

# 11 *Postscript: 'Content Preservation'*

In this postscript I discuss three topics that come up in all my articles on interlocution. I write the postscript to 'Content Preservation', because the topics were broached there. The first topic is the role of knowledge in an antecedent chain of communication in making knowledge by a recipient possible. The second is the Acceptance Principle and its role in articulating a default *prima facie* entitlement to believe an interlocutor. The third is the epistemic status of the initial comprehension of another's utterance. On the first and third topics, I criticize some of my earlier views. On the second, I elaborate and defend my views.

## I

When a person receives information in interlocution, the person frequently acquires knowledge of the subject matter of the report. If a child is told that Magellan was Portuguese but sailed for Spain, the child commonly comes to know that Magellan was Portuguese but sailed for Spain. Often, the recipient lacks any further warrant to believe the report. The recipient commonly gains new knowledge from the report without having warrant that is both specific to what is reported and independent of the report. Students entering a new subject and young children gain knowledge in this way. When we travel, we come to know things about foreign lands simply by asking questions of foreigners. The recipient's background information—about either the topic or the interlocutor—does not suffice to provide any significant independent epistemic support for what the recipient learns. Often the recipient has, at the time of the report, no independent check on the veracity or competence of the reporter. Yet the recipient gains new knowledge through the report itself.

My first topic concerns the epistemic resources in the chain of communication that leads to a reception. The child would not have come to know that Magellan was Portuguese but sailed for Spain if there were no appropriate knowledge in the antecedent chain. What is the role of such antecedent knowledge in making it possible for a recipient to gain knowledge through being told something?

Let us focus on a case in which a recipient's background information makes no significant independent contribution to supporting what the recipient learns.

That is, the recipient does not have, independently of relying on the report, even a nearly sufficient warrant to believe the particular thing that is reported. So, for example, the recipient is not in a position to use whatever epistemic force there is in the reception of the report to tip what was antecedently *close* to being knowledge over the bar. In 'Content Preservation' I assumed that, in such a case, a necessary condition on the recipient's gaining knowledge from a report is that

(A) knowledge must reside in the chain of communicators that leads up to a report, if the recipient is to obtain knowledge from the report.<sup>1</sup>

This formulation allows that a recipient can gain knowledge even if the recipient's immediate interlocutor lacks knowledge. For example, if the immediate interlocutor tells the recipient something, but just repeats what he or she had heard from a previous interlocutor—without understanding it well enough to know it or without forming a belief about it—then the recipient could gain knowledge—as long as some antecedent interlocutor of the immediate interlocutor had knowledge. In such cases, I call an interlocutor who passes knowledge without possessing it a '*non-knowledgeable conduit*' of knowledge.

(A) indicates that the recipient's knowledge depends on knowledge in the antecedent chain. But (A) does not specify the exact relation that is required. It does not even specify that the recipient's new knowledge be had by some individual in the antecedent chain. As I will explain shortly, this lack of specificity has the advantage of allowing (A) to be flexible about how non-knowledgeable conduits convey knowledge to recipients.

I think that (A) is true, on a natural but liberal understanding of it. However, I also made a more committal assumption in 'Content Preservation'. I wrote,

(B) If the recipient depends on interlocation for knowledge, the recipient's knowledge depends on the source's having knowledge as well. For if the source does not believe *the proposition*, or if the proposition is not true, or if the source is not justified [warranted], the recipient cannot know *the proposition*.<sup>2</sup>

Unlike (A), (B) requires that knowledge that a recipient gains purely from interlocation be the very knowledge had by someone in the antecedent chain of communication. This assumption is *prima facie* plausible. But I now think it probably untrue.

<sup>1</sup> 'Content Preservation', *The Philosophical Review* 102 (1993), 457–488, see note 480 n 19; 246 n 19, in this volume. A commitment similar to that in (A) occurs in 'Computer Proof, Apriori Knowledge, and Other Minds', *Philosophical Perspectives* 12 (1998), 1–37; see page 5; 311, 311 n 9, in this volume.

<sup>2</sup> 'Content Preservation', 486; 251, in this volume. Italics added. Earlier in the article, I had indicated that sometimes I would use 'justification' to cover all forms of warrant, as I do here. Thus the brackets.

The assumption, which I shared with several other authors at the time I wrote ‘Content Preservation’, was challenged by Jennifer Lackey.<sup>3</sup> Lackey’s proposed counterexamples do not work against (B). They fail because they do not take account of the provision that the source of knowledge in the antecedent chain need not be the recipient’s immediate interlocutor. That provision was quite explicit in my explication of (B).<sup>4</sup> Lackey’s mistake seems to have stemmed from insufficiently close reading. But a variant on Lackey’s counterexamples has been fashioned by Peter Graham.<sup>5</sup>

Graham describes a teacher of evolutionary biology who does not believe in evolution, but who faithfully and reliably teaches the science anyway. The teacher’s students have no other source on evolutionary biology than the teacher. They do not read science books or hear about the science from anyone else. Graham supposes, plausibly, that the students can come to know from the teacher that, for example, humans evolved from non-human primates. So far, the case is compatible with (B). The teacher does not know the propositions that the students learn from relying on his or her teaching, because the teacher does not believe those propositions. But the propositions are known by the teacher’s own sources. The students gain knowledge from those sources through the teacher, as non-knowledgeable conduit.

Graham adds a twist, however. The teacher discovers a fossil on a solo field trip and infers from the discovery a new proposition that is in fact true and that is strongly supported by evolutionary theory. The teacher does not know the new proposition, because he or she does not believe the science that formed the main basis for the inference.<sup>6</sup> No one else knows the new proposition before the teacher makes a report, because no one else observed the fossil or made the inference. The teacher then tells the students the new proposition, again as conduit of evolutionary biology and its consequences. Graham supposes, plausibly, that the students can come to know the new proposition from the teacher.

Here we have an apparent counterexample to (B). The teacher does not know the proposition, since he or she does not believe it. No one else knew the proposition before the teacher taught it. But the students can come to know it from the teacher’s teaching.

<sup>3</sup> Jennifer Lackey, ‘Testimonial Knowledge and Transmission’, *The Philosophical Quarterly* 49 (1999), 471–490.

<sup>4</sup> In the note attached to (B), I explicitly allow that the immediate interlocutor need not be the *source* of the transmission of knowledge. The source could be farther back in the chain of interlocution. In other words, I allowed for non-knowledgeable conduits. See ‘Content Preservation’, the note immediately attached to (B), 486 n 24. See also ‘Computer Proof, Apriori Knowledge, and Other Minds’, 17. Lackey criticizes a range of views, and it may be that her counterexample is successful against some of them.

<sup>5</sup> Peter Graham, ‘Can Testimony Generate Knowledge?’ *Philosophica* 78 (2006), 105–127.

<sup>6</sup> The teacher knows the science in the sense that he or she is very competent at explaining it. The teacher knows what the science says and implies. But the teacher does not know the subject matter of the science through the science. Evolutionary biology is not part of what the teacher knows about the world, because the teacher does not believe the science. Knowledge in this sense requires belief.

It does not seem to me *obvious* that the students can come to know the proposition under the stipulated circumstances. In believing that they do know, one is easily influenced by the natural assumption (contrary to what is stipulated in the example) that they have other sources. Normally, they would be able to use the teacher's knowledgeable report about the fossil to infer the relevant proposition on their own. Then the students would gain the knowledge needed to carry out the inference from knowledgeable sources in the chain (with the teacher functioning as a non-knowledgeable conduit to those sources). The final piece of knowledge that they gain would not be purely from the report. The propositional bases for the inference would come from knowledgeable sources, and the students would carry out the inference on their own. Such an example would not defeat (B).

One must avoid such natural assumptions in forming intuitions about Graham's example. The teacher must be taken to report the conclusion of the inference without ever having explained its bases to the students. They are not in a position to make the inference themselves. How good are our intuitions at staying clear of such natural assumptions about variant examples? Although I do not find the answer obvious, I believe that Graham is probably right. I take the case to be a counterexample to (B).

The counterexample to (B) is not a counterexample to a liberal, but natural construal of (A). The non-knowledgeable conduit (the teacher) takes an inferential step that combines his or her own knowledge (based on observation of the fossil) with knowledge of the conduit's sources (the knowledge involved in understanding the inferential relation between the belief about the fossil and the conclusion of the inference). True, no one in the antecedent chain knows, or believes, the inferred conclusion that the teacher conveys to the students. But the knowledge that the students acquire is the product of the knowledge of the teacher's sources, the teacher's own observational knowledge, and a good inferential step taken by the teacher. In an abstract sense, the knowledge that the students gain resides, collectively, in the antecedent chain, including the teacher (with his/her knowledge of the fossil). We do talk this way about complex, collective scientific or mathematical work. Knowledge of a theoretical explanation or a proof resides in a group, even though, because of the complexity of the content of the knowledge, no individual has full control of the explanation or the proof. In the students' case, the relevant knowledge—a well-supported, thought-through proposition that is fully available as knowledge in the antecedent chain and that would be known by the teacher apart from the teacher's idiosyncratic irrationality—is conveyed to the students even though no individual knows it before the students do. The knowledge can be regarded as possessed collectively by the individuals in the antecedent chain, even though no individual in the antecedent chain has the knowledge.

The example suggests another issue that interests me more than my (probable) error in (B) and the need to take (A) in a liberal, abstract way. How are we to

characterize the students' entitlement that underwrites their knowledge? What exactly is the route to truth and knowledge that they rely upon?

A recipient of interlocution can have different lines of warrant for believing the same proposition at the same time. The students do have and rely on a default warrant that presumes upon the rationality and sincerity of their interlocutor, the teacher.<sup>7</sup> The students do not need to think about rationality or sincerity to have the warrant. Their entitlement is correctly explained by reference to the reliability of interlocutors' being broadly rational and sincere, other things equal. That is the fundamental idea behind the Acceptance Principle. I think that that default warrant is undefeated in the students' psychologies. So they retain it. But *that* warrant cannot underwrite their knowledge. For the presumptions that are associated with the warrant are incorrect. The teacher is neither rational nor sincere. So if the students nevertheless have knowledge, it is because they have a further warrant, beyond the default warrant. I find the example interesting because it forces one to think about different lines of warrant that the students have.

