if suitable boundary conditions are satisfied (perhaps the existence of enduring economic instability), a public statement like the one made by EXP' can on its own *cause* stock prices to fall. It is thus hard to deny that E' is for LAY also evidence for P' when LAY knows that the boundary conditions are satisfied. For learning E', in this case, is for LAY something that counts towards establishing the truth of P'. It would be uncharitable, however, to take examples like this to constitute falsifications of (NE). For Hardwig didn't certainly intend to apply (NE) to cases in which there is a *special* evidential link between E and P known by LAY.

Note that reflexive predictions are absent in natural and (pure) mathematical sciences, for the predictions of experts in these sciences generally don't cause or contribute to cause the truth or falsehood of their contents. Considering this, to avoid unnecessary complications, let me simply stipulate that *P* in (NE) is a placeholder for propositions of *natural* or *mathematical* sciences only.

Even so restrained (NE) still looks problematic. An immediate problem is that in epistemology and everyday life, testimony—whether a layman's testimony or an expert's testimony—is normally taken to be a source of *evidence*.<sup>2</sup> Thus (NE) is *prima facie* at odds with both mainstream epistemology and common sense.<sup>3</sup> There are subtler problems. As Almassi (2007: 62-65) has argued, (NE) seems to make Hardwig's overall view of epistemic dependence on experts internally incoherent.<sup>4</sup> In brief, Hardwig himself emphasizes that scientists are very often epistemically dependent on other scientists just as laymen are. In science, because of lack of time or competence, any given expert *EXP* will in very many cases rely on the *testimony* of some other expert *EXP*\* to acquire reasons to believe some proposition *P. EXP*\*'s testimony that *P* will in turn rationally enable *EXP* to testify that *P* to some other subject *LAY* (cf. Hardwig 1985: 345-348.)

<sup>&</sup>lt;sup>2</sup> For instance, note that the expression 'testimonial evidence' looks perfectly in order and is widely used in both areas. <sup>3</sup> Although this should be a reason of concern for Hardwig, it seems to me that rejecting (NE) on just this basis would only beg the question against him.

<sup>&</sup>lt;sup>4</sup> Almassi's argument essentially draws from one made in Gaon and Norris (2001). However, Almassi's argument is more neatly formulated than Gaon and Norris' because it unequivocally individuates (NA) as the source of the incoherence.

Thus, if (NE) is correct, in very many cases in which *EXP* testifies that *P* to *LAY*, *EXP* won't have evidence for *P*. For *EXP*'s reasons to believe *P* are only testimonial. This is in tension with Hardwig's claim that when *LAY* learns *E*—i.e. receives *EXP*'s testimony that *P*—*LAY* normally acquires evidence that (*K*) *EXP* has evidence for *P*. If (NE) is true, this claim by Hardwig is presumably false.

Hardwig might try to settle this conflict by partly revising his view—precisely, by claiming that when LAY learns E, LAY thereby acquires evidence for K only if LAY knows that EXP's testimony that P is based on EXP's autonomous research. However, this wouldn't solve all problems. Consider in fact that in many of the cases in which LAY relied on EXP's testimony that P, as a result of LAY's unfamiliarity with EXP's field or lack of relevant information, LAY could not discern whether or not *EXP*'s testimony is based on *EXP*'s autonomous research. And in many others of these cases, LAY could easily conclude that EXP's testimony is not based on EXP's autonomous research.<sup>5</sup> Hence, it seems plausible that in very many of the cases in which LAY relied on *EXP*'s testimony that *P*, *LAY* would not have evidence for *K*. Note that these cases are presumably situations in which LAY would rationally relay on EXP's testimony. In spite of this, Hardwig contends that what makes LAY's reliance on EXP's testimony that P rational is in general the fact that LAY has good reasons to believe that EXP's opinion about P is more trustworthy than her own (cf. 341) because LAY has evidence for K (that is to say, because LAY 'has good reasons to believe that [EXP] has conducted the inquiry necessary to have evidence for believing that P' 337, my emphasis). Thus Hardwig's view would still be incoherent, for his general explanation of the rationality of our reliance on experts would be incoherent. It is clear that if Hardwig simply dropped (NE), these problems would all vanish.

