

Assertion remains strong

Peter van Elswyk, UNIVERSITY OF WISCONSIN–MILWAUKEE / NORTHWESTERN UNIVERSITY

Matthew A. Benton, SEATTLE PACIFIC UNIVERSITY

Assertion is widely regarded as an act associated with an epistemic position. To assert is to represent oneself as occupying this position and/or to be required to occupy this position. Within this approach, the most common view is that *assertion is strong*: the associated position is knowledge or certainty. But recent challenges to this common view present new data that are argued to be better explained by assertion being weak. Old data widely taken to support assertion being strong has also been challenged. This paper examines such challenges and finds them wanting. Far from diminishing the case for strong assertion, carefully considering new and old data reveals that assertion is as strong as ever.

1 Introduction

The canonical use of a bare declarative sentence is to make assertions. Though there are many theories of assertion on offer, most are POSITIONAL THEORIES. Positional theories analyze assertion as a speech act associated with an epistemic position the speaker takes towards the declarative's content as opposed to analyzing it as an act essentially associated with the speaker's responsibility (Brandom, 1983; Alston, 2000), the content's informativeness (Pagin, 2004), or the act's conversational effects (Stalnaker, 1978). Here we use *associate* as a catch-all term for the role played by an epistemic position in a theory of assertion. The term applies to theories on which a position is expressed or represented, a position is required by a norm, or a change in position is proposed. Within this family, theories divide over whether the associated position is strong or weak. To fix the meaning of a slogan, let's say that *assertion is strong* when the position associated with assertion is or at least entails knowledge.

Historically, assertion was regarded as weak because assertion was associated with belief.¹ But the tides changed with Williamson (1996, 2000).² He proposed that assertion was associated with knowledge. Since then, assertion being strong

¹ Classic examples include Frege (1892), Austin (1962), Searle (1969), Davidson (1984), Grice (1989), and Bach and Harnish (1979).

² Williamson was not the first to associate assertion with knowledge. Hooper (1975), Unger (1975), and Slote (1979) do. Before them, Moore (1962) and Black (1952) each tentatively described assertion as being associated belief *or* knowledge. There are probably others. But Williamson was the most influential.

appears to have broader support among philosophers. For good reason too. As Benton (forthcoming) documents from the last twenty years, strong assertion has been argued to explain Moorean conjunctions, prompts to assertions, challenges to assertions, abstentions from assertion, hedged assertions, the distribution of verbs that appear in parenthetical position, mutual reasoning based on assertions, lottery assertions, retraction of assertions, and the parallel between knowing and showing. In stark contrast, weak theories of assertion have either not been advanced to explain this broad range of data or cannot be advanced. In many cases, weak theories have to rely on auxiliary hypotheses to explain the data as opposed to doing so uniformly like a strong theory.

Further support for assertion's strength has come from reflection on belief. It has recently been argued that belief is weak, i.e., that it has very low evidential standards.³ To rationally believe a proposition, it is enough to think that proposition is likely. But thinking as much is not enough to assert that proposition. Assertion is thus stronger than belief. Though this literature has just argued for the comparative generalization about strength, the comparative generalization makes trouble for the historical association of assertion with belief and is readily explained by assertion being associated with knowledge.

Enter Mandelkern and Dorst (forthcoming). They aim to reconcile weak belief with assertion by arguing that assertion is weak too. This conclusion is argued for in two ways. First, two new lines of data are presented and argued to be best explained if assertion is weak.⁴ Second, Moorean conjunctions and challenge data are problematized in the support they provide to assertion being strong. Accordingly, their attempt at reconciliation provides us an occasion to conduct an audit on strong theories of assertion.

This paper shows that the audit is passed. The old data still supports assertion being strong, and the new data will turn out to be best explained by strong assertion. Though our focus will be on the challenges raised by Mandelkern and Dorst, our defense is broader in scope. We provide a distinction between ways assertion is associated with an epistemic position like knowledge that is useful to identifying the limits of other objections to strong theories such as the objection from selfless assertions owed to Lackey (2007).