One sceptical way to respond to the example is this. As a conduit for knowledge, the teacher is corrupted by the fact that he or she is insincere. One might support this point by claiming that the teacher is unreliable because he or she would teach whatever was required to have a job. Robert Audi made this point against Lackey's original counterexample.<sup>8</sup> Graham responds by building up the case so that the teacher is reliable in the particular circumstances. Although the teacher is insincere, the reliability of the students' entitlement derives from the school that they attend, not from the teacher's rationality or sincerity. The teacher teaches in a school that has good judgment about its curriculum and requires that its teachers teach its curriculum, which in fact constitutes knowledge.

Although Graham does not develop his point in this way, I take Graham's point to indicate that in addition to the students' default entitlement to rely on the teacher's rationality and sincerity—an entitlement that is undefeated, but that cannot support the students' knowledge—the students have a further entitlement that depends on the teacher's social role. This further entitlement does support the students' knowledge. Graham's idea is that the teacher is reliable because the school's judgment about the curriculum is reliable, and the teacher is as reliable as other teachers in the system. The students' knowledge depends on the school's reliability, although the students need not have any *views* about reliability.<sup>9</sup>

<sup>7</sup> In 'Content Preservation', I argue that a default entitlement to rely on an interlocutor's sincerity is derivative from a default entitlement to rely on an interlocutor's rationality. But I keep track of both entitlements for the sake of expositional clarity. See note 15 below.

<sup>8</sup> Robert Audi, 'Testimony, Credulity, and Veracity', in J. Lackey and E. Sosa (eds.), *The Epistemology of Testimony* (Oxford: Oxford University Press, 2006), 25–49.

<sup>9</sup> One could also stipulate that the teacher's relation to the science is not malleable in the way that Audi suggests. Suppose that the teacher teaches the science faithfully because of its social prestige. I think that neither this response nor the one discussed in the text is the right way to defend the example.

I find this dialect unsatisfying. The school's good judgment and reliability do not seem to be essential to the students' having a warrant that supports knowledge. Suppose that some years before the students arrived, the curriculum had been staffed by an abnormally high percentage of unreliable and worthless teachers teaching worthless subjects—yielding no knowledge. But suppose that the earlier teachers died of a plague and a new set of teachers, more normal in teaching better subjects, arrived to staff the school's curriculum—through no particular good judgment by the school's officials. Then the students would retain a warrant to rely on their insincere teacher that would, I think, still underwrite the students' gaining knowledge of biology from their teacher.<sup>10</sup>

Consider the facts (a) that teachers (or teachers of science) are mostly reliable, at least on large matters about their subjects (the main points in the science); (b) that the particular teacher faithfully teaches the subject (or faithfully teaches science); and (c) what the teacher teaches is a body of knowledge about a subject matter and hence is itself a good route to truth. I think that these are the relevant facts for determining whether the teacher can serve as a knowledge channel for the students. (a) and (b) are social facts that the students' knowledge depends on. (c) is a fact about the science. The school's being run by people with good judgment is not essential. It is the prevalence of knowledge-conveying teachers (or science teachers), and the fact that the students are not in a context in which this prevalence is abnormally and indiscernibly (to the students) overmatched by teacher frauds, that are essential to the students' gaining knowledge.

There remains a question about the nature of the facts in the students' psychologies that ground their entitlement to rely on the teacher in such a way as to yield knowledge for the students. How do they hook into the reliable social resource that connects them to the knowledge in the antecedent chain? In the case of perceptual belief, we can specify the perceptual system and belief-forming system that underlies an individual's entitlements to rely on perceptual beliefs. These are natural psychological kinds that constitute the individual's route to the belief. When they are reliable, they form a natural psychological kind of belief formation that grounds the individual's entitlements to the perceptual beliefs. What are the psychological competencies that ground the students' entitlements to rely on the teacher's reports? What route or routes of belief formation underwrite the students' knowledge?

There are different types of entitlement to rely on the teacher. Relative to one type that they have, the students cannot obtain knowledge, though they have warranted true belief. If they were to rely essentially on the teacher's rationality

<sup>10</sup> If the biology teacher were the only one at the school who taught a respectable subject, capable of conveying knowledge, and all others taught virulently and pervasively post-modernist versions of relativism, no matter what the subject matter, and if the students had no instinct to rely on the biology teacher any more than on the others, then plausibly the students would fail to gain knowledge from the biology teacher. Then the case might be regarded as similar to a case in which an individual is forming perceptual beliefs about a barn in a landscape in which the thing the individual is perceiving is the only real barn among a host of nearby barn-facades.

(and sincerity), they could not obtain knowledge. Relative to another type, or other types, that they also have, the students do obtain knowledge.

Let me back up a bit. I believe that whether an individual is epistemically entitled to a belief depends on the reliability of belief-forming competencies that, in the absence of special information available to the individual, go by way of natural psychological or sociological kinds. For example, an individual is entitled to a perceptual belief if the individual's perceptual system and system of perceptual belief formation (for a particular kind of perception and belief) are well functioning, and are reliable in normal circumstances.<sup>11</sup> The relevant route is specified in terms of natural psychological kinds that the science of perceptual psychology and perceptual belief formation specify.

Let us assume that in the normal environment—the environment in which these competencies were determined to be the kinds of competencies that they are—the perceptual system and perceptual belief-forming system are reliable. Whether an individual happens to be in a psychological experiment with distorting mirrors does not affect the individual's entitlement to rely on perceptual beliefs, assuming that the individual has no information about being in such a situation. Such a situation is not the natural environment in the sense just specified. Being in such a situation may, however, affect whether the individual has knowledge, even if the individual's belief happens to be true. Such situations are the stuff of Gettier cases—true warranted belief that is not knowledge.

Similarly, I think that the sociological kinds that figure in the warrant-giving route that connects an individual's belief in a report to the report's subject matter are general, unless they are made more specific by special information that the individual has. The reliable social channel that grounds a default entitlement for the students is not determined by the particulars of the school that the students attends, unless that school is abnormally infested with unreliable teachers or unreliable subjects. Entitlement hinges, other things equal, on whether the social institutions that occur in the students' society are reliable routes to truth.

I conjecture that the teacher's being a teacher of a body of knowledge is the key fact. This fact is comprised by facts (a) and (c) above. The institution of teaching the subject matter must be reliable in order for the students' relying on it to be entitled to their beliefs. For the students to have knowledge, the *particular* instantiator of that social institution—here the oddball teacher—must be a reliable route to truth. Fact (b) must be in place for knowledge, though not for entitlement. Conditions (a)–(b)–(c), all external to the students, are necessary conditions on the students' having a route to knowledge. They are satisfied.

There can be hard questions about the social conditions, of course. At what juncture in history did teachers become reliable routes to truth in their science teaching? How should routes be specified synchronically? Perhaps late nineteenth-century teachers in Timbuktu are too unreliable, whereas those in England

<sup>11</sup> See my 'Perceptual Entitlement', *Philosophy and Phenomenological Research* 67 (2003), 503–548.

are reliable. How should the type of teacher be specified? What are the relevant synchronic sociological kinds? For the case of routes for forming individual perceptual belief, we have enough psychological science to answer analogous questions.<sup>12</sup> For the case of relying on others for information, sociology is not far enough along to provide general, well-supported answers. Philosophy must engage with sociology to find the relevant kinds.

Still, the outlines of answers can be reasonably conjectured. It seems to me that, even though reliability varies from teacher to teacher, default entitlement—in the absence of the students' having special information about their situation—cannot rest on local, contextual variations. The reliability relevant to entitlement must center on more general kinds that yield general sociological patterns on which beliefs rely. Such patterns may eventually be specified systematically, as our knowledge of social psychology and sociology grows.

Where it concerns empirical matters, the epistemology of default entitlement must ally itself with reliability of general patterns—the nearest thing to laws that a subject matter will allow. We do not know what the basic kinds are in the sociological world. But it seems clear to me that what particular school a student attends, or what particular teacher they have (assuming that the teacher is a reliable conduit), is at too fine a level of grain to ground scientifically valuable, sociological specifications of relevant *default* entitlement routes to truth—hence relevant types of reliability—that underwrite knowledge. Whether the students happen to attend a school that guides its curriculum in a good way does not affect the default entitlement for their beliefs that hinge on interlocution with their teachers identified as teachers (or teachers of science).

Let us suppose that the social aspects of the students' reliable route to the subject matter concern the institution of teaching science. We have not yet specified the psychological competencies that, along with the social facts, ground the students' entitlements that underwrite knowledge. I think it plausible that the students connect to the social channel by recognizing the teacher as a teacher, or perhaps as a teacher of science. They can recognize the basic social channel as the kind of thing that it is. They need not realize that it is a *basic* social channel. They need not *believe* that it is reliable. They need not even *consider* the teacher's being a teacher as a *reason* to rely on the teacher's reports. It is enough that they

<sup>12</sup> These remarks target the so-called *generality problem*. See Earl Conee and Richard Feldman, 'The Generality Problem for Reliabilism', *Philosophical Studies* 89 (1998), 1–29. An account of the reliable pattern that underlies entitlement must specify relevant kinds that fit into such a pattern, and must specify how the knower's psychology relies on these patterns. The generality problem is taken by some to be a serious difficulty because it is supposed that the kinds relevant to determining the reliability of belief-forming processes are open to endless armchair speculation. Such a view derives, I think, from trying to do epistemology independently of what is known about cognitive processes. In the case of the epistemology of *perceptual belief*, the view derives from failing to think seriously about perceptual psychology. The kinds that are relevant to specifying the relevant reliable process in perceptual belief formation are the most specific, or fundamental, natural psychological kinds of perceptual state and perceptual belief. The kinds are constrained by empirical knowledge of the natures of those states. We know a lot about such natures. Again, see 'Perceptual Entitlement'.

have the social know-how to discriminate the setting and to give some credence to what is taught in that setting. It is enough that they recognize the teacher as a teacher of science, and to have some inclination to allow that fact to be a factor in a tendency to rely upon the teaching. It is enough that they have the know-how to use productions from that social institution as a source of belief. Inasmuch as the institution of teaching science is generally reliable, the students are entitled to rely on it ((a) and (c)). Inasmuch as the particular teacher is a reliable instantiator ((b)) of the reliable institutional route, the students can gain knowledge, not just entitlement in the particular case.<sup>13</sup>

The foregoing account of the students' entitlement is richer than the account that I give in 'Content Preservation' of the most basic default entitlement that individuals have to rely on what they are told. The basic entitlement depends only on the intelligibility of the report, and on there being no sufficient counter-considerations. It does not depend on particular social institutions or on any psychological capacity to recognize them. I believe that the students have and rely on that basic entitlement, as well as the entitlement to rely on the teacher as a science teacher. The basic entitlement depends on the apriori connection between rationality and being a good, reliable route to truth.<sup>14</sup> But they have a supplementary entitlement as well.

