Part One. The Achievement View of Knowledge.

The driving idea of traditional virtue epistemology is that knowledge is true belief attributable to cognitive ability (for example: perceptual ability; reasoning ability). In Sosa’s terminology, knowledge is true belief attributable to competence.

Cognitive abilities (or competences) are here understood as abilities to reliably get things right, relative to some field or subject-matter, and under appropriate conditions. For example, visual perception is an ability to form true beliefs about various features of middle-size objects (e.g., color, size), under appropriate lighting conditions, with an unobstructed view, etc.

A salient idea here is that knowledge is a species of a more general normative kind: knowledge is a kind of success from ability, or success from competence.

A number of authors have argued that knowledge is a kind of success due to ability or competence, including Sosa (1988), Sosa (2003), Sosa (2007), Sosa (2015), Greco (2003), Greco (2010), Greco (2012), Riggs (2002), Riggs (2007), Riggs (2009) and Zagzebski (1996).
Suppose we understand success from ability as an *achievement*. Then *knowledge is a kind of achievement* (hence, “the achievement view of knowledge”). (Greco, *Achieving Knowledge* CUP 2010)

This simple idea turns out to have considerable explanatory power regarding the nature and value of knowledge.

Regarding the nature of knowledge, the account yields the following diagnosis of Gettier cases:

In cases of knowledge, S’s true belief is attributable to her cognitive ability.

In Gettier cases, S has a true belief, and even exercises cognitive ability, but S’s forming a true belief is not attributable to her cognitive ability. Put differently: in Gettier cases, S’s true belief is *lucky*, as opposed to attributable to ability or competence. (Greco 2003, 2010: Sosa 2007)

In any domain of human performance that allows for success and failure, we make a distinction between success due to competent agency and success that is merely lucky. The present account exploits this familiar distinction to understand the nature of knowledge, and the nature of epistemic normativity more generally. (Greco 2010; Sosa, 2015)
The idea that knowledge is a kind of success due to competence—an achievement in that sense—also yields an elegant explanation of the value of knowledge.

In general, we think that achievements are both intrinsically and finally valuable. That is, we think that achievements are both valuable “in themselves” and “for their own sake.” By understanding knowledge as a kind of achievement, we can explain the value of knowledge in terms of the value of achievements more generally.

In the same way, the account elegantly explains the superior value of knowledge over mere true belief, in terms of the superior value of achievements over mere lucky successes (Greco, 2003; 2010).

A virtue-theoretic approach in epistemology, then, has considerable explanatory power. Nevertheless, the view faces an important line of objection regarding the epistemology of testimony and regarding the social dimensions of knowledge more generally. We turn to that line of objection in Part Two.

Part Two. The “Individualism” Objection to Virtue Epistemology.

By conceiving knowledge as an individual achievement of the knower, this objection claims, the view fails to accommodate important ways in which the knowledge of individuals can depend on the cognitive contributions of others. In this sense, the view is overly “individualistic”.
In different terms: The view ignores the importance of “social epistemic dependence.”


For example, much of our knowledge is due to the competent testimony of others. But then it is unclear why testimonial knowledge should be understood as an achievement of the hearer, as opposed to the speaker. (Lackey 2007, 2009)

**CHICAGO VISITOR:** Having just arrived at the train station in Chicago, Morris wishes to obtain directions to the Sears Tower. He looks around, randomly approaches the first passerby that he sees, and asks how to get to his desired destination. The passerby, who happens to be a Chicago resident who knows the city extraordinarily well, provides Morris with impeccable directions to the Sears Tower.

Even if Morris is appropriately attentive to the speaker, Lackey argues, and even if his reception of the speaker’s testimony is appropriately discriminating, it seems right to say that he forms a true belief *because of the speaker’s testimony* rather than because of his own efforts. Alternatively, his true belief is attributable to the speaker’s competent agency rather than his own.
In response to this line of objection, achievement theorists have noted that many of our cognitive abilities are social cognitive abilities. In particular, it is by means of social cognitive abilities that a hearer competently participates in testimonial exchanges. (Greco 2007, 2010, 2012; Riggs 2009; McMyler 2011; Reibsamen 2015).

