



# On testimonial knowledge and its functions

Michel Croce<sup>1</sup>

Received: 9 February 2021 / Accepted: 29 November 2021  
© The Author(s) 2022, corrected publication 2022

## Abstract

The problem of explaining how we acquire knowledge via testimony gives rise to a dilemma, according to which any theory must make testimonial knowledge either too hard or too easy, and therefore no adequate account of testimonial knowledge is possible. In recent work (2020), John Greco offers a solution to the dilemma on behalf of anti-reductionism that appeals to Edward Craig's functionalist epistemology. It is argued that Greco's solution is flawed, in that his functionalist account provides wrong verdicts of ordinary cases of testimonial knowledge. In contrast, it is shown that both anti-reductionism and reductionism have the resources to solve the dilemma and provide the right verdicts in ordinary cases of testimonial knowledge without appealing to Greco's functionalism.

**Keywords** Testimony · Knowledge · Functionalism · Reductionism · Anti-reductionism · John Greco

## 1 Testimonial knowledge: a dilemma

It is almost a platitude that testimony constitutes a fundamental, in fact inescapable, source of knowledge. In the past few decades, epistemologists have come to an agreement about the relevance of testimony qua source of knowledge, but they offer very different explanations of how we come to know what others tell us. A concise consideration of two traditional theories of testimonial warrant should suffice to substantiate this point.

According to *reductionism*, a hearer H is justified in forming a belief that P based on a speaker S's testimony if and only if H possesses non-testimonial evidence for

---

✉ Michel Croce  
michel.croce@unige.it

<sup>1</sup> Department of Classics, Philosophy, and History, University of Genoa, Via Balbi 30, 16126 Genoa, Italy

P. Put it differently, what justifies H's belief that P on a reductionist view is some inferential work H does upon hearing S's words, which provides H with evidence that (S's) testimony is trustworthy or that S is sincere and knowledgeable qua testifier.<sup>1</sup> In contrast, *anti-reductionism* has it that H is entitled to accept what is told by S unless H has strong reasons to doubt S's trustworthiness or the truthfulness of S's testimony. H's warrant comes in the form of entitlement—or an epistemic right—rather than evidence for S's testimony. Thus, anti-reductionism relieves H from the epistemic burden of acquiring non-testimonial evidence for S's testimony that P. To borrow from Simion's characterization (2020: 2), on an anti-reductionist perspective testimonial warrant comes quite cheap.<sup>2</sup>

Despite their differences, both traditional views in the epistemology of testimony should be able to explain how people acquire knowledge from their interlocutors in everyday cases of testimony. However, scholars from both camps often appeal to such cases in an attempt to undermine the rival view. Reductionism is charged with making it too hard for people to acquire testimonial knowledge in ordinary situations involving, for example, a tourist asking information about the location of a monument to a random passerby and young children learning things from their educators. For in such cases, it looks as though H gets to know P via mere transmission from S's words—that is, without having any evidence for S's testimony. Meanwhile, anti-reductionism is charged with being unduly permissive as there are situations—involving, for example, witnesses testifying in court and doctors prescribing therapies—in which we expect H to do some epistemic work and verify whether S is knowledgeable and sincere. In these cases, many would expect that H acquires testimonial knowledge from S only insofar as H has sufficient grounds to trust S's words, typically boiling down to inductive evidence that (S's) testimony is trustworthy.

This diagnosis of the problems affecting the two most prominent theories of testimonial knowledge gives rise to the following dilemma:

- (i) Either testimonial knowledge requires non-testimonial evidence on the part of H or it does not.
- (ii) If it does not, then testimonial knowledge is *too easy*. There will be cases counted as knowledge that should not be.
- (iii) If it does, then testimonial knowledge is *too hard*. There will be cases not counted as knowledge that should be.

Therefore,

<sup>1</sup> For some prominent versions of reductionism see, among others, Adler (1994), Audi (1997, 2004), Fricker (1994), Kenyon (2012), Lyons (1997), Shogenji (2006).

<sup>2</sup> For some prominent versions of anti-reductionism see, among others, Burge (1993), Coady (1992), Goldberg (2006, 2010, 2014), Goldberg & Henderson (2007), Graham (2000, 2006, 2010), Simion (2020), Simion & Kelp (2020). For the sake of the argument, I shall set aside hybrid views: prominent examples can be found in Faulkner (2000, 2011), Gerken (2013), Lackey (2006, 2008), Pritchard (2004).

- C. A comprehensive theory of testimonial knowledge is impossible: a given theory must make testimonial knowledge either too easy for some cases or too hard for others.<sup>3</sup>

A few clarificatory remarks are in order. Condition (i) introduces the reductionist demands in terms of H's possession of evidence of a non-testimonial sort, where in the most traditional, i.e., Humean, version of reductionism this is cashed out in terms of inductive evidence.<sup>4</sup> Conditions (ii) and (iii) respectively shed light on the aforementioned worries with anti-reductionism and reductionism. The conclusion explains why it does not seem possible that a single theory of testimonial knowledge can account for all ordinary cases. In some of them, grounding a belief on inductive reasons is necessary for H to acquire knowledge, while in other cases H can acquire testimonial knowledge without undertaking any evidence-gathering process.

As the reader will imagine, a similar verdict would be heavily discouraging as it would somewhat undermine the prospects of any epistemology of testimony. This paper aims at restoring hope in the project of the epistemology of testimony by offering a novel strategy to address the dilemma. In particular, the proposed strategy (dis)solves the dilemma by showing that both anti-reductionism (§3) and reductionism (§4) have all the resources to handle the problem successfully. As a step toward this conclusion, Sects. 1 and 2 introduce and undermine a recent solution put forth by John Greco, who appeals to Edward Craig's functionalist epistemology (1990) to defend an anti-reductionist way out of the dilemma.

## 2 Greco's solution

The aforementioned dilemma challenges epistemologists of testimony to offer us a theory that accommodates the diverging nature of the intuitions we have in various cases of everyday testimonial exchanges. In recent work (2015; 2016; 2020), Greco argues that Craig's epistemology provides the necessary conceptual resources to build an anti-reductionist solution to the dilemma. It is important to note from the outset that Greco's solution requires adopting a specific version of anti-reductionism. The dilemma presupposes that we must choose between (a standard version of) reductionism, according to which testimonial knowledge *always* requires non-testimonial evidence on the part of H, and a standard (or strong) version of anti-reductionism (SAR), according to which testimonial knowledge *never* requires non-testimonial evidence on the part of H (see Simion & Kelp 2020: 2857-ss). Greco purports to solve the dilemma by making the case for a weaker version of anti-reductionism, which he conceives merely as a denial of reductionism. According to this weak anti-reductionism (WAR), in some circumstances testimonial knowledge requires non-testimonial

<sup>3</sup> This formulation of the dilemma is adapted from Greco (2015: 279).