<sup>13</sup> I think that if the institution is reliable—if most teachers, or science teachers, are reliable—the students are entitled to their beliefs insofar as they rely on this institutional channel. Relying on the channel involves exercising a psychological capacity to identify the channel appropriately. If a particular teacher were incompetent and unreliable, and students had no ground to realize this fact, the students could be entitled to rely on the teacher. But they could not gain knowledge from the teaching—even if, in a given case, what the teacher taught happened to be true. Here we would have a Gettier-type case.

<sup>14</sup> If a rational being were situated in circumstances in which reasons cannot correct for common, systematically misleading information, the rational being would not be a reliable channel to a subject matter *in those circumstances*. But a recipient could still be warranted in relying on the rational being. (Indeed, the rational being's own beliefs could remain warranted.) For being warranted does not—and in empirical cases, could not—depend on one's route to truth being reliable in all circumstances. Being warranted depends on one's channel's being reliable in normal circumstances—circumstances in which the relevant competence is determined to be what it is. Thus, suppose that a rational being were transported unawares to brain-in-vat circumstances. Then rational procedures might fail to improve on a systematic non-veridicality, and the rational being's empirical reports might be quite unreliable. Suppose that the recipient of the rational being's reports had no reason to think that the rational being had been envatted. The recipient would remain *prima facie* warranted in relying on the reports. For a discussion of these issues in the case of empirical entitlements, see my 'Perceptual Entitlement'.

A rational being can clearly be unreliable in a particular abnormal circumstance in a way that undermines *knowledge*. Whether, and in what ways a rational being can be unreliable in a normal environment in a way that undermines entitlement seems to me harder issue. Rationality itself is constitutively (and apriori) a good, reliable route to getting things right, in all circumstances. However, some of the resources that rationality relies upon (like perception) are not *constitutively*, hence not necessarily, reliable, even in normal circumstances. (Incidentally, in 'Interlocution, Perception, and Memory', *Philosophical Studies* 86 (1997), 31; 294, in this volume and in 'Comprehension and Interpretation', in L. Hahn (ed.), *The Philosophy of Donald Davidson* (Chicago: Open Court, 1999), 243; 357, in this volume—I make the mistake of claiming that perception *is* constitutively reliable. I have corrected that view in later work, for example in 'Perceptual Entitlement'). Insofar as a rational being relies only on rationality itself, it is, I think,

If the students had *only* the basic entitlement, they would not gain knowledge from the teacher's report. The basic entitlement is an entitlement to rely on the rationality and sincerity of the interlocutor. The students are entitled to rely on the teacher's rationality and sincerity by virtue of understanding the teacher's assertions. Again, they need not think about an interlocutor's rationality or sincerity, or be able to cite them as reasons. Still, their understanding the reports entitles them, *prima facie*, to believe the reports, because the intelligibility of the assertions is constitutively associated with rationality and because rationality is a good route to getting a subject matter right. The students lack any ground to suspect the teacher's irrationality or insincerity. They lack warrant to believe that the teacher's own attitudes toward evolutionary biology are irrational, or that the reports are not sincere expressions of beliefs. So they have the basic entitlement to rely on the teacher as a rational source. But the particular teacher's irrationality and lack of sincerity prevent the entitlement from yielding knowledge.<sup>15</sup>

clear, that the rationality will necessarily and *apriori* have the reliability necessary for being entitled to rely upon it. Whether the same can be said for a rational being that relies upon perceptual belief, but can use rationality to correct it, is the complex and deep issue. The issue bears on how best to respond to scepticism. In 'Content Preservation' and 'Perceptual Entitlement', I laid scepticism aside. I *assumed* that not only rationality but its non-rational resources (such as perception and the social institutions that we in fact rely upon) are reliable in their normal environments. I *assumed* that *that* reliability underwrites default entitlements. Whether one can show *apriori* that one has a right to such assumption is one form of the problem of scepticism about empirical knowledge.

Here also, I assume that perception is reliable. I also assume, for the students' knowledge case, that relevant social institutions are reliable. I also assume that unless special considerations undermine the presumption, one is *apriori* entitled to rely upon a rational being's presentations as true (cf. (A)). Rationality either supports or protects the presentations-as-true by rational beings.

<sup>15</sup> I continue to think that if one is warranted in finding an individual rational, one is *pro tanto* warranted in taking the individual to be sincere. See 'Content Preservation', 474ff.; 242ff in this volume. Since rationality has an impersonal function of supporting truth, an individual who has shown rationality can be presumed to be sincere, in the absence of evidence for doubt. As I wrote in 'Content Preservation', lying for no reason is irrational. Rational lying needs special reason to go against the impersonal function of supporting truth. Unless there is ground to think that one's source has special interests that would make the individual lie (perhaps rationally), a recipient can presume on a rational individual's sincerity. I leave open whether, if one came across a non-terrestrial blob apparently making English assertions, one would have some reason to doubt sincerity, or doubt whether the blob was actually making assertions. (See the case of a bush apparently talking in 'A Warrant for Belief in Other Minds'.) The blob's form may raise doubts. Still, I think that if one had sufficient reason to think that the blob was speaking English, one should not be neutral or negative in attributing sincerity unless there is some evidence that, from the apparent content or from the context, that counters the presumption of *pro tanto* rationality in sharing apparently harmless information. If one knows nothing about one's interlocutor or about the subject matter except that the interlocutor is an asserter of a not implausible and not specialized or difficult-to-know proposition, one is entitled to rely on the assertion as sincere and belief-worthy. If the recipient lacks ground to believe that a rationally competent individual is acting irrationally, or is lying for special practical reasons, the recipient is entitled to presume on the interlocutor's exercising truth-supporting capacities.

In the teacher's case, the irrational rejection of evolutionary theory falsifies the presumption of the teacher's rationality; and the teacher's not being open with the students about his or her disbelief in the science falsifies the presumption of sincerity. The students have an undefeated default entitlement to rely on the teacher (given no undermining considerations). They are entitled to believe the teacher. But this default entitlement cannot give them knowledge. For the teacher is relevantly irrational and

Here, I think, is a typical case of a recipient's having multiple warrants to believe a report. The entitlement to rely on a teacher does not essentially involve relying on the sincerity of the teacher in expressing individual, personal belief in the what he or she teaches.<sup>16</sup> An entitlement to rely on the teacher as a teacher (or as a teacher of science), given minimum recognition of someone as a teacher, supplements the basic default entitlement. The students' entitlement to rely on the teacher depends on the fact that teachers in the society are reliable in teaching the science and on the fact that the science is reliable. Given that this particular teacher is reliable in conveying the science, acceptance of the reports yields knowledge, where the reports are true.

The socially based entitlement overlays the basic entitlement that derives from the very intelligibility of the report. The students have both entitlements. But only the one grounded in the specific social institution of teaching (or teaching science) yields knowledge. If the students could not recognize the teacher as a teacher, and if they relied only on the intelligibility and internal coherence of the reports, they would not, I think, gain knowledge from them. Yet in many situations, the basic entitlement does suffice to yield knowledge. In the next section, I further discuss the widespread phenomenon of *overlay* among entitlements.

## II

In 'Content Preservation' and in my other articles on interlocution, my primary interest lies in the *structure* of epistemic norms that govern interlocution. I want to emphasize both the abstractness of the structure, and its philosophical interest.

I continue to think that the Acceptance Principle (AP) articulates the basic, default warrant in this structure.

insincere. Only their supplementary entitlement to rely on the teacher as science teacher supports their knowledge.

<sup>16</sup> The students' entitlement to rely on the teacher *as a teacher* does not depend on presuming that the teacher's reports express personal beliefs. But, as indicated in note 15, I think that the students are further entitled to rely on the natural presumption—associated with their default entitlement—that the teacher *as a rational source* is sincere. If the students had reason to believe that the teacher was insincere, both entitlements would be threatened. The entitlement to rely on the teacher as a rational, credible source would be directly threatened. The entitlement to rely on the teacher as a teacher would be indirectly threatened, because an insincere teacher is less likely to be a reliable conduit, other things equal. But we are supposing that the students lack any reason to think the teacher insincere. Since their supplementary entitlement (the entitlement to rely on the teacher as teacher) does not depend specifically on sincerity, only reliability, the actual, unsuspected failure of the teacher's sincerity does not prevent the entitlement from yielding knowledge, because the teacher's reliability as a teacher remains intact. These complexities illustrate, I think, the value of getting the form of an entitlement right. Most recipients have entitlements in addition to their default entitlement, as well as many further considerations that bear, pro or con, on entitlements that they have.

(AP) A person is entitled to accept as true something that is presented as true and that is intelligible to him, unless there are stronger reasons not to do so.<sup>17</sup>

The Acceptance Principle is the starting point for an account of warrants to believe what one is told. It is the baseline standard that governs epistemically good belief formation from communication with others. The starting point does not always provide warrant for belief. Sometimes the default warrant is defeated by counter-considerations. Often it is supplemented by further positive considerations, as it is in the case of the students, discussed in section I. But the principle lies at the base of the structure of epistemic norms that govern interlocution.

Some philosophers have doubted this starting point. Some have thought that one must gain information about the trustworthiness of one's interlocutor to be warranted in accepting what one is told. Some have thought that being warranted depends on one's at least trying to assess that trustworthiness. I will not engage specific versions of these doubts. I think that they are all driven by a hyper-intellectualized epistemology. Many confuse *scientia*—the knowledge involved in science and in critical reasoning—with all knowledge. The hyper-intellectualization and this particular confusion are occupational hazards in philosophy.

Such views cannot account for simple cases in which children rightly accept what they are told, without supplementary support and without the minimum sophistication even to try to assess trustworthiness. Information and knowledge simply seem to flow in, without the need for supplementary support or critical scrutiny. I think that if the Acceptance Principle were not true, adults would have too slim a basis to develop the knowledge base that they actually have.