Moreover, just as perceptual knowledge requires a good fit between our perceptual faculties and our broader physical environment, testimonial knowledge requires a good fit between our social cognitive abilities and our broader social environment. For example, we rely on knowledgeable speakers, and we rely on the social institutions that both make them available to us and help us to monitor them for competence and sincerity (Goldberg and Henderson 2006; Greco 2015; Graham 2015; Henderson and Graham 2017). In all these regards, then, the achievement view has resources for describing and explaining important aspects of social epistemic dependence.

I now think that this response by achievement theorists is right as far as it goes but ultimately inadequate. Here I am influenced by Lackey’s criticisms of this move but also by a remark by Goldberg.

When thinking about testimonial knowledge, Goldberg suggests, we don’t want to treat other people as “merely more furniture” in the environment. But that is what the present approach does, it seems.
That is because, for all that has been said so far, the virtue-theoretic approach makes no principled distinction between a) the ways that, in perceptual knowledge, our perceptual abilities interact with the physical environment, and b) the ways that, in testimonial knowledge, our social-cognitive abilities interact with the social environment. Accordingly, the present reply does not fully accommodate the point that, in cases of testimonial knowledge, our epistemic dependence on others is a kind of interpersonal dependence. We need a new view.

(So—to be clear—I am conceding that the objections against the achievement view from Lackey and Goldberg are correct.)

**Part Three. A Revised Virtue Epistemology (A Revised Achievement View)**

The new view comes in two major parts.

The first is to make a distinction between the generation (or production) of knowledge and the transmission (or distribution) of knowledge.

The second is to give an account of knowledge transmission in terms of competent of the competent cooperation between speaker and hearer.
More specifically, the account invokes the category of *joint agency* from action theory: In cases of knowledge transmission, the hearer’s true belief is attributable to the competent joint agency of speaker and hearer.

The revised view amounts this:

First, we now recognize two ways of coming to know: by *knowledge generation* (for example, by competent perception of reasoning) and by *knowledge transmission* (for example, by testimony from someone else who knows).

Second, knowledge generation continues to be understood as true belief attributable to the cognitive competence of the knower. But knowledge transmission is now understood as true belief *attributable to the competent joint agency of speaker and hearer acting together*.

In this sense, coming to know by transmission constitutes a *joint achievement*.

**Generation vs Transmission.**

We can begin with an intuitive distinction between the *generation* of knowledge and the *transmission* of knowledge. Very roughly, generation concerns coming to know “for oneself,” as when one perceives something, or reasons to a conclusion on the basis of good evidence.
Transmission, in contrast, concerns coming to know “from someone else,” as when one is told by someone else who knows.

We can further illuminate the distinction by invoking the notion of epistemic community, defined as a group of persons cooperating together with regard to some set of information-dependent tasks, and sharing norms for acquiring and distributing information associated with those tasks. (For example: a medical research team, a business corporation, a group of friends, a family.)

Suppose that S and H are members of the same epistemic community, and therefore cooperating with respect to some set of relevant tasks. One way for them to cooperate will be in the exchange of relevant information. The idea is that testimonial exchanges between S and H will be cooperative exchanges in that sense, and will be governed by norms and standards associated with that cooperative activity.

The next point is that not all testimonial exchanges are like that. On the contrary, sometimes speaker and hearer do not share membership in an epistemic community and are not cooperating in that sense. In fact, it is possible for the speaker-hearer relation to be characterized by competing interests. (For example: a police officer interviewing a suspected criminal, a salesperson trying to sell a product.)

In first kind of scenario, testimonial exchanges are at the service of information distribution within an epistemic community, and are governed by cooperative norms that serve that purpose.
In second kind of scenario, testimonial exchanges are at the service of information acquisition, and are governed by “gatekeeping” norms that serve that purpose.

Figures 1 and 2.

NB: Testimonial knowledge can arise both ways. A hearer can come to know as the result of both kinds of testimonial exchange.

The proposal is now this: we can understand the knowledge generation/ knowledge transmission distinction in terms of the information acquisition/ information distribution distinction. Specifically, knowledge transmission is to be understood in terms of the intra-community information distribution function.

 Accordingly, not all testimonial exchanges are at the service of knowledge transmission. Not all testimonial knowledge is transmitted knowledge.