<sup>4</sup> For further clarifications on the nature of the evidential support required to fulfill reductionist demands see, among others, Graham (2018b; Lackey, (2006); Pritchard (2004).

evidence on the part of H while in others H can acquire testimonial knowledge without possessing evidence for S's words (Greco, 2020: 43).<sup>5</sup>

To see how Greco motivates WAR, consider the following paradigmatic instances of testimonial exchanges, slightly adapted from his recent examples (2020: 33):

- Case 1. A seasoned police investigator questions a potentially uncooperative witness.
- Case 2. A job applicant tells the recruiter that they have relevant previous employment.
- Case 3. A third-grade teacher tells the students that France is in Europe.
- Case 4. A parent tells their small child that there is milk in the fridge.

As shown in the last section, it is reasonable to demand that a compelling theory of testimonial knowledge provides the appropriate verdict of ordinary cases of testimonial exchanges by discriminating those in which S's testimony transmits knowledge from those in which it is largely H's merit if H acquires knowledge. Yet, according to Greco, neither traditional theory can successfully accommodate this entire range of cases, as the dilemma predicts.

In particular, in Cases 1 and 2, one might intuitively worry about SAR's diagnosis: as a matter of fact, it seems quite natural to presume that neither the investigator nor the recruiter can take the speakers' words at face value. In both situations, they have to do some epistemic work to acquire knowledge from their respective interlocutor: that is, they ought to possess good evidence for S's testimony, as reductionism mandates. In contrast, Cases 3 and 4 involve situations that put pressure on reductionism, in that we would intuitively grant H the right to take S's words at face value, as in a standard anti-reductionist perspective. For it would sound unduly burdensome to contend that the young students and the child acquire knowledge from the teacher or their parents only insofar as they possess non-testimonial evidence that their source is trustworthy.

Greco's way out of the dilemma draws from Craig the idea that the concept of knowledge serves the purpose of flagging good information and good sources of information to be used in practical reasoning and applies it to the case of testimonial knowledge. In Greco's framework, testimonial exchanges constitute a paradigmatic means to fulfill two fundamental epistemic needs, or activities of an epistemic community: namely, acquiring high-quality information and distributing that information among its members.

The members of an epistemic community perform the first activity by gathering and introducing new information within their community, as Fig. 1 illustrates. This activity is governed by what Craig's commentators call a *gatekeeping function* (e.g., Henderson 2009), that is, by exerting some sort of check on the epistemic quality of the contents that are made available to the community. An epistemically healthy com-

<sup>5</sup> As Simion and Kelp rightly note (2020: 2857), Greco is quick to make this observation about his favored form of anti-reductionism. In the remainder of this paper, any consideration about anti-reductionism that does not explicitly mention 'SAR' or 'WAR' is meant to refer to both versions of the view.

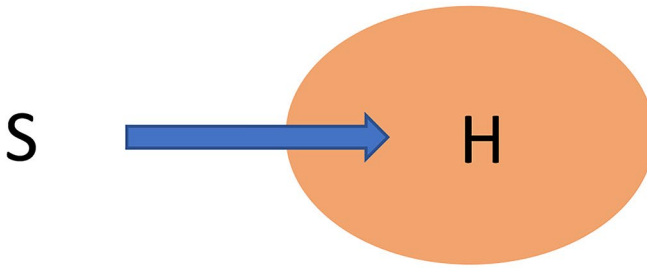


Fig. 1 Information acquisition

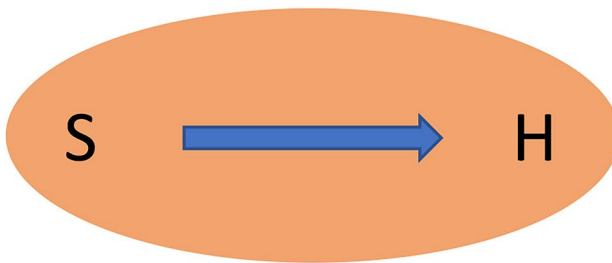


Fig. 2 Information distribution

munity is one in which the gatekeeping mechanisms ensure that only highly reliable information can access the community, while unreliable information is locked out.<sup>6</sup>

The other activity—namely, distributing information—amounts to ensuring that the knowledge that has already been introduced in the community via reliable gatekeeping mechanisms gets shared among as many members of the community as possible. This activity is governed by a *distributing function*, which aims at making it quick and easy for the community members to access available information, as illustrated in Fig. 2. An epistemically healthy community is one in which the distributing mechanisms ensure that all members who need some available information can access it.

These considerations suggest that, for Greco, the epistemic norms governing information acquisition differ from—in fact, are more stringent than—the norms governing information distribution. As Simion and Kelp rightly point out (2020: 2858),

<sup>6</sup> Figs. 1 and 2 are adapted from Greco (2020: 41). In both figures, “S” refers to the speaker, “H” refers to the hearer, the blue arrow identifies the direction of the testimonial exchange, while the orange circle identifies the boundaries of the epistemic community under consideration.

what matters in cases of information acquisition is *avoidance of error* and this is why they require stricter epistemic norms as opposed to cases of information distribution, in which what matters is *productivity* in the distribution of reliable information to all those who might need it.

If we apply this framework to the aforementioned list of examples, we can explain the above intuitions that reductionism accounts well for Cases 1 and 2 whereas SAR accounts well for Cases 3 and 4. In the first couple of cases, the reason why testimonial knowledge reduces to inductive knowledge is that both the police investigator and the job recruiter are checking whether a fresh piece of information—concerning the crime scene or a job applicant’s previous work experience—can be introduced in the community and this gatekeeping job requires that they collect non-testimonial—typically inductive—evidence. Unsurprisingly, SAR is of no help in this sort of case: by making it too easy for H to acquire testimonial knowledge from S, SAR is unable to explain what is going on in testimonial exchanges serving a gatekeeping function.

Cases 3 and 4 elicit an opposite diagnosis. Here the teacher and the parent take care of distributing information already available in their community—more specifically, information concerning the geography of Europe and the food that has been stored in the fridge—to young members who lack that information. SAR is well-suited to accommodate testimonial exchanges serving a distributing function because it explains how H can acquire knowledge from S without doing any particular epistemic work: namely, by having an entitlement to trust S. By imposing too heavy an epistemic burden on H, reductionism cannot explain how H acquires testimonial knowledge in exchanges serving a distributing function.

Thus, the appeal to Craig-style epistemic norms governing information-related activities in a community offers a strategy to explain why reductionism elicits the correct diagnosis of some cases—i.e., those in which testimonial knowledge serves a gatekeeping function—whereas SAR elicits the correct diagnosis of other cases—i.e., those in which testimonial knowledge serves a distributing function. From Greco’s perspective, this verdict undermines both reductionism and SAR at once, as it shows that neither theory can accommodate all kinds of testimonial exchanges.