Many philosophers acknowledge these points, but see them as fringe points. They see the epistemology of children's beliefs as a minor part of the whole of epistemology. I think that such a view is very shortsighted. The non-intellectualized starting point of the ontogenetic development of knowledge is a key to understanding the grounds for the epistemology of all interlocution. It is the key to the structure of the relevant epistemic norms.

In 'Content Preservation' I considered, with some hyperbole, whether the Acceptance Principle can ever be the last word in the epistemology of acceptance for anyone over the age of eleven. The most important thing about the principle is that it is the first word. The last word in any given case is what is most salient to epistemic agents. The last word is especially salient to mature, educated adults who commonly scrutinize interlocutors, whose reports they have not developed reasons to trust. Often mature adults weigh pros and cons before coming to a belief, especially with regard to specialized or advanced subject matters. Sometimes an initial ground for doubt prevents the entitlement articulated by the Acceptance Principle from warranting belief. Sometimes a reasonable doubt stands until it is counteracted by further considerations. But since the Acceptance Principle is the first word in the dialectic, it structures nearly everything that

<sup>17</sup> 'Content Preservation', 467; 237, in this volume.

follows. So its role in understanding the epistemic structure of warrant for relying on interlocution is fundamental.

This point is missed if one focuses on the surface of epistemic dialectic or if one does not reflect sufficiently on the structure of defeasible epistemic entitlements and defeasible standards for knowledge.

For example, Elizabeth Fricker writes that even if one were to grant that the Acceptance Principle is correct, it would be ‘largely irrelevant to explaining the basis of our right to accept most of the testimony we, mature adults, receive in everyday life’.<sup>18</sup> I believe that two serious errors underlie this claim of virtual irrelevance.

One is a focus on what is most salient to fairly sophisticated adults in their everyday acquisition of knowledge from others. Fricker writes,

[The Acceptance Principle] is largely irrelevant to explaining the basis of our right to accept most of the testimony we, mature adults, receive in everyday life. It is irrelevant because a mature and normally cognitively equipped adult is usually amply furnished with

<sup>18</sup> Elizabeth Fricker, ‘Martians and Meetings: Against Burge’s Neo-Kantian Apriorism about Testimony’, *Philosophica* 78 (2006), 81. Fricker argues against the Acceptance Principle. Some of the argument relies on the hyper-intellectualism mentioned earlier. Some of it relies on the claim that in discussing rational lying, I equivocate between a ‘thin’ sense of being rational that is constitutive of having propositional attitudes and a presumably thicker sense: ‘wholly impartial and disinterested speaker only of the truth’, 82. Fricker thinks that my account of the Acceptance Principle depends on conflating these “senses” of being rational. I deny that two such senses of being rational are at issue. I make no use of her supposed thicker sense. I deny that the sense of being rational that is implicit in having propositional attitudes (and being capable of making assertions) is thin. I think that it is the full sense of being generically rational, as distinguished from being critically rational. I think that generic rationality has practical and impersonally theoretical dimensions. I think that, *prima facie*, when a speaker fails to tell the truth because of special interests, the speaker crosses rationality in one significant dimension, the latter one. Just as a generically rational individual can be irrational on particular occasions, a generically rational individual can be all things considered rational in the particular case, while rationally lying. But the impersonal function of rationality is compromised. So there is some compromise on generic rationality. I think that lacking special reason to suspect that the individual is relying on special needs or special considerations, one can presume that the individual is in a non-special situation and is realizing the impersonal function of rationality. This point is an instance of the more general point that one is entitled to presume that a generically rational individual is in no respect irrational in a particular case, unless there is reason to doubt the presumption. Contrary to Fricker’s claim (a wild claim by virtue of the terms ‘wholly’ and ‘only’), I do not need to assume that a recipient relies on a presumption that the interlocutor is a ‘wholly impartial and disinterested speaker only of the truth’. The relevant knowledge is defeasible, and it depends on being right about the interlocutor in the particular case—not on presuming that the interlocutor is a perfect rational god. It allows that a given speaker may be rational and may make mistakes, or may, in some cases, not perform up to his or her rational competencies. It allows for different, sometimes conflicting dimensions of rationality. An individual’s entitlement can be defeated if there is reason to think that the interlocutor falls short of the default presumption in any of these ways. And an individual who has the entitlement can fail to have knowledge if in fact the interlocutor does fall short in any of these ways. I think that Fricker gives no genuine reason to doubt the explanation in ‘Content Preservation’ of the constitutive connections that underlie the Acceptance Principle.

Fricker is right (in her section IV) that my account of the Acceptance Principle is not intended to persuade people who doubt that we are entitled to accept what we are told, other things equal. I believe that reflecting on practice and taking care to avoid hyper-intellectualization are the best grounds for a philosopher’s coming to accept the principle. My account is intended to articulate an underlying rationale for the principle, granted its truth.

relevant empirical evidence concerning the likely reliability of most of the testimony she encounters in her daily life, and this swamps the significance of any supposed on-no-evidence entitlement to believe what she is told. . . . Whether [the Acceptance Principle] holds is a critical issue for the legitimacy of our everyday acceptance of testimony, only if we are sufficiently often in the position about which it pronounces—that is, we have no defeaters regarding the trustworthiness of the testifier. But more than this: the correctness or otherwise of [the Acceptance Principle] is critical for the propriety of our everyday response to testimony only if we are frequently in a position where we have no positive empirical basis to trust a testifier. If the typical position of a mature adult faced with a piece of testimony is that she has in her cognitive background, and brings to bear, a wealth of empirical knowledge relevant to the assessment of that testimony, then she does not need recourse to a default principle licensing its acceptance in the absence of such relevant empirical information.<sup>19</sup>

This passage illustrates a philosophical focus that fails to engage with the motivations that underlie my proposal and explanation of the Acceptance Principle.

It is true that normal, educated adults usually have lots of evidence that bears, pro or con, on the trustworthiness of a report. I made this point myself. But *irrelevance* of the principle to explaining the entitlements of such adults, much less the entitlements of many less well-equipped persons, hardly follows from this point. Fricker provides no argument that bridges the gap. The relevance of the principle does not depend on the frequency of its operating as the sole factor in recipients' warrant for belief. The principle's relevance does not depend on how often individuals 'need recourse' to it. Recipients frequently have many warrants to rely on the reports of others. They may regularly have a warrant but not *need* to rely on it, since they have others.

My interest in epistemic warrant does not center on the minimum needed to get by in everyday life. It centers on the structure of the relations among the warrants that come into play in the epistemology of interlocution. Frequency, minimum need, salience are not particularly important factors in understanding this structure.

Moreover, I am not focused on all the factors that make communication work in actual human life. It is surely true that the ontogenetically earliest communicative relations are between a child and relatively sympathetic adults, who need to initiate the child into the family or tribe form of communication. The child can rely on the adults not just because they are rational but because they are sympathetic and interested in helping the child learn the language and the environment. I see a deeper epistemic structure that in various ways underlies this practical ground. It underlies this practical ground by applying more broadly and by being a more central component in the epistemic structure of warrant through interlocution.

<sup>19</sup> 'Martians and Meetings: Against Burge's Neo-Kantian Apriorism about Testimony', 81.

Rationality is causally grounded and sustained in mutual need, perhaps. Still, once propositional attitudes and their attendant rational norms and capacities are in place, there are epistemic norms that are a priori fitted to propositional, rational capacities. It is these norms that I am trying to understand.

Fricker remarks, as if in a ridiculing *reductio*, that my abstract explication of the Acceptance Principle ‘conjures up the idea of a message beamed in, as it were from Mars, received in abstraction from any social context of real-life everyday communication’.<sup>20</sup> Far from being a rhetorical embarrassment to me, the Mars analogy is close to what I had in mind. I asked whether in abstraction from the trappings of human social context, there is ground to accept what one is told—given only an intelligible presentation-as-true and assuming that no counter-considerations are present.

I continue to maintain an affirmative answer. I believe that the affirmative answer indicates that the minimum source of warrant for receiving communication is more general than human social context. The source lies in something universal to intelligible, propositional presentations-as-true (centrally, assertions). That universality, together with the way dialectical reasoning works with possible defeaters of default entitlements, shows the source to be in a sense basic. All further considerations are more specialized, even if they are more common. As I will try to show, nearly all are in effect reinforcements of or threats on the probity of this basic warrant.

A second mistake that Fricker makes is to misconstrue a fundamental feature of default *prima facie* (or *pro tanto*) entitlement. She believes that when a recipient has evidential support other than that provided by the Acceptance Principle, that further support ‘replaces’ the entitlement default entitlement, thereby making it ‘irrelevant’ in all such cases.<sup>21</sup>

Default, *prima facie* entitlements do not in general operate that way. The default *prima facie* (or *pro tanto*) entitlement articulated in the Acceptance Principle certainly does not work that way. Fricker provides no reason to take her non-standard view of default *prima facie* entitlement.

<sup>20</sup> ‘Martians and Meetings: Against Burge’s Neo-Kantian Apriorism about Testimony’, 82. It is important *not* to allow ‘beamed’ to suggest that assertive mode is not part of what would be required to be entitled to accept a report in accord with the Acceptance Principle. The principle does not apply unless the recipient is in a position to exercise a reliable competence for taking received content to be asserted.

<sup>21</sup> Elizabeth Fricker, ‘Trusting Others in the Sciences: *A Priori* or Empirical Warrant?’, *Studies in the History and Philosophy of Science* 33 (2002), 373–383. Peter Graham, ‘Testimonial Justification: Inferential or Non-Inferential?’, *The Philosophical Quarterly* 56 (2006), 84–95, criticizes unsound argumentation by Fricker in ways I largely agree with. In elaborating on these criticisms, however, Graham appeals to overdetermination of warrant. I think that, in many cases, the default entitlement articulated by the Acceptance Principle and supplementary warrants severally provide warrant. In this sense, Graham is right that there is overdetermination. But most standard cases of overdetermination provide a poor model for the relation between the default entitlement and supplementary warrants. Most standard cases of overdetermination take the overdetermining factors to be independent. As I discuss below, most supplementary warrants are *not independent* of the entitlement articulated by the Acceptance Principle.