Here is the order of events. We begin by distinguishing two ways assertion is associated with knowledge (§2). This distinction will clarify what is required

³ See Hawthorne et al. (2016), Dorst (2019), Rothschild (2020), van Elswyk and Sapir (2021), Holguín (2022), and Dorst and Mandelkern (forthcoming).

⁴ Strictly speaking, Mandelkern and Dorst provide three arguments. But the first just consists of cases where speakers appear to assert blamelessly without knowing what they assert. The existence of such cases is a familiar point raised by critics of strong theories of assertion. For example, see Lackey (2007), Maitra and Weatherson (2010), Pelling (2013), and McKinnon (2013, 2015). Since their cases do not have notable features that distinguish them from previous cases, we do not discuss them individually.

for data to confirm or disconfirm that assertion is strong. Then we turn to defending that Moorean conjunctions and challenge data still support strength (§3-§4). After showing how strong assertion remains motivated, we consider the newer conversational data thought to support assertion being weak (§5). We conclude with remarks about how to theorize about assertion (§6).

2 Association with knowledge

Assertion can be associated with knowledge in more than one way.⁵ It can be normative, communicative, or both. The following two associations are important to keep separate:

KNOWLEDGE NORM (κ -norm)

Assertion is associated with a norm requiring the speaker to know what they say.

KNOWLEDGE SIGNAL (κ -signal)

Assertion is associated with a semantic or pragmatic signal indicating that the speaker knows what they say.⁶

Philosophers who endorse one kind of association tend to endorse the other. In fact, they often reason from one association to the other. For example, Williamson (2000) starts with κ -norm. He suggests that, for any act requiring authority to perform, an agent performing that act represents themselves as having the requisite authority. So asserting represents the speaker as knowing because knowing is the epistemic authority required for assertion. Going the other direction, McCammon (2014) starts by arguing that assertions represent the speaker as knowing what was asserted. Given as much, the κ -norm results because speakers ought not misrepresent their position. In contrast to philosophers, linguists commonly endorse the κ -signal but not κ -norm.⁷

⁵ The signal/norm distinction or something similar has been floating around in the literature on assertion for awhile. For example, Williamson (2000) makes the distinction in a footnote when he is comparing his approach to assertion with earlier approaches such as Unger (1975). See also McCammon (2014) for relevant discussion.

⁶ Throughout, we will use *signal* as a neutral way to describe how the speaker conveys that they know what they asserted. The traditional explanation is illocutionary. Knowledge is expressed or represented by the use of a declarative because that use tokens the speech act of assertion. Exactly how the signal is sent then depends on the illocutionary mechanism (*e.g.* convention, intention-recognition, constitutive rules, social norms) (Murray and Starr, 2018). Semantic views include Black (1952) who takes it to be an “implication” owed to the conventional meaning of the declarative clause, Meyer (2013) who posits a silent operator in the left periphery of the clause, and van Elswyk (2021) who posits a covert *know*-parenthetical.

⁷ It is especially common to endorse the κ -signal among those who adopt grammatical explanations of scalar implicatures. For example, see Chierchia (2006), Meyer (2013), Buccola and Haida (2019), and Marty and Romoli (forthcoming). In this literature, it is sometimes called the MATRIX κ HYPOTHESIS.

The norm/signal distinction is important to theorizing because the different associations require different evidence to be confirmed or disconfirmed. Consider κ -norm first. To engage in norm-governed behavior is to engage in behavior that can be evaluated normatively by the light of the norm. For example, to violate a norm makes one responsible, and often blameworthy, for non-compliance. We can provide evidence for κ -norm by providing evidence that speakers are typically blameworthy for asserting without knowledge. Lottery assertions are thought to provide such evidence (Williamson, 2000; Hawthorne, 2003). If a speaker is blameworthy for asserting that a ticket will lose in a fair lottery for which they lack inside information, κ -norm is supported.