Furthermore, the verdict allows Greco to show that WAR succeeds where the traditional views fail. WAR proves superior as a theory of testimonial knowledge because it is the only theory that can grant that in some circumstances—namely, *in testimonial exchanges serving a distributing function*, like Cases 3 and 4—H can acquire testimonial knowledge without possessing evidence for S’s words, while in other circumstances—namely, *in testimonial exchanges serving a gatekeeping function*, like Cases 1 and 2—H acquires testimonial knowledge only insofar as H has non-testimonial evidence for S’s testimony.

From these considerations Greco draws two solutions to the dilemma (2015: 287; 2020: 43–44) depending on how we read Condition (i). This premise can be interpreted in the following ways:

- (i\*) Either *all* testimonial knowledge requires non-testimonial evidence on the part of H or *no* testimonial knowledge does.
- (i\*\*) Either *all* testimonial knowledge requires non-testimonial evidence on the part of H or *it is not the case that all* testimonial knowledge does.

If we read the premise as in (i\*), Greco solves the dilemma by rejecting that premise. For the proposed analysis has shown that testimonial knowledge comes in two forms depending on the function it serves in the community. Thus, there is no room for an “all-or-nothing” clause: on WAR, when testimonial knowledge plays a gatekeeping function, it requires possession of non-testimonial evidence on the part of H; but in those cases in which testimonial knowledge distributes information already available within a community, H can acquire testimonial knowledge via mere transmission from S’s testimony.

Instead, if we read Condition (i) as in (i\*\*), then Condition (ii) should also be rephrased as follows:

(ii\*\*) If not all testimonial knowledge requires non-testimonial evidence on the part of H, then no testimonial knowledge does. Thus, testimonial knowledge is too easy. There will be cases counted as knowledge that should not be.

On this version of the dilemma, Greco rejects (ii\*\*) for the same reason that he rejects (i\*): namely, because this premise includes another “all-or-nothing” clause specifying that no testimonial knowledge requires non-testimonial evidence, which is false on his weak anti-reductionist account.

Regardless of how we read Condition (i), it is false that this account makes testimonial knowledge too easy, as the dilemma was imputing to standard anti-reductionists. For weak anti-reductionists do not grant H testimonial knowledge in gatekeeping scenarios unless H has non-testimonial evidence for believing S’s words.

### 3 Two problems with Greco’s solution

Despite the originality of Greco’s proposed solution to the dilemma, this section attempts to undermine the prospects of his Craigean approach. If I am right about the limits of this strategy, it will become clear that we should look elsewhere to solve the dilemma. More specifically, the next sub-sections introduce and discuss two main problems with the functionalist approach: §2.1 takes issue with how we cash out the notion of an epistemic community, while §2.2 is concerned with the distinction between the two functions that testimonial knowledge can fulfill.

#### 3.1 Epistemic communities and their boundaries

Consider the problem with the notion of an epistemic community first. Greco draws his technical notion of an epistemic community from Welbourne (1981) and defines it as “a collection of agents who share some set of information-dependent practical tasks, and who share norms for managing the information needs associated with those tasks” (2020: 17; see also 25). In this perspective, a company’s hiring procedures, police investigations, and the education of young children belong to the relevant practical tasks of a community and—so Greco’s definition goes—involve a fundamental epistemic dimension encompassing the acquisition and distribution of information, which has to be regulated by specific norms.

Despite its technicality, this definition does not tell us much about how we should conceive of the boundaries of an epistemic community. As a result, we lack a clear sense not only of who belongs to a community and who does not, but also of what it takes to move in and out of a community. This becomes a problem when we analyze Greco's proposed cases in more detail, particularly in those situations in which testimony appears to serve a gatekeeping function.

The problem might not arise in Cases 3 and 4: whatever the boundaries of the relevant community are, both parties in the testimonial exchange belong to the same community, and availability of information within the community is granted by S's presence. If we interpret the notion of a community in a broad sense, as referring to an entire country or society at large, then it is surely the case that the teachers and their students, but also the parents and their kids, belong to the same community. But in the cases under consideration, nothing changes if we restrict the notion of a community to something narrower like a school community, a particular neighborhood, or a given family.<sup>7</sup>

It is testimonial exchanges serving a gatekeeping function that put pressure on Greco's notion of an epistemic community. Consider again Case 1. The detective's questions to the witness play a key role in determining the quality and the quantity of the information which the police investigation is grounded on. Hence, it seems reasonable to assume that the detective's job serves a gatekeeping function for a community intended in a *wide sense*, as something akin to society at large. As a matter of fact, the investigation is meant to satisfy the legitimate need of the community members to know what happened as well as to provide the relevant members of the judicial system with the epistemic resources to find and condemn the culprit.

Nonetheless, this wide conception of a community sits badly with Case 2. If we take the recruiter to be gathering new information about the job candidate's past work experience and introducing it in the community, then that community cannot be conceived widely, as it is natural to suppose that other people like previous colleagues, bosses, family members and friends already have this information about the candidate. In such a case, it is more plausible to conceive of the relevant epistemic community in a *narrow sense*, as something akin to the company that is recruiting new personnel.

The problem of determining the boundaries of a community makes it harder to assess which function a given testimonial exchange is serving and therefore hinders the plausibility of Greco's functionalist epistemology of testimony. If we take the problem to the extreme, it might be argued that a sufficiently wide understanding of the notion of a community makes no room for pure gatekeeping. If, for example, we took the crime witness and their investigators to belong to the same community of whatever city's inhabitants, Case 1 would easily look like a situation in which one member—i.e., the witness—is distributing information that she already possesses to other community members who still lack that information, such as the investigators or the friend to whom they reported what happened. By contrast, if we narrow down our understanding of the notion of an epistemic community, there remains no room

---

<sup>7</sup> For a separate problem concerning cases of information distribution, see Simion & Kelp (2020: 2860–2861).



for the distributing function of testimonial exchanges. This happens, for example, if we conceive of the teacher as an outsider to the community of the classmates who learn from her that France is in Europe. In a similar setting, new information would be introduced in the community and therefore the testimonial exchange would be best read as fulfilling a gatekeeping function.

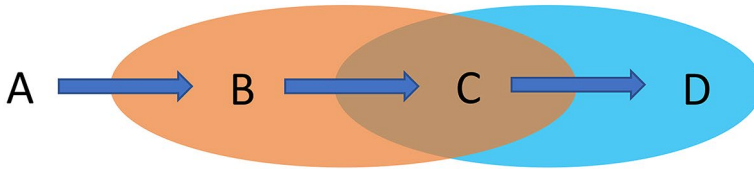
In response to these objections, Greco might argue that the boundaries of an epistemic community vary along with relevant contextual features or the practical needs of the community under consideration. After all, adding some flexibility to the notion of an epistemic community—especially as regards setting its boundaries—might constitute a virtue of an epistemology of testimony. Note, though, that Greco's notion of a community appears to be problematically unstable, as it can be interpreted widely or narrowly, and these alternative interpretations elicit opposite diagnoses of the functions of testimonial knowledge in the cases under consideration. Thus, while I am willing to grant that the notion of an epistemic community requires some sort of context-sensitivity, I do not think that this reply lets Greco off the hook. Furthermore, his account can also be called into question from another angle, as I argue in the remainder of this section.