A default prima facie entitlement *holds*, unless a further warrant either defeats it, or threatens it in a way that needs to be answered and is not answered. The foregoing claim is the claim made in the Acceptance Principle. That claim is also what is meant by saying that the default warrant holds 'other things equal'. The idea is not that the principle holds only when other considerations are absent or other considerations exactly balance one another. The idea is that it suffices to support belief (and I think, in the absence of further defeaters, supports knowledge), unless there is unanswered, sufficiently strong countervailing warrant. If there is a countervailing threatening warrant and if a supplementary positive consideration defeats or outweighs that warrant, the default entitlement stands. The positive considerations show that the countervailing threats do not, all things considered, undermine the warrant. So the warrant holds. Sometimes the supplementary positive considerations simply show that a threat, which would warrant doubt in the absence of the supplementary considerations, is misleading; the supplementary considerations do not support the belief directly. Then it is completely clear that the initial entitlement retains its force.

Other times, the supplementary considerations support the belief directly, and more strongly than the counter-considerations support doubt. In such a case, the supplementary considerations can be regarded as sufficient to support the belief. But they do not, and cannot do so, in complete independence of the entitlement articulated by the Acceptance Principle. The fact that the report is an intelligible presentation-as-true, with its associated implications spelled out in the Acceptance Principle, must figure in nearly *any* supplementary warrant that directly supports belief. Supplementary considerations show that in the particular case the reporter's rationality and sincerity are to be trusted. Supplementary warrants are specializations and elaborations of the entitlement present in the principle. They are not fully independent voices.

If one were to think of the default warrant and the supplementary considerations that directly support belief as separate units, then it would be hard to see how the the default warrant has any significant role in the final outcome. On this picture, the default warrant and the supplementary warrant are like competing but separate voices. Either voice taken by itself would suffice to support the belief. If the default voice were alone with the counter-consideration, it would not suffice. It would be drowned out. If the supplementary reason were alone with the counter-consideration, it *would* suffice. Given that all three are in competition, the default warrant's voice might seem to be outshouted by the counter-consideration, which is itself outshouted by the supplementary positive consideration.

This picture is misleading about the structure of warranting support. Supplementary positive considerations are normally not independent of the basic default entitlement in the way that the picture of competing voices suggests. As noted, nearly all supplementary warrant presupposes and uses warranting force involved in comprehension of a presentation-as-true. Nearly all supplementary warrant

presupposes and uses the warranting force involved in the rationality and sincerity of the recipient's source. Supplementary warrant tends to ensure that this force is in place by supporting the presumption that the recipient's source is likely to be rational and sincere—and consequently worth relying upon—in the particular case. Such support reinforces the warrant already present in the default warrant.

This point is clear from the fact that the same generic kinds of threats that could threaten the general basic default warrant can also threaten these supplementary warrants. For example, if the supplementary warrant is a reason to believe that the individual is a specially competent scientist in the field in which he or she tells one something, that warrant could be threatened by further information that the scientist is an inveterate liar in the type of circumstance in which he or she made the report. Or it could be threatened by further information that the scientist is in a depression and his or her usual rationality has been compromised.

The idea that supplementary positive warrants 'swamp' or 'replace' the basic default *prima facie* warrant depends on a misconstrual of the nature of the relevant warrants. Nearly all supplementary positive considerations that support the credibility of a reporting incident reinforce the basic warrant. They are not independent of it. They provide special information that tends to indicate that a given case fits the general form of the basic default warrant. They certainly do not emasculate its warranting force, or replace it.

Of course, some supplementary considerations reinforce the credibility of a report not by bearing directly on the credibility of the reporting incident, but by providing independent warrant for the proposition that is reported. For example, the same proposition might be reported by others. Or one might have been an eyewitness to something that adds to the credibility of the reported proposition. If the basic warrant for the initial report is threatened, independent supplementary positive considerations (that do not bear directly on the credibility of the reporting incident) may provide an independent and crucial element in the full warrant for believing the relevant proposition. But such cases certainly do not show that the initial warrant is irrelevant to warrant. They just illustrate what is already obvious—that the basic warrant is *prima facie*. It is not in general decisive for supporting belief; it can contribute warrant without being decisive.

As noted, nearly all supplementary positive considerations that support the credibility of a reporting incident indicate that the incident is a specific realization of general features that provide warrant in the default case other things equal. The general features that support credibility are those implied by the rationality of presentations-as-true. Reason supports credibility. Slightly less generally, that an individual is *prima facie* competent in a given case follows from the individual's rationality. A rational person, exercising reason, would not make an assertion on a matter about which he or she is not competent. Also that an individual is *prima facie* sincere in a given case follows from an individual's rationality. See notes 15 and 16. Sincere, rationally supported or protected, competent presentations-as-true are credible. Further evidence that supports an interlocutor's credibility

usually supports specific elaborations on the interlocutor's competence, sincerity, and/or rationality. In nearly all cases, a reporting incident helps ground an entitlement to believe the report at least partly by virtue of the presumption that in presenting the proposition as true, the source exhibits a rationality—including a sincerity and competence—that *prima facie* supports belief.

I say 'nearly all' because of the complexity in the structure of epistemic warrant illustrated in section I. When the students obtain knowledge from the insincere but reliable teacher, they rely on the source's being a teacher, or a teacher of science. *That* entitlement does *not* rely on the overall rationality or sincerity of the teacher. It relies only on the institution of reliable reporting/teaching of the science. That warrant is not a specialization of two of the key warranting features that are articulated by the Acceptance Principle—the sincerity of the report and rationality of the interlocutor in backing belief in what is reported. The students' supplementary entitlement bypasses those features. Their supplementary warrant yields knowledge even in the absence of those features.

I think that this supplementary warrant depends on special aspects of social institutions. Such institutions can enlist loyalty and veridicality in carrying on cultural tradition, regardless of the individuals' particular beliefs in what is conveyed. Teaching the subject matter has one function of simply being a conduit of the subject matter. As teacher, the individual can subordinate his or her own belief to the teaching function. Teachers can even function as non-rational but accurate instruments that do not contribute *any* of their own rationality to the process. They can function minimally as telephones or amplifiers that pass on propositions—even knowledge—that resides in their social antecedents.

Such separation of individual belief from accuracy in conveying knowledge is not the normal case. More importantly, the existence of such social institutions—institutions involved in education that reliably conveys truths to recipients—is possible only because of a base of sincere, rational assertions that figured in the development of such institutions. Institutions can go unreliable. Institutions that reliably convey knowledge can be staffed by many non-knowledgeable conduits. However, such institutions are normally dependent on a base of sincere interlocution backed by rationally supported or rationally protected beliefs in the reports. Institutions that lack a such a base will tend to go unreliable and thus will fail to provide warrant, hence knowledge, through interlocution.

Thus, although the epistemic structure of warrant and knowledge transmission is made more complex by the fact that social forms can take over some of the epistemic functions of individual rationality, the role of individual rationality in the epistemic structure of interlocution remains primary. It is the first word in any complex dialectic of pros and cons. And it is normally *present* in the last word, at least in specialized form, if the last word is pro. Most positive considerations that directly support the credibility of a report are specializations and confirmations of the default warrant articulated by the Acceptance Principle.

My third topic is the epistemic status of the initial intake of a report—the exercise of a capacity for comprehension. Let me state briefly the background for this topic in my work. Recall the Acceptance Principle:

(AP) A person is entitled to accept as true something that is presented as true and that is intelligible to him, unless there are stronger reasons not to do so.

I take the warrant for believing the Acceptance Principle to be apriori.

The warrant, which is a justification, for believing the principle is to be distinguished from the warrant that is articulated by the principle. The latter is a default prima facie entitlement that all interlocutors have, if they are reliable comprehenders and if they comprehend an event as having a specific representational content and as a presentation-as-true.<sup>22</sup> To have the entitlement, an individual need not believe the principle, or even have the concepts necessary to believe it. Nevertheless the justification of the principle reveals something about the epistemic status of the entitlement that it articulates.

The justification for believing the principle consists in the argument given in ‘Content Preservation’. The argument connects

(1) prima facie intelligibility of a presentation-as-true

with

(2) there being, prima facie, a rational source of the presentation-as-true.

And it connects (2) with

(3) there being, prima facie, a good route to truth.

The argument develops the idea that a presentation-as-true is prima facie backed by reason—either supported by it or protected by it.<sup>23</sup> Reason constitutes a prima

<sup>22</sup> This formulation should not be understood to require that the recipient have the general concepts representational content or presentation-as-true. The idea is that in the particular case, the recipient exercises a comprehension competence. That competence treats the event as a presentation-as-true and assigns a specific representational content to the event. To have the default prima facie entitlement articulated by the Acceptance Principle, the recipient must exercise a reliable competence on the particular occasion.

<sup>23</sup> Not all reports by a rational being are reasoned to or supported by reason. For example, rational beings report their perceptual beliefs. They are entitled to the beliefs. Entitlements are warrants without reason. I say that the rational source’s report can be presumed to be supported *or protected* by reason, because I think one can expect a rational being to be able to sustain or protect such warranted beliefs by reasons, even when the beliefs themselves are not supported by reasons. A rational being must have at least a know-how sensitivity to possible defeating considerations or supplementary supporting considerations. And it must be able to think rationally with such considerations when they arise. See ‘Perceptual Entitlement’. (Having the know-how sensitivity is *not* to be understood as requiring having epistemic concepts like defeating condition or reason.) The presence of reason enhances the source’s reliability even when reason does not directly support the report.

facie good reliable route to getting a subject matter right. Beliefs obtained by such routes are warranted.<sup>24</sup>

There are subsidiary arguments in this account.<sup>25</sup> But the main argument goes through (1), (2), and (3). The links between these steps and the overall argument seem to me to be apriori. So the connection between an event's being an intelligible, propositional presentation-as-true and the proposition's being worthy of belief, other things equal, seems to me to be apriori.

The default prima facie entitlement, articulated by the Acceptance Principle, to believe a proposition that is comprehended, and is presented as true, seems correspondingly apriori. What gives that entitlement epistemic force is the constitutive, apriori connections expounded by the argument that goes through (1)–(3).<sup>26</sup> Those connections are apriori knowable. So I take the entitlement as articulated in the Acceptance Principle to be apriori. I stand by these ideas.