Rejecting (NE) would block another unpalatable consequence of Hardwig's view of epistemic dependence (one that Almassi 2007 doesn't discuss). Hardwig himself acknowledges that claiming

<sup>&</sup>lt;sup>5</sup> Suppose for instance *EXP* teaches *LAY* a university introductory course to physics.

that EXP knows that  $P^6$  on the basis of a reason for believing P that constitutes no evidence for P is 'paradoxical and counterintuitive' (1985: 345). Assenting to this claim, according to Hardwig, 'would require dramatic changes in our analysis of what knowledge must be' (348-349). Nevertheless, Hardwig (1985: 348 and 1991: 699) insists that we should very probably assent to it once we realize that reliance on expert fellows with regard to matters of knowledge is a pervasive phenomenon within the scientific community. Precisely, Hardwig emphasizes that any given scientist EXP will typically be able to produce fresh knowledge only by relying on some antecedent knowledge that P acquired through the testimony that P from some other scientist EXP\*. Given (NE), this seems to imply that scientists typically know many propositions without evidence for them (cf. 1985: 345-348). Hardwig concedes that an alternative conclusion that we might prefer to draw is that when a proposition is known, it is known by, not individuals singularly considered, but a community of individuals as a whole. This would allow us to us to stick to the intuition that the knower that *P*—i.e. a scientific community as a whole—does possess evidence for *P* (cf. 1985: 349). Nevertheless, this alternative conclusion would also require revising the ordinary notion of knowledge, which attributes knowledge primarily to individuals rather than communities. If Hardwig dropped (NE), his views of epistemic dependence would require no change of in our standard assumptions about knowledge.

Hardwig (1985: 336-337) offers a few arguments in favour of (NE)—arguments aiming to show that *E* doesn't actually count towards establishing the truth of *P*.<sup>7</sup> Hardwig contends, for instance, that *E* doesn't make the case for *P* stronger (cf. 337), and that 'truth claims cannot be established by an appeal to authority, nor by investigating what other people believe about them' (ibid.). Almassi (2007: 59-62) has given good reasons to think that Hardwig's arguments in favour of (NE) are inconclusive. Rather than dissecting Hardwig's arguments once again, I prefer to make a more direct case against (NE), one to the effect that (NE) turns out to be normally *false* when

<sup>&</sup>lt;sup>6</sup> Supposing *P* is true.

<sup>&</sup>lt;sup>7</sup> Hardwig's arguments are summarized in Almassi (2007: 59-60).

quite natural formalizations of epistemic notions that Hardwig would seem to presuppose are put into operation. My argument deploys Shogenji-Roche theorem of transitivity of incremental confirmation (see Shogenji 2003 and Roche 2014).

As we have seen, Hardwig explicitly characterizes the notion of evidence for P used in (NE) as 'anything that counts towards establishing the truth of P'. Let's call *evidence*<sub>1</sub> any proposition that, if learned by a subject, would count for that subject towards establishing the truth of another proposition. The informal notion of evidence<sub>1</sub> naturally translates into the Bayesian notion of *incremental confirmation*. Let's assume, accordingly, that for a subject *SUB*, *X* is evidence<sub>1</sub> for *Y* just in case the degree of *SUB*'s rational credence in *Y* (interpreted as subjective probability) would increase if *SUB* learned *X*. Succinctly:

(EV1) For *SUB*, *X* is evidence<sub>1</sub> for *Y* iff Pr(Y|X) > Pr(Y).

Arguably, Hardwig (1985) also makes use of a different notion of evidence. Hardwig typically deploys the expression 'good reasons to believe *P*' to refer to *EXP*'s evidence for *P*. It appears rather plausible, therefore, that when Hardwig claims that (*K*) *EXP* has evidence for *P*, he intends to say that *EXP* has evidence sufficiently strong to sustain her (plain or outright) *belief in P*. Let's call *evidence*<sub>2</sub> any proposition that, if learned by a subject, would rationally sustain the subject's belief in another proposition. The informal notion of evidence<sub>2</sub> naturally translates into the Bayesian notion of *absolute confirmation*. Let's assume, accordingly, that for a subject *SUB*, *X* is evidence<sub>2</sub> for *Y* just in case the degree of *SUB*'s rational credence in *Y* would exceed an appropriate threshold value *t* (intuitively, the one certifying plain belief), if *SUB* learned *X*. Succinctly:

(EV2) For *SUB*, *X* is evidence<sub>2</sub> for *Y* iff Pr(Y|X) > t.