If an epistemic community consists of a group of people sharing a task for which some relevant piece of knowledge is needed, then it should come as no surprise that the members of a given community can change with time and, most importantly, that each of us may belong to several epistemic communities at the same time. These considerations complicate Greco's functionalist framework, in that they force us to consider cases in which a piece of information is introduced in one epistemic community and, from there, crosses other communities.

Consider the following scenario:

**NEGOTIATION STYLES.** Beth, a newly appointed real estate agent, and Chloe, an experienced colleague, are having a coffee with Achraf, a young professional who manifested interest in one of the agency's flats. At some point during the chat, Chloe has to leave the table to pick up an urgent phone call. Once the meeting is over, Chloe asks Beth what they were talking about when she was on the phone. Beth replies that they were chatting about customs and traditions of Achraf's region. Achraf was telling Beth about how people from his region—call it X—hate taking part in long negotiations. They'd rather receive reasonable but not exciting offers and consider whether to accept them with little negotiation than having to bargain a lot to come to terms with their interlocutors. Chloe shows interest in Achraf's remarks because her partner, David, is discussing the sale of his company with traders from X. Thus, Chloe immediately calls David to inform him about the negotiation style that these traders might appreciate.

Let us assume, for the sake of argument, that the testimonial exchange between Achraf and the estate agents, Beth and Chloe, is serving a gatekeeping function, as he is an outsider to the community composed of the agency members. The testimonial exchange concerning the negotiation style of people coming from X—call the relevant shared content, P—takes place between Achraf and Beth. Chloe gets to know P



**Fig. 3** Testimony exchanges in NEGOTIATION STYLES

from Beth, who is a member of her work-community, and therefore, on Greco's functionalist framework, we can treat their exchange as a case of information distribution. An analogous diagnosis should apply to the exchange between Chloe and David, who is a member of Chloe's family-community.

However, as Fig. 3 illustrates (consider *C*, in particular),<sup>8</sup> Chloe's position is tricky because she is at the same time the receiving end of a process distributing information in her work-community and the person responsible for introducing information in her family-community. Since the norms governing knowledge acquisition involve much higher epistemic standards than the norms governing knowledge distribution, Chloe appears to be trapped in a situation that makes it impossible for her to meet the normative constraints of both activities at once.

On the one hand, we might require that she complies with the norms governing information distribution within the work-community. On Greco's approach, these norms grant Chloe the right to take Beth at face value and acquire testimonial knowledge in the absence of defeaters for the new colleague's testimony, as in an anti-reductionist perspective. However, by doing so Chloe violates the gatekeeping constraints she has qua member of her family-community. In fact, David has the right to expect that Chloe has collected non-testimonial evidence for whatever she is telling him about the negotiation styles of the traders he is going to deal with, but Chloe lacks the required evidence.

On the other hand, we might require that Chloe complies with the norms governing information acquisition within her family-community. On Greco's approach, these norms mandate that she collects non-testimonial evidence in favor of Beth's testimony, as in a reductionist perspective. Yet such a constraint would clash with the norms of the information-distributing activity Chloe has to comply with qua member of the work-community, which allow her to trust Beth provided that she lacks defeaters for her testimony.

In sum: either reading of the example commits Chloe to violating a key normative constraint of Greco's functionalist framework, which proves unable to account for more complex—albeit no less realistic—cases of a testimonial exchange without giving up on either function of testimonial knowledge.<sup>9</sup>

<sup>8</sup> The letters in Fig. 3 indicate the initials of the characters in NEGOTIATION STYLES.

<sup>9</sup> Greco's account opens the door to a further problem about the knowledge any epistemic agent brings with them while entering a new community. Suppose you acquire testimonial knowledge that *P* via distribution qua member of Community (1) Later on, you are invited to join Community 2 which does not

Let's take stock. The considerations offered in this section shed light on two problems with the notion of an epistemic community on which Greco's account is grounded. First, the notion is unduly unstable, as we lack a clear method to set the boundaries of a community, and this makes it hard to apply Greco's theory to the cases under consideration. Second, his functionalist framework fails to account for testimonial exchanges involving agents who take part in multiple communities at once, as his definition of a community allows.

### 3.2 On gatekeeping and distributing qua functions of testimonial exchanges

Let us suppose that Greco can successfully address both problems with the notion of an epistemic community, and focus on the second line of objection, which I take to set out a more radical criticism against his view of testimonial knowledge. As I have illustrated in Sect. 1, Greco's view is grounded in the idea that reductionism provides a convincing diagnosis of cases in which testimonial knowledge serves a gatekeeping function, while SAR provides a convincing diagnosis of cases in which testimonial knowledge serves a distributing function. Now, Greco's argument shall inevitably lose its force if other cases elicit an opposite diagnosis, namely, cases in which:

- (a) *SAR* can account for exchanges in which testimonial knowledge serves a *gatekeeping* function, and.
- (b) *reductionism* can account for exchanges in which testimonial knowledge serves a *distributing* function.

This scenario would show that a consideration of the function testimonial knowledge serves in a given exchange does not help to assess which theory provides the right diagnosis of the exchange. In the remainder of this section, I shall attempt to undermine Greco's strategy by making a case for both (a) and (b).

Let us start with (a). Consider the following case:

**POKER NIGHT.** James is hosting some friends at his place for a Texas Hold 'Em poker night and has asked them to spread the word in an attempt to collect a

---

have knowledge that P prior to your joining it. Were you to have been part of this new community when the original testimony took place, the problem raised by this scenario would be very similar to what happens in NEGOTIATION STYLES, as one might wonder whether you should accept the testimony that P qua member of Community 1 or gatekeep qua member of Community (2) However, since you weren't part of Community 2 at the time, there is nothing you should have done differently. The problem is that Greco seems committed to either of the following unsatisfying diagnoses of the case at issue. He could argue that as a member of Community 2, your knowledge now counts as part of that community and you are free to distribute it among its members. Note, though, that this verdict amounts to bypassing the gatekeeping mechanisms to introduce new information within a community. Alternatively, Greco could try and preserve the spirit of the gatekeeping function by admitting that, in a scenario like this, your membership to the new community retroactively changes the status of the past testimony such that it becomes a case of gatekeeping. But this means that, as a result of joining Community 2, you would now lose your knowledge that P which you acquired as a member of Community 1. Again, this appears to be an unwelcome result for a theory that aims at accommodating ordinary testimonial exchanges by appealing to the functions these exchanges serve within an epistemic community. (With thanks to Matt Jope for raising this problem for Greco's view in conversation.)

few more participants. While he is receiving the usual players, someone rings the doorbell. He opens the door and welcomes the new participant: “Hi, I am James. Welcome! I suppose you’re here to play poker. What’s your name?” The lady replies: “Hi James! Nice to meet you. Yes, thanks. I’m Liv. A friend of a friend told me you’re organizing a tournament and I thought it could be fun to play some poker.”