The epistemic status of occurrent exercises of comprehension is a further matter. The entitlement so far discussed is a prima facie epistemic entitlement to form beliefs in presentations-as-true of intelligible propositions. If one is prima facie warranted in one's comprehending an event as a presentation-as-true, one is prima facie warranted in believing the proposition (prima facie) presented as true. But to be epistemically entitled to a particular belief in an intelligible proposition presented as true by another person, one must be epistemically entitled to one's occurrent exercise of one's capacity for comprehension. One must be epistemically entitled to rely on one's (seeming) comprehension of the other person's report as genuine comprehension. Thus the instantiation or 'application' of the entitlement articulated by the Acceptance Principle in a particular case of interlocution requires that the recipient exercise a competence for comprehension. So to be entitled to the belief in the report, the recipient must be entitled to rely on the exercise of comprehension.

In 'Content Preservation', 'Interlocution, Perception, and Memory', and 'Reason and the First Person' (last section), I argued that the warrant for *particular exercises* of our comprehension of others' communication sometimes is non-empirical. I relied on this claim, at least for the sake of argument in 'Computer Proof, Apriori Knowledge, and Other Minds'.<sup>27</sup>

<sup>24</sup> 'Content Preservation', 470ff; 239ff. in this volume.

<sup>25</sup> I have in mind, for example, the argument that entitlement to rely on rationality implies entitlement to rely on sincerity. See 'Content Preservation', 474ff., 242ff. in this volume, and notes 15 and 16 above.

<sup>26</sup> The statements of the principle and its epistemic status in 'Content Preservation', 467 and 469 (237, 238 in this volume) respectively go only this far. This point is explicit, 476 (243 in this volume), though it is not as clear on 469 as it should be. The issue of whether in a particular case an individual is warranted in comprehending an event as certain specific propositional content presented as true is a further issue. This is the issue that I shall discuss in this section.

<sup>27</sup> See 'Content Preservation', 476–485 (243–250 in this volume), esp. 478 (245 in this volume); 'Interlocution, Perception, and Memory', esp. sections I and II; 'Reason and the First Person' in Crispin Wright, Barry C. Smith, and Cynthia Macdonald (eds.), *Knowing Our Own Minds: Essays Self-Knowledge* (New York: Oxford University Press, 1998), 264–267; 401–404 in this volume; and 'Computer Proof, Apriori Knowledge, and Other Minds'; all are reprinted in this volume.

I acknowledged that all successful exercises of comprehension of others' assertions depend causally on perception. I maintained, however, that the role of perception in comprehending another's speech or writing is sometimes purely that of an enabling condition. Although perception is necessary for the success of our comprehension, I claimed that perception does not always contribute to the force of one warrant that we have for relying on an exercise comprehension. This claim always seemed to me, as well as to others, counter-intuitive. Still, I thought that I could see through to a way of justifying it. I now think, what most readers have probably long thought, that I was mistaken.

Several authors correctly objected to my claim. But no one explained to my satisfaction why it was mistaken. I will try to sort out rights and, mainly, wrongs in my earlier view.

I begin by reviewing key features of the view. Then I discuss four ideas that seemed to me to support it. Finally, I explain why I think that these ideas, both individually and jointly, fail to justify the claim that in actually comprehending others' assertions, we sometimes have a non-empirical entitlement to rely on the exercise of comprehension in forming beliefs. One's entitlement to rely *essentially* on an exercise of *seeming* comprehension of another individual's report as *genuine* comprehension is never strictly apriori.<sup>28</sup>

I took default prima facie warrant for exercises of comprehension to be an element in default prima facie warrant for forming beliefs in what others present as true. As noted, I stand by my account of the warrant that connects an exercise of comprehension with belief. This is the account that connects propositional presentations-as-true with rational sources, and rational sources with good routes to truth. I believe that the contrast that I draw in 'Interlocution, Perception, and Memory', section II, between using others as sources in communication and using scientific instruments is right. Although one might be equally warranted in relying on a measuring instrument and on an interlocutor in forming beliefs, the explanations of the warrants for belief are significantly different. Both require reliability, relative to appropriate conditions, and goodness of route to truth. But the fact that the latter runs through a rational source makes the forms of the warrant differ in epistemically important ways.

I take exercises of comprehension often to be immediate and non-inferential at the personal-level. Although there are certainly complex, sub-personal, irredeemably unconscious transitions in the formation of a (purported or actual) comprehension, the individual often carries out no inference. At the level of processes available to the individual's consciousness, understanding is often as immediate as ordinary perception of the physical environment. Furthermore, individuals need not be capable of giving reasons that justify their comprehension

<sup>28</sup> Note the role of 'essentially'. In mathematics, one could take a piece of communication, find it intrinsically plausible, or find that it fits with other things one knows, and come to know it apriori. Then one's warrant would not rely essentially on the proposition's being presented as true by another. The understanding of the content itself would be the source of warrant.

of others' utterances. So the relevant sort of warrant at issue is an entitlement, not a justification.

Although the comprehension is both a comprehension of content and of mode—presentation-as-true—the comprehension is normally not *based* on a belief that a source asserted (or presented-as-true) that such and such. I believe it likely that children comprehend utterances and are entitled to rely on their comprehension *before* they have any beliefs about assertions as such. They are cognitively sensitive to utterances' being assertions (or other presentations-as-true) and to what the utterances' contents are. But they need not have, and I suspect at certain stages have not, formed conceptions as of content or mode, much less beliefs about them. Understanding here is prior to having beliefs as the "object" of understanding.

I think that comprehending the representational content of another's utterance requires a capacity to understand the primary modes of utterance, or types of speech act. In particular, comprehending such representational content requires responding differentially to assertion, or at least the broader generic mode—presentation-as-true. The epistemic status of comprehending the mode of another's utterance and that of comprehending the representational content of another's utterance are parallel and interlocked.

I did not claim that all exercises of comprehension could be non-empirically warranted.<sup>29</sup> I excluded exercises of comprehension in which the comprehended content itself includes exercises of perceptual representation. For example, if you say 'that is a star-gazer lily', looking at a flower, and I comprehend what you say, part of my comprehension consists in perceiving the flower, or at least perceiving your angle on what you are talking about. My comprehension includes *de re* perception-backed representation. I always took such comprehension to be warranted empirically.

The sort of comprehension that I made my counter-intuitive claim about is purely *conceptual* comprehension—comprehension that utilizes only exercises of ability-general representation.<sup>30</sup> For example, comprehension of another person's utterance of 'the longest strait in the universe is well over 200 miles long', 'the cube root of 27 is 3', and 'blue whales are larger than school buses' are each relevantly conceptual or intellectual. The instances of comprehension do not contain perceptually backed, *de re* applied representational content. The question is whether exercises of conceptual comprehension can sometimes be

<sup>29</sup> Normally, I take epistemic entitlement to apply to an individual's belief, or to an individual's reliance on cognitive capacities that are part of a system that includes belief. I never take it to apply to occurrences of perception. Perceptions *contribute* to entitlement to perceptual beliefs. Exercises of comprehension comprise an intermediate case. I will write of entitlement to such exercises. One could recast this way of writing, but nothing here hangs on the terminological issue. Comprehension, unlike perception, is propositional. Arguably it can constitute propositional knowledge of the content of another's utterance. Perception cannot constitute propositional knowledge.

<sup>30</sup> For explication of 'ability-general', see 'Disjunctivism and Perceptual Psychology', *Philosophical Topics* 33 (2005), 1–78, esp. section VII; 'Five Theses on *De Re* States and Attitudes', in J. Almog and P. Leonardi (eds.), *The Philosophy of David Kaplan* (New York: Oxford University Press, 2009), section II; and *Origins of Objectivity* (Oxford: Oxford University Press, 2010), 379–396.

intellectually and non-empirically warranted—warranted independently of any contribution by perception to the warrant's positive epistemic force.

I strictly distinguished the nature of the warrant for an exercise of comprehension from the nature of its vulnerability to correction. Although I claimed that some exercises of comprehension are non-empirically warranted, I took all exercises of comprehension of another's utterances to be vulnerable to empirical correction or refutation.<sup>31</sup> The issue concerns sources of positive epistemic force, not sources of epistemic threat.

Because I took perception to be a necessary enabling condition for any comprehension of others' utterances, hence for any *warranted* comprehension of others' utterances, I took malfunctions and other poor exercises of perception to be capable of undermining entitlement to conceptual comprehension. I maintained that it does not follow that perception makes an essential positive contribution to the force of epistemic warrant for comprehension of others' utterances. Malfunctions of the brain can undermine warrant for relying on one's reasoning processes. It does not follow that references to the brain figure in one's entitlement to rely on particular transitions in deductive inference.

I stand by all the foregoing. I will be reconsidering and criticizing only the claim that in some of our exercises of conceptual comprehension, perception contributes nothing to the positive epistemic force of the default *prima facie* entitlement to rely on the veridicality of an exercise of comprehension of another's occurrent presentation-as-true. Put less technically, I shall criticize the counter-intuitive claim that one's warrant for relying purely on one's comprehension of another's utterance can sometimes be non-empirical.

I discussed four ideas that made me think that I could justify this counter-intuitive claim. The first concerned the intellectual objects of conceptual comprehension and the large role that conceptual mastery plays in comprehension, even acknowledging the necessary genetic role of perception in the process. The second consisted in an analogy between exercises of comprehension and uses of diagrams or concrete symbols in coming to understand mathematics. The third consisted in an analogy between the preservative role of perception in interlocution and the preservative role of memory in deductive inference. The fourth consisted in what I called 'the Injection Argument'.

I regarded no one of the four ideas as decisive in itself. I saw them as mutually reinforcing. I will discuss each idea and try to explain why, even collectively,

<sup>31</sup> Although I agree with the conclusion of Christensen and Kornblith's objection to my earlier view that some of our exercises of comprehension of another's utterances are non-empirically warranted, I continue to think that their reasons were not good ones. A central line of reply in 'Interlocution, Perception, and Memory', section I, esp. 26–30; 290–292 in this volume rests on the distinctions in the text above. It is obvious that empirically warranted considerations can threaten default entitlement—threaten the plausibility of a report or the trustworthiness of the reporter. It does not follow that the default entitlement itself is perceptually warranted. Nearly all the considerations that I mistakenly marshalled to support my view relied on this delicate but important distinction between source of support and source of warranted threat.

they do not suffice to support the counter-intuitive claim that in some cases of being warranted in comprehending others' utterances, perception is just an enabling condition and contributes nothing to the positive epistemic force of the epistemic warrant to rely on the exercise of comprehension.