An account of knowledge transmission.
In summary: we invoke two resources from outside epistemology: the concept of a *speech act* from the philosophy of language, and the concept of *joint agency* from action theory. The argument proceeds in three stages.

Stage 1. The transmission of knowledge involves a particular kind of *speech act*, one that we might think of as especially designed for the transmission of knowledge. In particular, the speech act of *telling* that p is tailor-made for sharing knowledge that p (or letting know that p, or giving to know that p).

Stage 2. The transmission of knowledge involves a special kind of *action*—a kind of action that may be variously characterized as “acting together” or “doing something together,” and that has been fruitfully theorized in the recent literature on *joint agency*.

Stage 3. In knowledge transmission, the speech act of telling and the joint action of sharing knowledge are importantly related. Specifically, the characteristic intention of the relevant speech act of telling—that of *sharing knowledge*—is also the shared intention of the relevant joint action.

That is, in successful instances of knowledge transmission, the speaker not only tells her audience that p, thereby manifesting her intention to share knowledge with her audience that p. In addition to this, her audience understands and shares this intention, and thereby becomes a participant in the joint action of sharing knowledge that p.
Stage 1. Telling as letting know.

It is standard in speech act theory that speaker intention is essential for specifying the kind of speech act that is being performed. For example, a speaker performs the speech act of promising (or commanding, or questioning) only if she intends to promise (or command, or question).

It is also standard that, for a speech act to be successful, the speaker’s intentions must be recognized and understood by the audience for what they are. (This is easy to see in the case of betting. I have not successfully bet you ten dollars that my horse will win unless, among other things, you understand me as doing just that.)

Speech acts, then, share at least this much with other kinds of action—mere trying to φ does not make it so that one has φ’d. Rather, the world (and in this case the audience) must cooperate.

These general characteristics of speech acts are manifested by the particular speech act of telling, understood as a species of assertion. Here is a passage from Elizabeth Fricker.

Tellings are a subset of assertions. In a paradigm and felicitous telling, the teller rightly takes herself to know that P, and seeks to share her knowledge with her intended audience, whom she believes ignorant, or possibly ignorant, as to whether P. Telling is the proprietary linguistic means—often the only practicable
way of achieving this, and almost always by far the easiest—of letting someone else know what one already knows oneself. The illocutionary act of telling is achieved when there is uptake: the intended audience correctly grasps the content and force of the speech act, recognizing that she is being told that P. It is consummated when the audience trusts the teller, forming [the] belief that P on her say-so. . . . This type of action, telling, exists and has a rationale, in our repertoire of mutually understood speech act types, in virtue of what is achieved in a felicitous act of telling which is taken up and consummated. Telling is a social institution for the spreading of knowledge . . .

(“Second-hand Knowledge,” p. 596)

Richard Moran is another author who, in his account of testimonial knowledge, gives pride of place to the speech act of telling. Moran nicely emphasizes the kind of intersubjective dependence and mutual understanding involved in the successful uptake and completion of speech acts such as telling and promising.

The simple act of telling involves an interlocking system of authority and dependence on, or deferral to, a role played by the other person. As Reid says, social acts of the mind are distinctive in that they “can have no existence without the intervention of some other intelligent being, who acts a part in them” (emphasis added by Moran) . . . they must be expressed to another party who
recognizes them for what they are and “acts a part” in their “completion.” (The Exchange of Words, p. 34)

Tellings, then, like other social acts, are characterized by an “interlocking system of dependence”—one that includes another person’s “recognizing them for what they are,” and who thereby “acts a part in them.” Likewise, telling involves a common or “shared” knowledge between speaker and hearer:

... the speaker’s knowledge of what she is doing in speech depends on this very knowledge being taken up and shared by her interlocutor; otherwise she will not in fact be doing what she announces in saying, I apologize, accept, refuse, tell . . .” (Ibid.)

It is precisely these features of interdependence and shared understanding that are also hallmarks of joint agency. We are in good position, then, so see how the transmission of knowledge, now understood as executed by the speech act of telling, can also be understood as a kind of joint agency between speaker and hearer.

Stage 2. Joint agency.
Suppose that two people are walking to the same restaurant at the same time, although neither is aware of what the other is doing. (Gilbert 1990) This is compatible with the two persons walking side by side.