Consider now the following conjunction:

(C) (i)  $\Pr(Z|X \& Y) \ge \Pr(Z|Y)$  and (ii)  $\Pr(Z|X \& \sim Y) \ge \Pr(Z|\sim Y)$ .

(i) says that provided that *SUB* knows that *Y* is true, *SUB*'s degree of credence in *Z* would not drop if *SUB* learned that *X* is also true. (ii) says that provided that *SUB* knows that *Y* is false, *SUB*'s

degree of credence in *Z* would not drop if *SUB* learned that *X* is true. Roche (2012) generalizes an important proof by Shogenji (2003) and shows the following theorem of *transitivity* of incremental confirmation:

(TR) For any propositions X, Y and Z, if  
(1) 
$$Pr(Y|X) > Pr(Y)$$
,  
(2)  $Pr(Z|Y) > Pr(Z)$ ,  
(C) (i)  $Pr(Z|X \& Y) \ge Pr(Z|Y) \&$  (ii)  $Pr(Z|X \& \neg Y) \ge Pr(Z|\neg Y)$ ,<sup>8</sup>  
then  
(3)  $Pr(Z|X) > Pr(Z)$ .

Incremental confirmation is known *not* to be transitive, in the sense that the conjunction of (1) and (2) alone (i.e. without any additional assumption such as (C)) is known *not* to entail (3). (TR) describes a special case in which incremental support is transitive: if (C) is added to (1) and (2), then (3) follows.

Roche (2014) gives an example in which a subject SUB's evidence<sub>1</sub> X for the proposition that (Y) another subject has evidence<sub>2</sub> for Z is, for SUB, also evidence<sub>1</sub> for Z because (1), (2) and (C) in (TR) are satisfied. In Roche's example X doesn't describe an expert's testimony that Z, and not even a testimony.<sup>9</sup> However, Roche's example is suggestive of a counterexample to (NE) that I now detail.<sup>10</sup>

I will use to (EV1), (EV2) and (TR) to show against (NE) that *E* (the proposition that *EXP* has asserted *P* in the role as an expert) is for *LAY* evidence<sub>1</sub> for *P* in quite ordinary cases. Let's assume that *LAY*'s background information is the everyday one. Let's also assume that *LAY* has thought of *P* for the first time (perhaps because someone has talked to her about *P*) but that *LAY* doesn't know whether any expert in the relevant research field has found evidence<sub>2</sub> for *P*. Now take Pr to represent *LAY*'s degree of credence, and let's replace *X* with *E*, *Y* with *K*, and *Z* with *P* in (TR). It is

<sup>&</sup>lt;sup>8</sup> Shogenji (2003)'s theorem replaces (C) with a stronger *screening-off* condition in which (i) and (ii) are strict identities.

<sup>&</sup>lt;sup>9</sup> Suppose John is a trusted colleague of *SUB*. In Roche's example, X = 'John believes (i.e. has a high degree of credence in) Z', Y = 'John has evidence<sub>2</sub> for Z' and Z = 'The departmental meeting is scheduled for 3:30 today'.<sup>10</sup> Roche (2014) uses his example in support of Feldman (2006, 2009)'s thesis that evidence of evidence is evidence.Roche doesn't explore possible consequences of his own finding for Hardwig's controversial views. My article can be read as an attempt to connect Roche's discussion with Hardwig's.

easy to verify that on the above assumptions, (1), (2) and (C) prove all intuitively true after the replacements.

To begin with, since *LAY* doesn't know whether any of the relevant experts has found evidence<sub>2</sub> for *K*, *LAY*'s shouldn't believe *K* (the proposition that *EXP* has evidence<sub>2</sub> for *P*). Given (EV2), it should consequently be the case that  $Pr(K) \le t$ . It is intuitive, however, that if *LAY* learned *E*, her credence in *K* should lift to the effect that Pr(K|E) > t. For if (*E*) *EXP* asserts *P* in the role as an expert, *EXP* should presumably believe *P*. Consequently, it should be the case that (*K*) *EXP* has evidence<sub>2</sub> for *P*. As Pr(K|E) > Pr(K), (1) is true. Note that this conclusion is coherent with Hardwig's claim that, normally, *E* is for *LAY* evidence<sub>1</sub> for *K*.