Let us stipulate that, for the purposes of this testimonial exchange, the relevant epistemic community is the group of people gathered at James’ to play poker and that the exchange between Liv and James is introducing new information in the community since none of the participants knows Liv. Since on Greco’s functionalist framework the testimonial exchange is serving a gatekeeping function, his diagnosis of the case shall align with the demands typical of reductionism: James could acquire testimonial knowledge from Liv only if he had non-testimonial evidence to trust her.

Yet intuitively we would expect that, in the absence of cues of insincerity or unreliability (e.g., her being drunk or under the effect of some drug), her testimony directly transmits knowledge to James, who seems entitled to take her words at face value. This is the sort of exchange involving mature agents in which SAR seems particularly appealing: James is just asking a stranger her name in a friendly context in which both parties share a common interest and therefore it seems reasonable to concede that acquiring testimonial knowledge does not involve the usual epistemic burden of the hearer. If this is true, then POKER NIGHT turns out to be a relevant case in which testimonial knowledge serves a gatekeeping function, and yet SAR can successfully account for it, as required by (a).<sup>10</sup>

A parallel analysis can be offered to make a case for (b). Consider the following example:

ONCOLOGIST. Stephanie, an oncologist who is about to examine a patient affected by early-stage cancer, bumps into Frank, the surgeon who has recently operated on the patient to remove the tumor. Stephanie asks her colleague about the outcome of the surgery. Frank tells her that, since surgery went well and the tumor margins were very neat, no chemotherapy is required.

On Greco’s functionalist approach, it is plausible to contend that Frank’s testimony distributes information that has already been introduced in the community. For we can imagine that, as is standard procedure with surgical activities, other doctors and nurses took part in the surgery and discussed its outcome, but also that a report has already been filed in the hospital’s database. Thus, the functionalist framework pro-

<sup>10</sup> One might note that reductionists too can account for this case of gatekeeping. For the fact that people typically do not lie about their name and are almost always in a position to know their name can be taken to provide James with non-testimonial evidence for believing Liz’s testimony. I do not dispute this consideration which, however, does not undermine my argument against Greco. For if his functionalist approach were right, SAR norms should not be able to regulate testimonial exchanges serving a gatekeeping function, as SAR makes it too easy for H to acquire knowledge via S’s testimony. POKER NIGHT shows that this diagnosis is wrong as, pace Greco, SAR can account well for some cases of gatekeeping. I am grateful to an anonymous reviewer for urging me to clarify this point.

posed by Greco suggests that absent defeaters, Stephanie acquires testimonial knowledge from Frank by mere transmission, as SAR would predict.

Yet again we would intuitively expect that in a case like this, the oncologist acquires testimonial knowledge from the surgeon only to the extent that she has antecedent evidence that he is (as) reliable (as oncologists are) concerning post-operative treatments of cancer patients. In other words, it seems natural to think that the oncologist does some epistemic work to assess the surgeon's credentials before trusting him on a topic that might exceed his main area of specialization. If this is true, then ONCOLOGIST turns out to be a relevant case in which testimonial knowledge serves a distributing function and yet reductionism can successfully account for it, as required by (b).

The cases I have just discussed put pressure on Greco's strategy to solve the dilemma raised against the traditional theories of testimonial knowledge. For as I have just shown, our intuitions about the epistemic work H ought to do to acquire knowledge from S do not vary along with the functions that testimony serves within an epistemic community. Thus, pace Greco, it is not always necessary to invoke reductionist norms to account for testimonial exchanges serving a gatekeeping function, nor is it always the case that standard anti-reductionism accounts for testimonial exchanges serving a distributing function.

This section has illustrated that the functionalist approach fails to account for the intuitions we have about the diagnosis of everyday testimonial exchanges. Together with the criticisms raised in §2.1 against Greco's notion of an epistemic community, the section has undermined the prospects of Greco's epistemology of testimony. In the next sections, I shall embark in the constructive part of the project and show that both traditional views have the resources to solve the dilemma without appealing to Greco's functionalist approach. As anticipated, if my attempt is successful, the dilemma will lose its alleged plausibility: for it will become clear that both reductionists and standard anti-reductionists can accommodate everyday testimonial exchanges.

## 4 An anti-reductionist solution

Let us first consider how standard anti-reductionists can address the dilemma. The problem with SAR, as the dilemma revealed, is that it makes acquiring testimonial knowledge too easy. This is particularly troublesome in those cases in which we have a strong intuition that H ought to collect some evidence before forming a belief in S's words. Nonetheless, once we understand anti-reductionism as a denial of reductionism—that is, as a theory in which *not all* testimonial knowledge reduces to inductive knowledge or, in general, knowledge of other sorts—the problem can be solved by showing that, in some relaxed circumstances, H can take S's words at face value. This is the starting assumption of Greco's weak anti-reductionist solution to the dilemma and, I shall speculate, all that standard anti-reductionists can happily grant him.

That said, I worry that standard anti-reductionists have reasons to think that Greco's solution does not do justice to their view. On the one hand, Greco's account mistakenly reduces the scope of SAR to its ability to accommodate testimonial exchanges serving a distributing function. On the other, it does not provide an adequate explanation of how SAR handles the cases in which testimony cannot be passed on from S

to H via mere transmission. In the remainder of this section, I aim to show that SAR can do *more* explanatory work than Greco suggests with *less* conceptual machinery than he appeals to.

The notion of a *defeater* is key to allowing standard anti-reductionists to meet both goals at once. On SAR, defeaters play the role of the gatekeeper and do so irrespective of the functions that testimonial knowledge fulfills. In general, defeaters can be conceived as conditions that cancel H's epistemic right to believe that S is trustworthy and S's testimony is true (Fricker, 1994: 142). We shall not be concerned with how H inherits their entitlement to trust S here, as we are not interested in motivating an anti-reductionist epistemology of testimony.<sup>11</sup> Suffice it to note that testimonial defeaters typically amount to evidence to the contrary of what S asserts (rebutting defeaters) or doubts about S's reliability (undercutting defeaters). What is important to show for this paper is rather that in all the above cases in which we would intuitively require that H has to do some epistemic work to acquire knowledge from S, SAR can easily accommodate our intuitions and mandate the appropriate verdict. For those are cases in which, as a matter of fact, H does possess a defeater for S's testimony and therefore has reasons not to take S's words at face value.