First, the large role that conceptual mastery plays in comprehension. I take it to be clear that conceptual representational content is an abstract entity that cannot be perceived. Instances or tokens of symbols can be perceived. But individuated as shapes or as acoustical signals in a clearly physical and not content-based way, instances or tokens of symbols are not themselves instances of representational content. They *express* representational content. Expression is not a natural-kind relation, and is not instantiation. It depends on the conventions of a language community, or the idiosyncracies of an idiolect.

As a consequence, language perception is very different from perception of ordinary entities in the physical environment. The latter is known to leave little scope for top-down influence. When we perceive ordinary entities in the physical environment, our background beliefs can affect attention and memory. But the primary processing of perception of basic perceivable attributes—like shape, color, pitch, location, texture, motion, bodihood—is nearly independent of background belief and is broadly common to all mammals.<sup>32</sup>

In language perception, the connection between the physical sounds or shapes that are produced and what sentence is taken to have been uttered by a recipient, let alone what representational content the recipient assigns to the utterance, is vastly more complex. The connection is deeply informed by antecedent linguistic, cognitive capacities. Indeed the acoustical signal in heard speech is not stored or remembered by a hearer of speech.

In 'Content Preservation' and other articles, I emphasized that comprehension is not an inference at the personal-level of psychology. It is fast and unconscious.

<sup>32</sup> A critique of the tendency in twentieth-century philosophy to overrate top-down elements in ordinary, basic perception is one of the main themes of *Origins of Objectivity*. For an introductory explanation of the relative independence of human, non-phonological perceptual systems from higher-level cognitive capacities, see Zenon Pylyshyn, 'Is Vision Continuous with Cognition? The Case for Cognitive Impenetrability of Visual Perception', *Behavioral and Brain Sciences* 22 (1999), 341–365. Pylyshyn's point is among the best supported general facts in perceptual psychology about perception. Many experiments, mainly in social psychology, have tried to show that background beliefs affect perception. But these experiments have never controlled for the psychological source of familiarity effects. They fail to engage with the results in perceptual psychology. Familiarity effects that stem from knowing what sort of thing is perceived have not been shown to be caused by, or part of, perceptual operations as opposed to prior beliefs. A well-entrenched finding in perceptual psychology indicates that formation of perception *per se* does not depend on higher-level cognitive states. For studies that are pointed at poorly controlled experiments alluded to above, and that show that when the sources of familiarity effects are controlled for, the judgment-independence of perception—including human perception—remains intact, see G. Naor-Raz, M. J. Tarr, and D. Kersten, 'Is Color an Intrinsic Property of Object Representation?' *Perception* 32 (2003), 667–680; and M. Olkkonen, T. Hansen, and K. R. Gegenfurtner, 'Color Appearance of Familiar Objects: Effects of Object Shape, Texture, and Illumination Changes', *Journal of Vision* 8 (2008), 1–16. Formation laws for ground-level perception do not involve concepts or linguistic capacities. By contrast, language-perception depends heavily on background linguistic capacities, such as syntactic and semantic competencies, that are not perceptual.

Many comprehenders cannot articulate the inductive and context-dependent transitions that they make from perceiving utterances, as physical tokens, to assigning a representational content and mode to the utterance. To be sure, there is, in principle, a possible person-level inductive, theoretical route from the physical tokens to the assignment of meaning. But the route is not the basic psychological route. The basic route is a sub-personal route. That route begins with perception and proceeds through a complex, context-dependent set of unconscious transitions that are cognitively dominated. The transitions are largely dependent on application of the individual's particular, contextually influenced syntactic and semantic competencies. As I emphasize in 'Comprehension and Interpretation', they are not even a sequence of the individual's unconscious propositional inferences involving beliefs about sounds, speech acts, and the like. The complex processing involved in linguistic comprehension is not a matter of individual-level propositional inferences at all. Normally, linguistic comprehension involves processing, but not propositional inferences from perceptual beliefs about physical situations. The processing is modular and very likely not even propositional.

I took the role of perception in this process to be more one of triggering the application of the cognitive competencies than one of contributing to the warrant for applying these competencies. I attempted to bolster this first idea with a second.

The second idea is an analogy between the role of perception in triggering comprehension of others' utterances and the role of perception of symbols or diagrams in triggering comprehension of logical or mathematical truths. A traditional rationalist point is that symbols or diagrams simply trigger understanding of representational content. The perception of the symbols is causally and psychologically necessary for understanding. But the epistemic force of the warrant for believing the mathematical content owes nothing to perception. I take this point about the role of perception in coming to understand and be warranted in believing logical and mathematical propositions to be correct. The idea of the analogy was that in the relevant cases of comprehension of an utterance, the role of perception in the *epistemology* of comprehending others' utterances and in believing what one is told is like that of perception in learning mathematics. Perception is necessary to trigger understanding. But the warrant for belief derives from understanding, not from perception.

I acknowledged disanalogies. In understanding mathematics, it does not matter for knowing the proposition whether one correctly understands what proposition is expressed by a symbol, or what proposition the teacher is trying to get across by drawing a diagram. One knows whatever proposition is triggered, if one understands that proposition and if one can know it by understanding it. To know an ordinary proposition by being told it, one must get *right* what proposition is uttered. For, in interlocution, gaining knowledge in the proposition is parasitic on there being knowledge of that proposition (in the sense of section I) in the antecedent chain.

I thought that this disanalogy does not undermine the main claim for two reasons.<sup>33</sup> First, I noted that one can be warranted *and gain knowledge* through interlocution even if one mis-perceives an utterance, as long as one's comprehension is correct.<sup>34</sup> There are many cases in which one mishears what an individual utters and yet correctly understands what the individual says. For example, the interlocutor might mis-speak; but one might correctly understand what the individual intends to convey. Second, I noted that one can be warranted and gain knowledge through interlocution, even if one's perception and perceptual belief about the utterance go wrong because of negligence or carelessness. That point seemed to show that perception of the only relevant thing that one could perceive—the utterance—was not crucial to the warrant for comprehension. Again, I thought, what matters for whether one acquires knowledge is whether one comprehends what the interlocutor asserts—not how perception supports the comprehension.

My idea was that if the default warrant that supports knowledge through interlocution depended for its warranting force on perception or perceptual belief, these two possibilities would not exist—or at least would not be so frequently realized. It seemed to me that perception was just functioning to trigger comprehension. What mattered to warrant and knowledge, I thought, was comprehension, not whether perception was correct or even adept. I thought that these points suggested that perception and perceptual belief sometimes does not provide warranting support for comprehension.

I overrated these two points, which seemed to disarm disanalogies between comprehension in interlocution and coming to understand mathematical/logical truths. They do not show what I thought that they showed. I expound them here to explain how I came to my earlier view, and how I defended it against doubts, including my own doubts. I will come back to why they lack the force that I thought that they had.

Now to the third idea. I thought that the force of the diagram analogy was bolstered by a further analogy. In 'Content Preservation', I argued that purely preservative memory is essential to deductive reasoning, but does not contribute to the warranting force for any premise or inferential transition in the reasoning. Failure of such memory can undermine warrant. But its success, though essential, is not a warranting factor in deductive reasoning. The warrant for believing the conclusion hinges on whatever warrant there is for believing the premises, and whatever warrant there is for relying on one's competence to carry out deductive inferences. Memory does not figure as a positive warranting factor in the

<sup>33</sup> I made these two points in 'Content Preservation', 480 n19; 246 n19 in this volume, and 'Interlocution, Perception, and Memory', 29; 292 in this volume.

<sup>34</sup> One can be *entitled* to rely on one's comprehension and one's belief in what one is being told, even if one does *not* correctly comprehend the utterance. But one is thus entitled only because one is a good, reliable comprehender of others' utterances, in normal circumstances.

epistemology of ordinary deductive inferences. I believe that this argument remains sound.

The argument was in effect an existence proof of a psychological capacity that is psychologically essential to knowledge, but does not contribute to warrant. I thought that, like purely preservative memory in deductive inference, perception could, in interlocution, be psychologically essential, but epistemically inert, unless it failed. Perception seemed to play a role in transduction and preservation of representational content through interlocution that was quite analogous to the role that purely preservative memory plays in keeping steps in an argument in play over the time during which an inference is carried out. The analogy seemed to help explain how perception could be so important to the success of interlocution without contributing to the warranting force for belief or knowledge.

I called a fourth idea ‘the Injection Argument’.<sup>35</sup> I tried to evoke the idea that the contents of perception and perceptual belief are inessential to comprehension, by invoking a counterfactual supposition. Suppose that recipients in communication never relied on what they perceived or perceptually believed about utterances in communication in forming their understanding of what was said to them. Suppose that there were a natural, reliable, causal route from interlocutors’ intentions in making assertions through some physical medium into the brains of recipients that then reliably caused comprehension. I thought—and still think—that recipients would be warranted and could gain knowledge via such communicative exchanges. If the causal route were part of a natural and reliable psychological competence in understanding another person, then persons could be entitled to rely on it. But the competence would not depend, even causally, on perception or use of one’s senses. Perception and sensing would play no role in the account of the positive epistemic force in the warrant. A reliably veridical comprehension competence, supported by a natural causal chain, would suffice.<sup>36</sup>

<sup>35</sup> The idea does surface in ‘Comprehension and Interpretation’, 244; 358 in this volume. I developed the argument in more detail in the Santayana Lectures at Harvard in 1998 and in an earlier version of ‘A Warrant for Belief in Other Minds’. But I never had sufficient confidence in the argument to press it in print. The occurrence in ‘Comprehension and Interpretation’ broached the idea. I hoped to develop it in more depth later, in the essay that is now titled ‘A Warrant for Belief in Other Minds’. The work on that essay halted around 1999. As things turned out, I changed my mind about the Injection Argument. The revised version of that essay is printed in this volume, with the Injection Argument deleted. Of course, the issue over the Injection Argument ran parallel to my pulling back on the larger positions that we could have a warrant for comprehending others’ utterances, and that we could have a non-empirical warrant for knowledge of the existence of other minds. I cannot remember when I clarified to myself why I should give up these views, though I began to draw back from them over a decade ago. I did not write down the reasons in detail until around 2010, in preparation for this volume.