Consider now that since *LAY* doesn't know whether any relevant expert has found evidence<sub>2</sub> for *P*, *LAY* shouldn't believe *P*. Given (EV2), it should thus be the case that  $Pr(P) \le t$ . It is very intuitive, however, that if *LAY* learned *K*, *LAY* should come to believe *P* to the effect that Pr(P|K) > t. Since Pr(P|K) > Pr(P), (2) is also true.<sup>11</sup>

Consider now (i)  $Pr(P|E \& K) \ge Pr(P|K)$ . This inequality intuitively says that *E* (the proposition that *EXP* has asserted *P*) is not a *defeater* of *LAY*'s degree of credence in *P* based on *K*. For, according to (i), if *LAY* learned *E* after learning *K*, her credence in *P* should *not* decrease.<sup>12</sup> If *P* were a proposition of social sciences, *EXP*'s assertion that *P* might have a bearing on *P*'s likelihood, thus *E* might turn out to be a defeater of *LAY*'s degree of credence in *P* based on *K*. We have excluded, however, that *P* is a proposition of social sciences. When *P* is a proposition of natural or mathematical science—like in the present case—it is intuitive that *E* is *not* a defeater of *LAY*'s degree of credence in *P* based on *K*. E could become such a defeater if *LAY* were provided

<sup>&</sup>lt;sup>11</sup> Note that (2) entails—through (EV1)—that K is for LAY evidence<sub>1</sub> for P. Furthermore, Pr(P|K) > t entails—through (EV2)—that K is for LAY evidence<sub>2</sub> for P. Neither claim begs the question against Hardwig because K doesn't describe a testimony that P. Recall that what Hardwig denies is that LAY could have testimonial evidence<sub>1</sub> for P from an expert.

<sup>&</sup>lt;sup>12</sup> (i) denies that *E* defeats *K*'s support for  $\vec{P}$ . Note that defeating can just be a matter of degrees (cf. Pryor 2013: §2).

with *apposite* background information, but this background information would be different from the everyday one, which we have assumed to be that of LAY.<sup>13</sup> Thus, (i) is also true.

Consider finally (ii)  $Pr(P|E \& \sim K) \ge Pr(P|\sim K)$ . It looks very plausible that if *LAY* learned that *K* is false, the degree of *LAY*'s credence in *P* shouldn't decrease even if *LAY* also learned *E*. Again, if *P* were a proposition of social sciences, *EXP*'s assertion that *P* might have a bearing on *P*'s likelihood; thus *LAY*'s learning *E* might lessen *LAY*'s credence in *P* based on  $\sim K$ . But we have excluded that *P* is a proposition of social sciences. Therefore, (ii) is true. As both (i) and (ii) are true, (C) is true.

Since (1), (2) and (C) are true, it follows through (TR) that (3) Pr(P|E) > Pr(P). This implies, via (EV1), that *E* is for *LAY* evidence<sub>1</sub> for *P*.<sup>14</sup>

To summarize, suppose that: the notions of evidence<sub>1</sub> and evidence<sub>2</sub> are explicated in terms of respectively (EV1) and (EV2), P is a proposition of natural or mathematical sciences, and LAY initially relies on ordinary background information without knowing whether any expert has found evidence<sub>2</sub> for P. When these conditions are satisfied, E is for LAY evidence<sub>1</sub> for P. This result disproves (NE). For it shows that there are quite ordinary cases in which EXP's testimony that P is for LAY evidence for P in the sense of counting towards establishing the truth of P.