To disconfirm κ -norm, similar normative evidence is required. One needs to provide evidence that speakers are blameless for asserting without knowledge. But such evidence is trickier to acquire without confounds. EXCUSE VALIDATION is one important confound that has been explored experimentally (Turri and Blouw, 2015; Turri, 2019). In cases where a person unintentionally violates a norm, participants will nearly unanimously judge that the person is blameless. About half of those participants will also deny that a rule has been broken at all even though they answer comprehension questions in which they clearly acknowledge a rule as having been broken. The explanation for this puzzling denial is that the availability of an excuse inclines some to validate that a person has broken no rule. Assertion is not exempt from this effect. When participants are presented with cases where a speaker unwittingly asserts without knowing while rationally believing, they nearly unanimously judged the speaker blameless. Half of them deny that the speaker broke any rule at all. Accordingly, evidence that speakers are blameless for asserting without knowledge is of minimal evidential value if excuse validation is not controlled as a potential confound.⁸

Turn now to κ -signal. It is an association concerning what epistemic position is communicated as opposed to what is required for proper behavior. To confirm or disconfirm it, we need to consider what speakers can felicitously say about their epistemic position and how hearers interpret a speaker as being related

⁸ Matters are more complicated if κ -norm is a social norm (Kelp, 2018; Simion, 2021; van Elswyk, forthcoming). Whether the violation of a social norm is excusable can depend on a variety of features of the context. Consider the norm *Wait your turn* that applies to forming queues or lines. Sometimes we allow people to skip ahead (e.g. the elderly and those with children when boarding a plane), to have their friends or family join them, or to have their place in line held by an object. But sometimes we do not (e.g. when waiting to purchase a limited volume item). There are even cases where people have been killed for not waiting their turn (Fagundes, 2017). If excusability for κ -norm is similar, it will depend on the practical stakes of allowing exceptions, facts about the individuals, and more. Admittedly, regarding κ -norm as a social norm makes it harder to falsify with the method of cases. Cases of permissible assertions made when the speaker does not know can be classified as excused violations. But this just means better evidence is called for than what philosophers often appeal to in this literature. This is why we take experimental investigation of κ -norm to be so important.

to that epistemic position. The classic evidence for the κ -signal is the Moorean conjunctions (Moore, 1942, 1962). In such discourses, the speaker asserts p and then disavows knowledge or belief in p . The result is a conjunction that feels contradiction-like.

- (1) # The garage door is closed, but I don't believe that.
- (2) # The garage door is closed, but I don't know that.

κ -signal well-explains the defectiveness Moorean conjunctions like (1) and (2). Since the first conjunct *The garage door is closed* signals that the speaker knows and thereby believes that the door is closed, the disavowal in the second conjunct contradicts what was just signaled.

In the literature on assertion, one regularly encounters the assumption that evidence for κ -signal is evidence for κ -norm and *vice versa*. This assumption may sometimes be harmless given that both are often endorsed, and that one can reason from one association to the other. But it is still mistaken. κ -norm cannot be motivated merely with descriptive considerations about signaling without running into is/ought obstacles. κ -signal cannot similarly be motivated merely with considerations about blameworthiness. Plenty of communicative norms require something of a speaker's utterance without that utterance signaling that the speaker fulfills that requirement. For example, a norm requiring a speaker to not interrupt does not somehow ensure that utterances carry a semantic or pragmatic signal that the speaker is not interrupting.

This is not to say that data motivating κ -signal is non-normative. Much of the data consists in judgments of felicity or infelicity, and such judgments are plausibly normative in some sense. Our point is only that judgments about *blameworthiness* do not directly motivate κ -signal like they do κ -norm. There is a stark difference between the judgment that Moorean conjunctions are infelicitous in virtue of feeling contradictory, and the judgment that a speaker is blameworthy for asserting that a ticket is a loser in a fair lottery.