If we consider ONCOLOGIST, for example, the role of a defeating condition can well be played by the division of epistemic labor. Surely, the surgeon can offer the oncologist an expert testimony about the specifics of the tumor he had to remove and the outcome of the surgery. However, the oncologist is arguably in a better position than the colleague to know how the patient would react to different available therapies. For this reason, the oncologist lacks the epistemic right to trust the surgeon about whether the patient needs any cycles of chemotherapy. As we have anticipated, she can acquire testimonial knowledge from him only insofar as she has antecedent evidence that he is particularly reliable about the therapies that these patients should undertake after surgery. Thus, ONCOLOGIST is a case in which the testimonial exchange distributes "old" information—that is, information already available within the relevant epistemic community—and yet SAR can successfully explain why testimonial knowledge cannot be passed along via mere transmission.

SAR can offer a similar analysis to accommodate Cases 1 and 2. Consider Case 1: standard anti-reductionists have several ways to explain why the police investigator lacks the epistemic right to take the witness's words as true without further inquiry. The most obvious scenario is one in which the witness has an interest in hiding the truth. But even setting this case aside, high levels of stress (Deffenbacher, 1983) could lead a sincere witness to misrepresent the facts in a crime and thereby offer an unreliable testimony. Similarly, if the witness were exposed to suggestive information about a relevant factual detail that they have not experienced, they might again be prone to misrepresenting the facts and testify as if they had experienced such detail (Otgaaar et al., 2018). These elements suffice to provide the investigator with a defeater for the testimony of the witness in the above situation. Whether the investigator can acquire knowledge from the witness will (at least partly) depend on the former's ability to deploy interrogation techniques and determine whether the witness is reliable and sincere.

<sup>11</sup> For helpful discussion see, e.g., Burge (1993); Graham (2018a), Simion (2020), Simion & Kelp (2020).

In Case 2, it is plausible to suppose that analogous concerns with the job applicant's reliability and sincerity get in the way of the recruiter's entitlement to trust the interlocutor. Even admitting that the psychological pressure of a job interview does not reach the levels of a police interrogation, it seems evident that a job applicant with poor or irrelevant work experience would still have a clear incentive to lie or, at least, to exaggerate their resumes and maximize their chances of getting the job. Such a concern with the candidate's sincerity suffices to provide the recruiter with a defeater for the latter's testimony.

The moral of these considerations is that an in-depth analysis of the role of defeaters within an anti-reductionist perspective reveals that SAR can issue appropriate verdicts in the relevant everyday testimonial exchanges analyzed in this paper. For starters, SAR tells us that in many ordinary cases—e.g., Cases 3 and 4, and POKER NIGHT—S's testimony transmits knowledge because H has no reasons to doubt S's sincerity and reliability. But, pace Greco, SAR can also explain why testimonial knowledge cannot be acquired via mere transmission in the other relevant cases, in which some defeating condition deprives H of their epistemic right to trust S—e.g., Cases 1 and 2.

In this perspective, SAR looks particularly appealing because it allows one to buy into Greco's solution to the dilemma without paying the price of Craig's functionalist epistemology. Going back to the technical formulations of the dilemma, anti-reductionists can follow Greco in rejecting whatever premise includes the "all-or-nothing" clause according to which all (or no) testimonial knowledge requires non-testimonial evidence on the part of H.<sup>12</sup> However, unlike Greco, standard anti-reductionists can do so by conceding that testimonial knowledge requires non-testimonial evidence on the part of H whenever H has a defeater for S's testimony. In general, it is false that on SAR testimonial knowledge is made too easy, in that the presence of defeating conditions deprives H of the epistemic right to trust S and therefore requires that H does some epistemic work to acquire knowledge from S's testimony.

## 5 A reductionist solution

At this point in the analysis, it is important to show that anti-reductionists have no exclusive rights to the solution to the dilemma. Quite to the contrary, reductionists can articulate their way out of the problem. As we have seen in §1, reductionism is charged with making it too hard for H to acquire knowledge from S in many everyday situations in which we would intuitively concede that H can take S's testimony at face value. For in such situations there is no need for H to activate gatekeeping mechanisms, as reductionism requires.

Before discussing how reductionists could solve the dilemma, a qualification about how this view deals with childhood testimony is made necessary by the fact that the aforementioned cases putting pressure on reductionism feature young chil-

<sup>12</sup> More specifically, anti-reductionists can reject the first premise of the dilemma if we read it as in (i\*). Instead, if we read this premise as in (i\*\*), anti-reductionists can reject the second premise, namely (ii\*\*), which includes the target "all-or-nothing" clause.

dren in the role of H. Childhood testimony is traditionally meant to score a point for anti-reductionism, in that reductionists struggle to offer a convincing story of how young and immature hearers can possess evidence for the testimony they receive.

Some reductionists deny that young children acquire testimonial knowledge, as they lack the conceptual resources required to acquire sufficient evidence for their testimonial beliefs (Audi, 1997; Van Cleve, 2006). Others concede that children can acquire testimonial knowledge via mere transmission, in that childhood testimony forms an exception to the general reductionist theory as applied to mature epistemic agents (Fricker, 1994). Others, finally, appeal to recent work in developmental psychology to argue that young children possess the necessary non-testimonial evidence because they can discriminate accurate reports from inaccurate ones (e.g., Koenig & Harris 2004; Harris & Corriveau, 2011).<sup>13</sup>

Since both the philosophical debate about childhood testimony and the empirical findings concerning children's capacities for second-order thought are undecided<sup>14</sup>, it seems wise to set the issue aside, as we might not want our epistemology of testimony to be decided on this basis. Thus, in the remainder of this section, I shall limit myself to exploring how reductionists can account for testimonial exchanges involving mature epistemic agents and I shall argue that their solution to the dilemma in the case of adulthood testimony is no less promising than the anti-reductionist's.

Reductionists can attempt to deny the accusation that they make testimonial knowledge too hard a goal by arguing that H never takes S's words at face value; or, with a slogan, that direct transmission is just an illusion. The punchiest way for reductionists to debunk the illusion of direct transmission amounts to showing that whenever we would intuitively think that H can take S's words at face value, in fact H easily meets the reductionist requirements. As anticipated, Greco's toy examples are not very helpful here, in that he only considers cases of childhood testimony, which we have just thoughtfully set aside for the purposes of this analysis. Nor is ONCOLOGIST, because we would not concede that the surgeon's testimony suffices to provide the oncologist with knowledge about the most promising therapy for the patient. Yet, the reductionist account applies well to many everyday cases, including those in which testimony distributes knowledge to some members of a community who lack it.

Imagine, for example, an accountant telling her client that the tax laws have recently changed and, as a result, some previous deductions are no longer allowed; or a city clerk telling a resident who has been in the hospital for a while that plastic bottles can now be left at the transfer station for recycling. At first glance, these might look like typical (information-distributing) cases in which H acquires knowledge merely by accepting S's words as true, provided H has no clues of insincerity or unreliability on the part of S, as anti-reductionists predict. However, it is far from clear that reductionists cannot accommodate these situations in their own framework.

<sup>13</sup> A further option for reductionists is to dispute that childhood testimony should trouble them more than it troubles anti-reductionists. Lackey (2005) takes this route. See Graham (2018b) for a critique.