Before concluding, let me consider a possible response to my Bayesian objection. This response naturally stems from the suggestion by Hardwig—mentioned above—to ascribe knowledge to a scientific community as a whole, rather than individuals, as an option to block

<sup>&</sup>lt;sup>13</sup> Suppose for example *LAY*'s background information entails that if *EXP* believed *P*, *EXP* would assert *P* in the role as an expert *only if EXP*'s colleagues challenged her belief in *P* by adducing some weak evidence against *P*—namely, evidence that, if learned by *EXP*, would somewhat *reduce EXP*'s confidence in *P* without defeating her belief in *P*. In this case, it appears to me that if *LAY* acquired *E* after learning *K*, she should also lower her credence in *P* without ceasing believing *P*, to the effect that  $Pr(P) \le t < Pr(P|E \& K) < Pr(P|K)$ .

<sup>&</sup>lt;sup>14</sup> Fitelson (2012) has presented Bayesian examples relying on (EV) in which evidence<sub>1</sub> X for the proposition that (Y) someone has evidence<sub>1</sub> for Z is *not* also evidence<sub>1</sub> for Z. However, in these examples X doesn't describe *a testimony that* Z. Furthermore, Roche (2014) has shown that Fitelson's examples don't satisfy (C) in (TR). Shogenji (2003), on the other hand, has applied his version of (TR)—which replaces (C) with a stronger screening-off condition—to cases of testimony in which X says that someone has asserted that Y, and Z is a proposition supported by Y. Shogenji shows, for instance, that the proposition that (X) someone asserted that (Y) a miracle occurred is evidence<sub>1</sub> for the proposition (Z) that God exists. Once again, in these cases X doesn't describe *a testimony that* Z.

counterintuitive consequences of (NE).<sup>15</sup> In short, Hardwig could first emphasize that the expression:

(I1) Anything [X] that counts towards establishing the truth of P,used by him to characterize the notion of evidence, has (at least) *two* legitimate precisifications.Namely:

(I2) Anything *X* that counts towards establishing the truth of *P* for a given individual;(I3) Anything *X* that counts towards establishing the truth of *P* for a given community as a whole.

Let's say that when (I1) is precisified into (I2), *X* qualifies as *individual-focused* evidence for *P*. This seems to me to be the general notion of evidence most commonly presupposed in philosophical and non-philosophical discussions involving epistemic assessments. Let's also say that when (I1) is precisified into (I3), *X* qualifies as *community-focused* evidence for *P*. This general notion of evidence doesn't appear to be as widely used as the former.<sup>16</sup> In this case *X* is conceived of as a piece of information given to an epistemic community *taken as a whole*. Consequently, the testimonial exchanges *within* the epistemic community are thought of as trading in, not evidence, but only *reasons* to believe propositions. These exchanges are thought of as capable of spreading over the individuals of the community only—so to speak—the rational force of the evidence given to the community as a whole. It would seem to follow from this characterization that a proposition *X* satisfies (I3) only if *X* is *not the testimony that P*.

After telling apart these two general notions of evidence, Hardwig would emphasize that my Bayesian formalization interprets (I1) specifically as (I2). Thus the general notion of evidence actually regimented by (EV1) and (EV2) and presupposed in my Bayesian objection is just the one of individual-focused evidence. Hardwig would also claim that, in contrast to this, he interprets (I1) specifically as (I3) when he discusses epistemic dependence on experts. Hence, in that context, he presupposes the notion of community-focused evidence. Hardwig would conclude from this that the

10

<sup>&</sup>lt;sup>15</sup> I'm in debt to a referee of this Journal for suggesting this possible response.

<sup>&</sup>lt;sup>16</sup> A notion of evidence of this type might however be presupposed by philosophers who claim that scientific evidence is *objective* or *impersonal*. See for instance Snyder (1994).

precisification of (NE) that he actually endorses—stating that for LAY,<sup>17</sup> *EXP*'s testimony that *P* is not *community-focused* evidence for *P*—is actually true. Hardwig would also emphasize that my Bayesian objection cannot affect this conclusion. For my objection actually targets a *distinct* precisification of (NE)—the one that states that for *LAY*, *EXP*'s testimony that *P* is not *individual-focused* evidence for *P*.

Let's assess this possible response. If Hardwig distinguished between the two alternative precisifications, (I2) and (I3), of (I1) and endorsed just (I3) while discussing epistemic dependence on experts, the precisification of (NE) that he would accept would actually be true. Furthermore, it seems correct to say that my Bayesian objection should properly be interpreted as presupposing the alternative precisification (I2) of (I1). Thus my objection would actually be irrelevant to whether or not Hardwig's accepted precisification of (NE) is true.