What goes for confirming evidence goes for disconfirming evidence. That evidence makes trouble for one way assertion is associated with knowledge does not guarantee that it makes trouble for the other. To illustrate, let's consider a putative counterexample to κ -norm. A category introduced by Lackey (2007) is *SELFLESS ASSERTION*. Selfless assertions are ones in which the speaker does not believe p for non-epistemic reasons, and yet the speaker still asserts p because they are aware that the available evidence strongly supports p . Lackey (2007, 598) provides one such case involving racial prejudice:

RACIST JUROR

Martin was raised by racist parents in a very small-minded community and,

for most of his life, he shared the majority of beliefs held by his friends and family members. After graduating from high school, he started taking classes at a local community college and soon began recognizing some of the causes of, and consequences of, racism. During this time, Martin was called to serve on the jury of a case involving a black man on trial for raping a white woman. After hearing the relatively flimsy evidence presented by the prosecution and the strong exculpatory evidence offered by the defense, Martin is able to recognize that the evidence clearly does not support the conclusion that the defendant committed the crime of which he is accused. In spite of this, however, he can't shake the feeling that the man on trial is guilty of raping the woman in question. Upon further reflection, Martin begins to suspect that such a feeling is grounded in the racism that he still harbors, and so he concludes that even if he can't quite come to believe that the defendant is innocent himself, he nonetheless has an obligation to present the case to others this way. Shortly after leaving the courthouse, Martin bumps into a childhood friend who asks him whether the "guy did it." Despite the fact that he does not believe, and hence does not know, that the defendant in question is innocent, Martin asserts, "No, the guy did not rape her."

Let's suppose that excuse validation is not adding noise to RACIST JUROR. Let's also suppose *contra* Turri (2015) and Tebbens (2020) that it is coherent to understand Martin as not believing or knowing that the defendant did not commit the crime. Then we have a genuine counterexample to κ -norm. Martin does not believe and thereby does not know that the defendant is innocent. And yet, Martin is completely blameless for his assertion.

However, we do not have a counterexample to κ -signal (McCammon, 2014; Black, 2019). It might be that Martin signals that he knows even though he is not required to know via a norm. This possibility is not eliminated. On the contrary, we have evidence that this possibility is realized in RACIST JUROR. Suppose Martin answers his childhood friend's question with (3) or (4).

(3) # The guy did not rape her. But I don't believe that.

(4) # The guy did not rape her. But I don't know that.

Such an utterance would more accurately capture Martin's mental state towards the jury's verdict: that the evidence supports the defendant's innocence, and that he does not believe as much. But (3) and (4) are defective like all Moorean conjunctions are.⁹ Insofar as Moorean conjunctions provide evidence for κ -signal, RACIST JUROR is a situation where a speaker falsely signals that they know, and

⁹ Such defectiveness plausibly surfaces within a discourse too as opposed to just a contradiction were Martin to disavow belief or knowledge soon after his claim. See Benton (2016, 695) and Benton (2011, 685-686) for relevant discussion. In §3.1 we consider contexts where such defectiveness is perhaps screened off.

remains blameless for doing so. Moorean conjunctions are not an outlier either. All of the data that motivates κ -signal as opposed to κ -norm still provides evidence for the signal in cases of selfless assertion.

The upshot of appreciating the norm/signal distinction is that the mere evidence of speakers blamelessly asserting without knowing does not count against assertion being associated with knowledge, i.e., assertion being strong. Such evidence will not meaningfully count against κ -norm unless the confound of validating excuses is controlled. Even if controlled, blameless assertions will not count against κ -signal because evidence against κ -norm is not evidence against κ -signal or *vice versa*. What is required to disconfirm κ -norm is controlled evidence of blameless assertion. To make trouble for κ -signal, linguistic data is required that shows how speakers and/or hearers interpret the position signaled with assertion to be weaker than knowledge.