<sup>14</sup> See Graham (2018b) and Goldberg (2008) for concerns with the empirically informed strategy to vindicate reductionism about childhood testimony.



As a matter of fact, minimal effort would allow the accountant's client and the patient who is finally able to go back home to acquire inductive evidence that their respective interlocutor is reliable, as reductionism requires. The client merely needs to have collected some experience with other accountants or the one she turned to. The resident need only know that city clerks typically do not lie about ordinary matters of civic interest like their city's recycling procedures. Thus, reductionists appear to be well suited to explain why H can easily acquire knowledge from S. For some basic background knowledge from experience about the life of their community suffices to provide H with the non-testimonial evidence necessary to fulfill the reductionist demands.

What I argued so far in the section should suffice to secure the goal of the section: namely, to show that standard reductionists can successfully dismiss the charge with making knowledge acquisition too hard in ordinary testimonial exchanges and, more specifically, that they can do so without relying on Craig-style functionalism. Yet, one could imagine that some reductionists might want to reject Greco's theory—in particular, the idea that reductionism can only account for testimonial exchanges serving gatekeeping functions—while being happy to deploy some of Craig's epistemological concepts. These reductionists could offer a slightly different account of the evidence that ordinary hearers like the client and the resident ought to possess and still resist the claim that their view makes testimonial knowledge too hard to acquire.

On this alternative reductionist account, H need not inquire into S's sincerity or the reliability of S's testimony because the epistemic community takes on the burden of gatekeeping on behalf of H. In practice, the client can believe in the accountant's words because other community members—e.g., other clients, fellow accountants, lawyers, etc.—have already engaged with this accountant and assessed that she is a sincere and knowledgeable testifier. Similarly, the resident can trust the city clerk because other citizens—e.g., fellow clerks, bosses, members of the city hall, etc.—have acquired evidence that this person plays by the rules of the community.

One might suspect that this view boils down to a form of anti-reductionism since H is entitled to take S's words at face value. This is inaccurate. The proposed account falls within a reductionist epistemology of testimony because H has to do some—albeit minor—epistemic work to inherit their right to trust S. It is not enough for S to be sensitive to defeaters: entitlement would come too cheap that way. Rather, H has to possess evidence that members of the community typically abide by its rules and that failure to do so will normally result in a loss of credibility, if not exclusion from the community. It is the awareness of being part of an epistemic community regulated by such norms that allows the client and the resident to infer that they can believe what the accountant and the city clerk tell them.<sup>15</sup>

The reductionist approach I have just briefly sketched is no less effective than a standard reductionist account in debunking the illusion of direct transmission. For whenever we have the impression that a mature H acquires knowledge from S's tes-

---

<sup>15</sup> The proposed reductionist account has something in common with a novel and inspiring form of anti-reductionism, namely Simion's testimonial contractarianism (2020). For both views allocate (part of) the burden to social norms. Unlike contractarianism, though, this reductionist account grants us the right to trust community members only to the extent that we acknowledge what the epistemic community ordinarily does for us.

timony via pure transmission, this is only because other members in the community took on (most of) the burden of collecting inductive evidence on H's behalf. It is true, though, that this alternative reductionist approach requires less of individual hearers than standard reductionism: rather than asking H to go out and collect independent evidence to trust S, the former perspective only requires H to acknowledge that collective gatekeeping mechanisms are operating.

Regardless of how we prefer to cash out the reductionist requirements, what I have argued in this section should suffice to show that, in general, reductionism is not hostage to a view that makes achieving knowledge from everyday testimonial exchanges too hard a goal. If we go back to the technical formulation of the dilemma, reductionists can reject Condition (iii) by arguing that though all testimonial knowledge requires non-testimonial evidence on the part of H, there won't be cases not counted as knowledge that should be. For whenever we take a mature H to be entitled to accept S's testimony absent defeaters, in fact H already possesses non-testimonial evidence to believe S's words—be it evidence that S is sincere and trustworthy or evidence that the epistemic community vouches for the sincerity and the trustworthiness of its members *qua* testifiers.

## 6 Conclusion

By showing that both traditional views in the epistemology of testimony can solve the dilemma outlined in §1 without relying on Greco's functionalist machinery (see §§2–3), the last two sections have achieved the main goal of this paper. Furthermore, both the proposed solutions have some virtue that is worth spelling out by way of conclusion.

The anti-reductionist way out of the dilemma has the advantage of falling in line not only with Greco's verdict concerning Cases 1 to 4, but also with the overall spirit of his approach, which makes it as easy as possible for epistemic agents to acquire testimonial knowledge from other members of their epistemic community. The reductionist solutions cannot meet these expectations but, provided we set aside childhood testimony, reductionists can explain both what it takes for H to gatekeep when testimonial knowledge requires some epistemic work on the part of H, and the fact that, in more relaxed exchanges, acquiring testimonial knowledge is a relatively easy game. For, as we have seen in §4, reductionists can accommodate cases in which it takes minimal epistemic work for H to acquire evidence for S's testimony. Even more so if we buy into the alternative reductionist approach outlined at the end of the last section and concede that all it takes for H to satisfy the reductionist requirements in such easy cases is to acknowledge that generally the community checks upon the epistemic credentials of its members on our behalf.

As soon as we acknowledge that the traditional views can account for everyday cases of testimony without making it too easy or too hard for H to acquire testimonial knowledge from S, the dilemma loses its initial appeal. The moral we can draw from this verdict is that Greco's functionalist theory does not get to the heart of the dispute because the distinction between gatekeeping and distributing information does not

map well onto a distinction between cases inviting a reductionist diagnosis and cases supporting an anti-reductionist diagnosis.

Furthermore, the solutions I have proposed here show that both traditional views in the epistemology of testimony can accommodate a wide variety of ordinary testimonial exchanges without giving up on the original spirit of their views. If this is true, then it seems fair to wonder whether discussing how these theories handle everyday examples can really help us settle the traditional dispute between reductionism and anti-reductionism in the epistemology of testimony. This paper has not offered reasons to conclude that we should stop fighting over standard examples of testimonial exchanges. Yet, it has hopefully made it worth asking whether we would do better to turn the discussion to other theoretical features of the available views.

**Acknowledgements** Special thanks to Adam Carter, Giada Fratantonio, Sandy Goldberg, Peter Graham, Matt Jope, Chris Kelp, and Mona Simion for extensive feedback on earlier versions of this paper and/or helpful discussion on topics related to this paper. I am also grateful to two anonymous referees for this journal for detailed comments on earlier versions of this paper. Thanks also to audiences at the University of Edinburgh, Cogito – Epistemology Research Centre at the University of Glasgow, and the Bled Epistemology Conference, for helpful feedback. Work on this article was supported by funding from the European Union’s Horizon 2020 research and innovation programme for the project *Policy, Expertise, and Trust in Action* (PERiTIA) under grant agreement No. 870883, as well as from the postdoctoral fellowships programme *Beatriu de Pinós*, funded by the Secretary of Universities and Research (Government of Catalonia) and the Horizon 2020 research and innovation programme under grant agreement No. 801370.