Although this outcome might appear very important, note—to begin with—that it wouldn't help Hardwig resolve the tensions afflicting his overall view of epistemic reliance on experts. Consider in fact that in very many cases in which EXP testified that P to LAY, EXP wouldn't have community-focused evidence for P. For EXP's reasons to believe P would be just testimonial. This would clash with Hardwig's (precisified) claim that when LAY receives EXP's testimony that P, LAY typically acquires community-focused evidence for believing that EXP has community-focused evidence for P. Hardwig could try to settle this conflict by claiming that when LAY receives EXP's testimony that P, LAY thereby acquires community-focused evidence for believing that EXP has community-focused evidence for P only if LAY knows that EXP's testimony is based on EXP's autonomous research. However, there would presumably be very many cases in which LAY would rationally rely on EXP's testimony that P without having that having that knowledge. This would conflict with Hardwig's (precisified) explanation of the rationality of relying on the testimony of experts. As this explanation says that what makes LAY's reliance on EXP's testimony that P rational is, in general,

<sup>&</sup>lt;sup>17</sup> Note that when one makes use of the notion of community-focused evidence, one can still meaningfully say that X is evidence for *P* for an individual, if the individual is a member of the relevant community. When X is primarily evidence for a community as a whole, X can still count as evidence for an individual in a secondary or derivative sense.

the fact that LAY has community-focused evidence for believing that EXP has communityfocused evidence for P. These wouldn't probably be *lethal* difficulties for Hardwig's view. However, Hardwig should work a bit to render it internally coherent.<sup>18</sup>

A more serious drawback of this possible response by Hardwig is that it would turn (NE) into a much less interesting thesis. Suppose first that the general notion of evidence to which (NE) is meant to apply were characterized in terms of (I1) without any further precisification, in agreement with my interpretation of it in the first part of the paper. This characterization would be so generic that it would probably include *any* notion of evidence in use in philosophical and non-philosophical contexts. So interpreted, (NE) would have quite significant consequences. For instance, (NE) would presumably entail that ordinary and apparently innocent statements such as 'the testimony by expert *EXP* supplies strong evidence for P'—made in, say, courts of law—are in fact literally false. By the same token, (NE) would entail that whenever epistemologists assert that some expert's testimony that P is evidence for P, they assert the false. So interpreted, (NE) would be a very surprising and indeed revolutionary thesis. If true, (NE) would bear great philosophical importance.

Now suppose that (NE) were precisified through (I2), to apply only and specifically to community-focused evidence in accordance with Hardwig's possible response to my Bayesian objection. In this case the truth of (NE) would have no consequence for any claim to testimonial evidence that presupposed a distinct notion of evidence. For instance, if this precisification of (NE) were true, expert's testimony would still count as evidence in the Bayesian sense regimented by (EV1), which has quite a wide application range in formal epistemology. Another way to describe this drawback is the following: as emphasized before, expert's testimony is customarily claimed to be evidence in mainstream epistemology and everyday life. The truth of (NE) would disprove these

<sup>&</sup>lt;sup>18</sup> Note that adopting the notion of community-focused evidence for Hardwig would certainly come together with adopting the notion of community-focused *knowledge*, which—as emphasized above—seems not to match the notion of knowledge ordinarily in use. I'm not sure that this mismatch would actually be problematic in the present context of discussion. As we have seen, Hardwig's possible response to my Bayesian objection would rest on a form of *pluralism* about the notion of evidence. If we allow for pluralism about the notion of evidence, we can presumably allow for pluralism about epistemic notions in general, including the one of knowledge. Accepting pluralism about knowledge, in these circumstances, wouldn't look like an *ad hoc* move to neutralize unwelcome consequences of (NE).

claims only if the subjects making them intended by 'evidence' specifically community-focused evidence. But this is presumably false in the largest majority of the cases. In conclusion, if (NE) were interpreted as applying to just community-focused evidence, (NE) would be bereaved of most of its philosophical relevance. Pursuing this defence strategy would probably result in nothing but a Pyrrhic victory.

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