3 Moorean conjunctions

Moorean conjunctions were previously introduced as data that supports κ -signal when distinguishing κ -signal from κ -norm (§2). In this section, we consider two objections to using such conjunctions to motivate that assertion is strong.

3.1 A first objection

Mandelkern and Dorst (forthcoming) observe that there are cases where the following three conditions hold:

- (i) The speaker may assert 'I don't know p '
- (ii) The speaker may assert p
- (iii) The speaker may not assert ' p , but I don't know p '

The existence of such situations is supposed to make trouble for assertion being strong because a strong view cannot explain why (i) and (ii) are permitted assertions on the one hand, but (iii) is not.

The problem with this objection is that it conflates κ -signal and κ -norm and thereby equivocates between different senses of *may*. The explanation given for (iii) or why the speaker cannot assert ' p , but I don't know p ' is that the first conjunct carries the κ -signal and that signal contradicts the second conjunct. This explanation is entirely neutral on the normative question of what the speaker properly asserts. But this is what (i) and (ii) concern. At most, what the existence of such situations reveals is that speakers can properly signal that they know even when they do not know. It does not problematize the explanation of Moorean conjunction based in κ -signal alone.

To illustrate, let's consider the scenario Mandelkern and Dorst offer. This scenario takes place on a game show where a contestant is asked what year the Seven Years' War started. They initially abstain with *All I know is that it started in the 1700s—I don't know more than that*. There is nothing improper about this abstention. As such, the abstention shows that condition (i) is fulfilled. But the host insists that they guess, and they do so with (5).

(5) Ok, hm. The war started in 1760.

For the sake of argument, suppose that (5) is proper.¹⁰ (ii) is then fulfilled too. Finally, were the contestant then to state *The war started in 1760, but I don't know that* it would be defective in the way Moorean conjunctions always are. The envisioned situation is one where (iii) is satisfied. But nothing in such a scenario bears on the explanation of Moorean conjunctions provided by κ -signal. *The war started in 1760, but I don't know that* is defective because of the signal sent by its first conjunct. That signal contradicts the subsequent denial of knowledge. Accordingly, the fact that both conjuncts can be properly stated individually (in a normative sense) just shows that the epistemic position required for properly uttering either conjunct is not identical with the position signaled by their utterance.

The existence of situations where speakers can properly signal knowledge while lacking knowledge is not a problem for κ -norm either. As discussed in §2, apparent violations of κ -norm can seem blameless because the violations are excused. To be a counterexample to κ -norm, the assertion must be unexcused. But (5) is plausibly excused given the gameshow context. The contestant only makes an unknown assertion after alerting participants they do not know and then being prodded to cooperatively participate in the game by sharing their guess. Thus the speaker is in an atypical context where saying what they do not know is expected and even encouraged. Accordingly, their assertion is an excellent candidate for being excused. They are cooperating without misleading anyone about the strength of their position.

3.2 A second objection

Mandelkern and Dorst note for any disavowal expressing a lack of maximal certainty in p , which we can represent as $\mathcal{U}(p)$, the schema ' p , but $\mathcal{U}(p)$ ' is similarly

¹⁰ We do not share this judgment. Another way to explore whether (5) is felicitous is to consider whether it is dispreferred to alternative utterances that could be made by the speaker instead. Notably, everyone we have discussed such an utterance with prefers a sentence like *My guess is that the war started in 1760* that makes explicit that the speaker is guessing. If assertion is strong, the dispreference is easily explained: (5) is dispreferred because it signals knowledge in a context where knowledge has already been disavowed by the speaker. See van Elswyk (2021, 163-164) for related discussion.

defective.¹¹

- (6) # John will bring Indian, but there's the tiniest chance that he won't.
- (7) # Miriam lost, but I wouldn't bet my life that she lost.
- (8) # The butternut squash are in aisle 4, but I can't absolutely, infallibly rule out every possibility in which they aren't.