Now imaging two people who are walking to the restaurant together. In this case, the two share an intention to walk to the restaurant together, and they share the knowledge that such an intention exists between them. This latter case is an example of joint agency.¹

There are various accounts of joint agency in the literature, but there is broad agreement about its characteristic features. First, and as already suggested, joint agency involves a “shared intention” on the part of the joint actors. That is, the participants in joint agency intend their participation, and understand their action, as something that they are doing together.

A second characteristic feature of joint agency is that it involves what Michael Bratman calls “sub-plans.” If we are to do something together, such as walk to the restaurant, we must have some plan for carrying that action out together. For example, we are not walking together if you decide to take one route to the restaurant and I decide to take another.

¹ For a helpful overview, see Roth 2011.
A third characteristic feature of joint agency is that it is *interactive*. Gilbert puts the point as follows:

If Jack and Sue are indeed going for a walk together, and Jack has apparently drawn ahead without noticing what is happening, we can imagine Sue taking action in various ways. She might call out “Jack!” with a degree of impatience. She might catch up with him and then say, somewhat critically, “You are going to have to slow down! I can’t keep up with you . . . [This] suggests that Jack has, in effect, an obligation to notice and to act (an obligation Sue has also) . . . each has a right to the other’s attention and corrective action. [Walking Together, p. 3]

As Bratman writes, in joint activity, “each is committed to, and appropriately responsive to, the coherent and effective interweaving of the . . . agency of one another.” (49)

**Stage 3. Knowledge Transmission as Joint Agency.**

With these ideas in place, we are now in a position to argue that knowledge transmission essentially involves a kind of joint agency between hearer and speaker.

First, the transmission of knowledge involves a communicative exchange, and it is plausible that communication in general involves the kinds of shared intention, shared understanding, and cooperation between speaker and hearer that are characteristic of joint agency. (Cf. Herbert Clark, *Using Language* CUP 1996)
Thus, in any communitive exchange, the speaker intends to be understood by the audience, and the audience understands that this is the speaker’s intention. Moreover, speaker and hearer cooperate so as to achieve the intended result, each depending on the other to make appropriate contributions (communicative and interpretive) to the exchange.

In the case of knowledge transmission, however, joint agency goes beyond what is required for communication in general.

Specifically, the transmission of knowledge involves the shared intention to impart relevant information: S transmits knowledge that p to H only if S intends to inform H that p, H understands and shares this intention, and the two successfully cooperate so as to execute their shared intention successfully.

\[
\text{(KT)} \quad \text{Knowledge that p is transmitted from a speaker S to a hearer H just in case S successfully tells H that p. And that happens just in case:}
\]

1. S knows that p;
2. S asserts that p with the intention of sharing knowledge that p with H;
3. H understands and shares S’s intention;
4. S and H act jointly so as to bring about their shared intention (i.e. so as to “consummate” the speech-act in 2).

Some points by way of elaboration

1. Our emphasis on joint action suggests that transmission need not be constituted by a “one-off” speech act. Rather, there might be an integrated series of moves by both hearer and speaker aimed at pulling off the shared intention of passing along knowledge. (For example, it is not uncommon for a hearer to ask a speaker for clarification, to redirect the speaker to a different question, to ask for some important detail or elaboration, or even to ask the speaker for her reasons. Likewise, it is not uncommon for a speaker to ask for clarification regarding the hearer’s question, to ask the hearer about what more specifically she needs to know, or to redirect the hearer to a different question altogether.)

Testimonial exchanges, then, are often more complicated than what is typically represented in the literature on testimony. This is important, because the false paradigm of testimony, as involving a one-off assertion, masks the extent of cooperation that is involved in a speaker transmitting knowledge to a hearer. Even in cases where knowledge transmission is underwritten by a one-off assertion, this is against the background of shared intentions and common understanding in which speaker and hearer stand ready to cooperate as needed for a
successful communicative exchange; i.e. for a successful act of telling to be “consummated.” So even when extended cooperation is not necessary, the potential for it is there if needed.

2. Clause 2 refers to the speaker’s intention to “share knowledge that p with H,” and clauses 3 and 4 refer back to that intention. As suggested above, the intention could be variously characterized as the intention to “inform H that p,” “let H know that p,” or “give H to know that p.”