<sup>36</sup> One could imagine that the causal route does not run through any of the normal sensory channels. Of course, in a broad sense, the recipient’s psycho-biological systems must be sensitive to differences in the causal chain that correspond to differences in content. In this broad sense, comprehension would still depend on a “sensory” route. I would have always been content to concede that interlocution must depend for its entitlement on a “sensory” route in this very broad sense. But I was supposing that no ordinary, and certainly no conscious, sensory capacities and no genuine perceptual representations play any role in the process. The interlocutor’s intentions are

I was inclined to think that this counterfactual supposition supported the view that even in actual situations, the nature of perceptual content was inessential to the account of a recipient's warrant to rely on comprehension competence, as long as that competence is in fact reliable in providing comprehension of others' presentations-as-true. What seemed to carry the positive warranting force was the reliable causal chain and the conceptual competence for comprehension, not the specific content of the perception.

I was never comfortable with the position that our default entitlements to rely on exercises of conceptual comprehension of another's utterances were sometimes independent of perception for their epistemic force. The view is clearly counter-intuitive. At first, I thought that some illumination might be gained by developing the position in an exploratory spirit. Then when I failed to see what was wrong with it, and when objections repeatedly seemed not to show it wrong (or to boil down to expressing general dissatisfaction with the explanation, largely in view of the counter-intuitive conclusion), I went with it.

In retrospect, I think that the number of relatively new and abstract initiatives that figured in the discussion concealed, at least from me, the force of the ordinary, intuitive view. The following were all relatively new ideas:<sup>37</sup> (i) the separation of epistemic support from epistemic threat, (ii) the idea of entitlement as a type of warrant that is distinct from justification and that can depend entirely on unconscious sub-personal psychological processes, (iii) the complexities of language perception and its differences from ordinary perception, and (iv) the idea of purely preservative memory. They provided resources for deflecting common sense objections that—at least, as I thought—had not yet been couched in sufficiently sophisticated terms to deal with them. So the common sense objections did not influence me as much as they should have.

In any case, I believe that the four ideas that I mentioned earlier that were supposed to support the thesis that we can have non-empirical warrant for beliefs based on interlocution do not collectively suffice to support that thesis. Taking the four ideas in reverse order, I will explain what I think I missed in each case.

The Injection Argument does, I think, show that exercises of comprehension *could* be warranted independently of perception and of sensing. They could depend only on sensitivity to aspects of a causal chain that affects the intellectual faculties directly. The first, and perhaps even only, *representational* competencies that come into play could be intellectual, and warranted only through the reliability and competence of those intellectual capacities. But our actual comprehension competencies do not work in that way. The key point is this: Epistemic norms—like epistemic warrant—are standards for the good use of

"mainlined" into the central comprehension system. For the distinction between perception and various notions of non-perceptual sensory capacities, see *Origins of Objectivity*, chapters 8 and 9.

<sup>37</sup> I was certainly not alone in emphasizing the first and third points. I mean that the four points were relatively new in the sense that they had not been around for long enough (more than a generation) to be well assimilated and reasonably well understood.

psychological competencies. Epistemic norms are necessarily fitted to underlying psychological competencies. Since our psychological competencies do employ perception, since successful interlocution cannot get by without its being at least broadly reliable (see below), the role of perception in successful exercises of comprehension cannot be avoided *just because* other, psychologically possible beings might not use perception in comprehension.<sup>38</sup>

To put it another way, one's right to rely on comprehension of another's utterances as veridical comprehension depends on not just having perceived some utterances, but on perceiving such utterances reliably enough to warrant taking them as expressing a specific content, which one veridically comprehends. The force of one's right to rely on one's comprehension depends on one's perceiving others' utterances well enough to map them onto the representational content that others in fact utter. If one were systematically unreliable in one's perceptions, one would have no warrant to rely on one's seeming comprehension of others' utterances as genuine comprehension.

So I think that the Injection Argument, though instructive, cannot show that we have apriori warrant to rely on comprehension of others' utterances. We lack the psychological competencies that the relevant warrant would attach to. The argument shows at most that it is in principle possible for someone to have such an apriori warrant.

Now to the third idea. Purely preservative memory does show that a psychological competence can participate in a cognitive process and not contribute to entitlement to rely on the process. There are some interesting parallels between the role of purely preservative memory in inference and the role of perception in enabling content to be preserved through communication. But a key difference is that purely preservative memory does not introduce a subject matter for cognition for an epistemic agent, whereas perception does introduce a subject matter—a communicative event. The epistemic role of purely preservative memory is *purely* preservative, purely anaphoric. The epistemic role of perception in communication is partly preservative; but perception also introduces new, epistemically relevant information into the recipient's cognitive system. How well perception contributes information to the formation of comprehension, and ultimately belief, bears on the epistemic force of the warrant for relying on an exercise of comprehension.

<sup>38</sup> The comprehension postulated in the Injection Argument is analogous to the cognition postulated by Shoemaker in his examples of quasi-memory. See Sydney Shoemaker, 'Persons and Their Pasts', *American Philosophical Quarterly* 7 (1970), 269–285; reprinted in his *Identity, Cause, and Mind* (New York: Oxford University Press, 2004). I emphasize that one must understand an individual's psychological competencies in terms of the *actual* natural psychological kinds that those competencies instantiate in 'Memory and Persons', *The Philosophical Review* 112 (2003), 289–337, reprinted in this volume; and in 'De Se Preservation and Personal Identity: Reply to Shoemaker', this volume. I emphasize the dependence of epistemic norms on such actual competencies in 'Perceptual Entitlement'.

The second idea—the analogy between communication and use of diagrams or symbols in learning mathematics—still seems to me valuable. The function of perception in contributing to cognition, in both cases, is to put the individual in a position to understand a propositional content. The primary source of warrant to believe the proposition lies in understanding it, not in perceiving anything. Perception does have a triggering function in comprehension of others' utterances. However, as noted, to gain knowledge by relying on communication, one must get right something about what is being communicated. By contrast, in the mathematics case, knowledge does not depend on getting right what proposition is uttered, or what diagram is drawn, by the interlocutor. The warrant attaches to one's understanding of whatever proposition is evoked by the external utterance. The proposition need not have any relation at all to what the interlocutor is trying to communicate. In fact, the triggering events need not have any mathematical relevance at all. There need be no reliable understanding of any event outside one's psychology. The warrant for understanding/believing logical and mathematical truths attaches to the individual understander's understanding of the content of his/her own states.

Recall that I appealed to two reasons to try to disarm disanalogies between warrant for comprehending others' utterances and warrant for comprehending mathematical/logical truths. I tried to discount a role for perception in contributing to the warrant for relying on an exercise of comprehension as veridical comprehension. The two reasons are not compelling.

The first reason was that one could be warranted in relying on comprehension—and even gain knowledge from such comprehension—even if one misperceives an utterance. The second was that one can be warranted in relying on comprehension—and even gain knowledge from such reliance—even if one misuses perception in such a way as to undermine warrant (and knowledge) for perceptual belief. Both of the premise points of these reasons are correct. But the reasons do not suffice to support their purported conclusion—that perception does not contribute to the force of the warrant for relying on comprehension or to the knowledge that depends on that warrant.

Both reasons fail to take account of the immense redundancy of empirical information that is available in a communicative situation. One's comprehension can succeed (and be warranted and yield knowledge) despite a misperception (even if the misperception is not brute error—and involves a misuse of perception), because one has enough other sound, warranting perception to enable one to determine what the individual says. For example, one can negligently misperceive what sentence an interlocutor utters and yet warrantably (and knowledgeably) comprehend what the interlocutor communicates, despite the interlocutor's mis-speaking. But this is possible only because one relies on correct warranting perception of previous utterances; or one uses perceptually based knowledge of the context to grasp what the individual means. One might fail to realize that one has relied on other empirical sources of understanding, even as one incorrectly and negligently misperceived the individual's (mistaken) actual utterance.

If perception of utterances were not reliably accurate for the most part, we could never have a warrant for our comprehension of what others say, or even for their sayings being propositional. The quality of one's comprehension depends systematically on the veridicality of one's perception, even allowing for much misperception. Warrant depends on a good route to veridicality, and a good route to veridical comprehension requires that there be reliable perception of others' expressions of what they say.

As for the first of my four ideas, it is true that language perception is top-heavy with cognitive supplements. Language perception categorizes in ways that do not line up very well with the acoustical signal or with the shape of written symbols. Memory does not retain perceived elements in the physical world, such as the acoustical signal, that are not categorized in linguistically relevant ways. What is remembered and used in language perception is dominantly categorized in terms fitted to higher-level (syntactical and semantical) cognitive categorization.<sup>39</sup> But regardless of how heavily informed language perception is by higher-level cognitive competencies, perception is not only essential to the success of comprehension. Its operating well, at least on some of its perceived subject matter, and providing a base for the sub-personal transitions that lead to comprehension, are also *part of* having a good, reliable route to comprehension of others' propositional presentations-as-true. And as noted with respect to the Injection Argument, epistemic norms are standards for good use of actual, cognitively relevant competencies. Good use of perception is a part of good exercise of comprehension of others' utterances. If perception were not reliable in getting right (enough of) what an interlocutor uttered, we could not be warranted in comprehending the representational content—or even the propositionality—of utterances by others.

I do think that the role of perception in content preservation through communication is interestingly different from its role in forming beliefs about non-linguistic, non-representational aspects of the physical environment. Language perception is nearly entirely geared toward formation of comprehension. What is comprehended is not what is perceived. In language perception, perceiving is very nearly *merely* causally triggered conceiving. Still, it *is* perceiving. Comprehension involves making good transitions from perception of physical events. Perception's going reliably well, in normal circumstances, contributes to the positive force of warrants for relying on occurrent exercises of conceptual comprehension. Its going reliably well on particular occasions contributes to the force of warrants that are necessary to gaining knowledge through comprehension on those occasions. Knowledge that relies on warrant for comprehension—including knowledge that relies essentially on the default *prima facie* warrant to believe what another says in particular cases—is always empirical, even if sometimes just barely.

<sup>39</sup> See J. A. Fodor, T. G. Bever, and M. F. Garrett, *The Psychology of Language* (New York: McGraw-Hill, 1974); Alvin M. Liberman, *Speech: A Special Code* (Cambridge, Mass.: MIT Press, 1996).