**Funding** Open access funding provided by Università degli Studi di Genova within the CRUI-CARE Agreement. Work on this paper was supported by funding from the European Union’s Horizon 2020 research and innovation programme for the project *Policy, Expertise, and Trust in Action* (PERiTIA) under grant agreement No. 870883, as well as from the postdoctoral fellowships programme *Beatriu de Pinós*, funded by the Secretary of Universities and Research (Government of Catalonia) and by the Horizon 2020 research and innovation programme under grant agreement No. 801370.

## Declarations

**Conflicts of interest** The author has no conflicts of interest to declare that are relevant to the content of this article.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Adler, J. (1994). Testimony, Trust, Knowing. *The Journal of Philosophy*, 91, 264–275
- Audi, R. (1997). The Place of Testimony in the Fabric of Knowledge and Justification. *American Philosophical Quarterly*, 34(4), 405–422

- Audi, R. (2004). The A Priori Authority of Testimony. *Philosophical Issues*, 14(1), 18–34
- Burge, T. (1993). Content Preservation. *The Philosophical Review*, 102, 457–488
- Coady, C. A. J. (1992). *Testimony: A Philosophical Study*. Oxford: Clarendon Press
- Craig, E. (1990). *Knowledge and The State of Nature*. Oxford: Oxford University Press
- Deffenbacher, K. A. (1983). “The influence of arousal on reliability of testimony.”. In S. M. A. Lloyd-Bostock, & B. R. Clifford (Eds.), *Evaluating Witness Evidence* (pp. 235–251). Chichester: Wiley
- Faulkner, P. (2000). The Social Character of Testimonial Knowledge. *The Journal of Philosophy*, 97(11), 581–601
- Faulkner, P. (2011). *Knowledge on Trust*. Oxford: Oxford University Press
- Fricker, E. (1994). “Against Gullibility.”. In B. K. Matilal, & A. Chakrabarti (Eds.), *Knowing from Words* (pp. 125–162). Dordecht: Springer
- Gerken, M. (2013). Internalism and Externalism in the Epistemology of Testimony. *Philosophy and Phenomenological Research*, 87(3), 532–557
- Goldberg, S. (2006). “Reductionism and the Distinctiveness of Testimonial Knowledge.”. In J. Lackey, & E. Sosa (Eds.), *The Epistemology of Testimony* (pp. 127–144). Oxford: Oxford University Press
- Goldberg, S. (2008). Testimonial knowledge in early childhood, revisited. *Philosophy and Phenomenological Research*, 76(1), 1–36
- Goldberg, S. (2010). *Relying on Others*. Oxford: Oxford University Press
- Goldberg, S. (2014). Interpersonal Epistemic Entitlements. *Philosophical Issues*, 24, 159–183
- Goldberg, S., & Henderson, D. (2007). Monitoring and Anti-Reductionism in the Epistemology of Testimony. *Philosophy and Phenomenological Research*, 72, 600–617
- Graham, P. J. (2000). “Conveying Information.” *Synthese*, 123(3), 365–392
- Graham, P. J. (2006). “Liberal Fundamentalism and Its Rivals.”. In J. Lackey, & E. Sosa (Eds.), *The Epistemology of Testimony* (pp. 93–115). Oxford: Oxford University Press
- Graham, P. J. (2010). “Testimonial Entitlement and the Function of Comprehension.”. In A. Haddock, A. Millar, & D. Pritchard (Eds.), *Social Epistemology* (pp. 247–273). Oxford: Oxford University Press
- Graham, P. J. (2018a). “Sincerity and the Reliability of Testimony: Burge on the A-Priori Basis of Testimonial Warrant.”. In A. Stokke, & E. Michaelson (Eds.), *Lying: Language, Knowledge, Ethics, Politics* (pp. 85–112). Oxford: Oxford University Press
- Graham, P. J. (2018b). Formulating Reductionism about Testimonial Warrant and the Challenge from Childhood Testimony. *Synthese*, 195, 3013–3033
- Greco, J. (2015). “Testimonial Knowledge and the Flow of Information.”. In D. K. Henderson, & J. Greco (Eds.), *Epistemic Evaluation: Purposeful Epistemology* (pp. 274–290). Oxford: Oxford University Press
- Greco, J. (2016). “What Is Transmission?” *Episteme*, 13(4), 481–498
- Greco, J. (2020). *The Transmission of Knowledge*. New York: Cambridge University Press
- Harris, P., & Corriveau, K. (2011). Young Children’s Selective Trust in Informants. *Philosophical Transactions of the Royal Society of Britain*, 366, 1179–1187
- Henderson, D. (2009). Motivated Contextualism. *Philosophical Studies*, 142, 119–31
- Kenyon, T. (2012). The Informational Richness of Testimonial Contexts. *Philosophical Quarterly*, 63, 58–80
- Koenig, M., & Harris, P. (2004). Trust in Children’s Use of True and False Statements. *Psychological Science*, 15, 694–698
- Lackey, J. (2005). Testimony and the Infant/Child Objection. *Philosophical Studies*, 126(2), 163–190
- Lackey, J. (2006). “It Takes Two to Tango: Beyond Reductionism and Non-Reductionism in the Epistemology of Testimony.”. In J. Lackey, & E. Sosa (Eds.), *The Epistemology of Testimony* (pp. 160–189). Oxford: Oxford University Press
- Lackey, J. (2008). *Learning from Words*. Oxford: Oxford University Press
- Lyons, J. (1997). Testimony, Induction, and Folk Psychology. *Australasian Journal of Philosophy*, 75, 163–178
- Otgaar, H., Howe, M. L., Merckelbach, H., & Muris, P. (2018). Who Is The Better Eyewitness? Sometimes Adults but at Other Times Children. *Current Directions in Psychological Science*, 27(5), 378–385
- Pritchard, D. (2004). The Epistemology of Testimony. *Philosophical Issues*, 14, 326–348
- Shogenji, T. (2006). A Defense of Reductionism about Testimonial Justification of Beliefs. *Nous*, 40, 331–346
- Simion, M. (2020). Testimonial Contractarianism: A Knowledge-First Social Epistemology. *Nous*. <https://doi.org/10.1111/nous.12337>
- Simion, M., & Kelp, C. (2020). How to Be an Anti-Reductionist. *Synthese*, 197, 2849–2866

- Van Cleve, J. (2006). "Reid on the Credit of Human Testimony." In J. Lackey, & E. Sosa (Eds.), *The Epistemology of Testimony* (pp. 50–74). Oxford: Oxford University Press
- Welbourne, M. (1981). The community of Knowledge. *Philosophical Quarterly*, 31(125), 302–314

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.