The reason that some such characterization is needed is to distinguish knowledge transmission from other ways that one might come to know via testimony. It is now commonplace in the literature, for example, that a hearer can come to know that the speaker has an alto voice, basing this on the tone of her testimony rather than its content. But this would not be a case of telling, or of transmitting knowledge in the intended sense.

Likewise, a hearer might come to know that a speaker is angry (or that she is talking, or that she is Irish), not by way of sharing knowledge, but by way of acquiring information that is otherwise encoded in the testimony offered.

A second kind of case is more important for present purposes. Namely, there are cases where coming to know from testimony is an instance of knowledge generation rather than knowledge transmission. For example, in the “Police Investigator” case above, the suspect can be
characterized as an “uncooperative” witness, and precisely not holding the intention to share knowledge with his audience.

An objection.

Finally, I want to consider an objection to our claim that knowledge transmission involves the kind of shared intention characteristic of joint action.

Specifically, even if S asserts that p with the intention of sharing knowledge that p with H, and even if H understands S’s intention, it does not follow that H shares S’s intention.

Likewise, even if S intends to tell S that p, and even if H understands this, it could not be that H shares S’s intention to tell H that p. In fact, the objection goes, H could not share S’s intention to tell, insofar as H is not the one doing (or intending) the telling.

In reply, it is important to note that “telling” (in the sense of “letting know”) has the same ambiguity as “promising,” “gifting” and “passing a ball.” In one sense of each word or phrase, it refers to the individual action of an individual actor. In another sense, however, each refers to a joint activity involving a shared intention, common understanding, etc.

The distinction is easiest to see in the case of passing the ball. On the one hand, there is Brady’s individual action of throwing the ball, which he could do himself by throwing into a practice net. On the other hand, there is “passing the ball” in the sense of completing a pass, something that
Brady and Gronkowski do together. In this sense, if Grontowski does not catch the ball, then Brady was trying to pass the ball to Grontowski but didn’t.

The promising and gifting examples are important in this respect, because they demonstrate a more general pattern in (a class of) speech acts that the present argument means to exploit.

There is an individual action sense and a joint action sense of “giving a gift” and “making a promise.” But a closer analysis of gifting, for example, brings out the point that the joint action meaning is actually the more central one. Thus, I haven’t “really” given you a gift until you accept it. If you don’t accept it, it is still mine—I failed to give it to you!

Likewise, I can say in frustration: “I tried to tell you that!” The implication is that I tried but failed.

That wouldn’t make sense if the single actor meaning was the only one.

In fact, it is plausible that the single actor meaning is parasitic on the joint action meaning. (That is plausibly the real takeaway of the relevant speech act theory). But the present argument does not need that stronger point. Rather, it is sufficient that there exists the joint action meaning of “telling,” on the analogy with a joint action meaning of “gifting” and “promising.” It is in this sense that, in cases of knowledge transmission, speaker and hearer share the intention that S tells H that p, or that S shares knowledge with H that p.
Part Three. A unified virtue-theoretic account of generation and transmission.

The central idea of the new view is this: The distinctive phenomenon of knowledge transmission is to be understood in terms of joint agency and the related idea of joint achievement. More specifically, transmitted knowledge is to be understood as a joint achievement attributable to the competent joint agency of a speaker and hearer cooperating in the context of a testimonial exchange.

This central idea involves a significant revision to traditional virtue epistemology and the achievement view of knowledge. For on that view, the idea was that all knowledge constitutes an individual achievement. That is, all knowledge was understood as true belief attributable to the cognitive abilities of the knower.

On the new proposal, there are in effect two ways of coming to know. First, one may come to know by means of one’s individual competent agency. Second, one may come to know by means of one’s competent participation in competent joint agency.

In the second case, it is important to note, one’s having a true belief is attributable to the competent joint agency, as opposed to one’s competent participation in that joint agency.

Put differently, in the second case one’s own competent agency does not adequately explain one’s success. Rather, one’s success is explained by one’s cooperation with others, and is in this
sense a joint achievement (an achievement attributable to joint agency) *rather than* an individual achievement (an achievement attributable to individual agency).

Is it always the case that, in cases of knowledge, true belief is attributable *in some way or another* to the competent cognitive agency of the knower? The answer is yes. The idea is that, when a success is *directly* attributable to the joint agency of S1 and S2 acting together, the success is *indirectly* attributable to both S1 and S2 individually, insofar as the individual agency of each contributed to the joint agency in the right way. This is clear in a variety of non-epistemic cases.

An orchestra performs a musical piece that heavily features the first violin. A successful performance is directly attributable to the joint agency of the orchestra playing together. If we are dishing out praise for the performance, we might naturally focus on the first violinist, and it is true that the successful performance is largely attributable to her. Nevertheless, the successful performance is also (indirectly) attributable to the second violinist, the flutist, the clarinetist, etc., insofar as they contribute to the performance in the right way. Once again, they play an essential role in the joint agency that is directly responsible for the successful performance, and that is sufficient for attribution to indirectly accrue to them.

We can make the same point with regard to the hearer in a case of knowledge transmission. It is true that, in many cases, the transmission of knowledge will be largely due to the competent agency of the speaker, but it is also true that the hearer must do his essential part for
transmission to be successful. And that is sufficient for success to be (indirectly) attributable to the hearer’s competent agency.

But the point remains: In cases of knowledge transmission, the hearer’s true belief is directly attributable to competent joint agency, that is, to speaker and hearer cooperation. Success is only indirectly attributable to the hearer, by way of her competent contribution to the relevant joint agency.

Finally, much of the forgoing discussion can be extended to knowledge generation as well. For once the new view is in place, it is easy to see that knowledge generation, as well as knowledge transmission, might sometimes be a joint achievement depending on joint agency.

That is, it is easy to see that knowledge generation might sometimes involve the kind of intentional cooperation that characterizes joint activity. For example, we can conceive of a research team that cooperates in an investigation that is too complicated for any one person to undertake alone. If that cooperation is structured in the right way, and if the knowledge so produced is attributable to that cooperation, we will have a case in which knowledge generation is a joint achievement.

The proposed view is of course lacking in many details. But the general idea is now in view. Further details should be adjudicated according to the best theoretical results. For present purposes, however, I am interested in defending only the more general proposal. We can do that
by considering a) how the proposal addresses concerns about social epistemic dependence, and b) how the proposal preserves the theoretical advantages of the original achievement view.

First, it should be straightforward that the revised view accommodates Goldberg’s point that, in theorizing about social epistemic dependence, we should treat persons as persons, as opposed to merely more furniture in the environment. The present account does this by treating others on whom we depend as agents, and more specifically as agents with whom we cooperate in joint activity. The view also addresses concerns about epistemic individualism more generally. For one, the view continues to invoke social cognitive abilities and social environments in its account of knowledge. But more importantly, on the revised view knowledge is no longer understood solely terms of individual achievements, but in terms of joint achievement as well.

How does the present approach handle Lackey’s objection regarding testimonial knowledge specifically? In sum, it does so by conceding her point that, in cases of testimonial knowledge, success is often attributable to the speaker more so than the hear.

First, we now understand this as a point about transmitted knowledge, as opposed to testimonial knowledge more generally.

Second, in cases of knowledge transmission, the hearer’s forming a true testimonial belief is now held to be attributable to the competent joint agency of speaker and hearer acting together. This
is compatible with Lackey’s point that, in some cases of testimonial knowledge, the speaker plays a greater role than the hearer in achieving that success. (compare passing a ball)

Finally, the revised achievement view also preserves the theoretical advantages that we noted for the original achievement view. First, knowledge is still understood as a kind of achievement, and achievement is still understood as success attributable to competent agency. We now add that knowledge is sometimes a joint achievement, understood as success attributable to competent joint agency.

This, in turn, preserves the achievement view’s general approach to the value of knowledge: knowledge is intrinsically and finally valuable because achievements in general are intrinsically and finally valuable, and we value knowledge over mere true belief because in general we value achievements over mere lucky successes. We need now add that we value joint achievements in which we participate (we value such achievements in and for themselves), and that we value such achievements over mere lucky successes.

For similar reasons, the revised achievement view straightforwardly preserves the original view’s approach to the relations between knowledge and luck, and its conception of epistemic normativity as a kind of performance normativity. In fact, the revised view potentially provides richer insights in all three respects, insofar as the notions of joint agency and joint achievement afford more resources than do the notions of individual agency and individual achievement alone.