The defectiveness of conjunctions like (6) through (8) then creates a dilemma. Either the defectiveness receives an assertoric explanation like Moorean conjunctions or a non-assertoric explanation. With an assertoric explanation, assertion must be absurdly strong—enough to bet your life on it. But if there is a non-assertoric explanation that works for these, that explanation will work for knowledge disavowals too. A defense of strong assertion from Moorean conjunctions is in trouble either way. It leads to absurdity, or is unnecessary.

We see this as a false dilemma. The assumption made by each horn of the dilemma is that '*p*, but $\mathcal{U}(p)$ ' is defective in the same way that '*p*, but I don't know *p*' is defective. As a result, the defectiveness should receive a uniform explanation. But this assumption is not correct. There are notable differences between Moorean conjunctions and conjunctions like (6) through (8) that requires they be explained non-uniformly.

The biggest difference between Moorean conjunctions and examples (6) through (8) is that many native speakers find varieties of the latter acceptable. An example is McCready (2015). Following Prince et al. (1982), she classifies such utterances as SHIELD HEDGES. She focuses on examples akin to (9) and (10) that differ in conjunct order.

- (9) ? I wouldn't bet my life on this, but Miriam lost.
- (10) ? I can't absolutely, infallibly rule out every possibility about this, but the butternut squash are in aisle 4.

For her, they contrast starkly with Moorean conjunctions by being perfectly felicitous. As a result, she goes on to offer a detailed semantic and pragmatic explanation for why they are acceptable. Similar disavowals can be found in the wild. Here are some bet disavowals.

- (11) Thurman will beat Danny Garcia—but I wouldn't bet on it.¹²
- (12) (a) With 10-3 season and a win against the team up north. Will that be our best season in the independence era?

¹¹ A similar observation was initially made by Cappelen (2011) in objecting to there being any speech act of assertion at all.

¹² <https://www.boxingscene.com/roach-thurman-beat-danny-garcia-i-bet-on-it-110207>, accessed on 10/29/2021.

- (b) Yes. For sure. But I wouldn't bet on it.
- (c) Yes but let's not count our chickens before they've hatched—even hypothetically.¹³

Of these (12) is the most striking. It comes from a message board where two distinct commentators gave *yes but...* answers to the initial polar question. On the assumption that the short answer *yes* is semantically equivalent to *That will be our best season in the independence era* (Krifka, 2013; Holmberg, 2013; van Elswyk, 2019), these two answers instantiate the ' p , but $\mathcal{U}(p)$ ' schema.

Our own judgment is that (6) through (12) exhibit interpretive discord. But we judge a stark contrast in acceptability when we consider a broader discourse in which an explanation for the disavowal is provided. As (13) illustrates, the Moorean conjunction remains defective in such a discourse. But the conjunctions disavowing maximal confidence as opposed to knowledge do not. They become felicitous.

- (13) # The garage door is closed. But I don't know that because I don't know anything.
- (14) The garage door is closed. But I wouldn't bet my life on that because I wouldn't bet my life on anything.
- (15) The garage door is closed. But I can't absolutely, infallibly rule out every alternative possibility because I can't do that for anything.

The differences in the felicity judgments of speakers show that ' p , but $\mathcal{U}(p)$ ' needs to be explained differently from ' p , but I don't know p '. The former is sometimes acceptable when the latter never is.

Once we accept that the two are different, the way through the dilemma becomes clear. The defectiveness of ' p , but I don't know p ' can be assertorically explained by the κ -signal. This predicts why the defectiveness persists even in discourses like (13). The signal is still present in such discourses. But the defectiveness of ' p , but $\mathcal{U}(p)$ ' can be explained non-assertorically. We don't offer that explanation of such non-assertoric data here since it is not needed to show that the dilemma is false.

3.3 An alternative explanation?

We have continued cause to endorse κ -signal if it alone is what explains Moorean conjunctions. But so that κ -signal does not win by default, weak-theorists might argue for an alternative explanation of Moorean conjunctions and the less-than-certain conjunctions like (6) through (8). Mandelkern and Dorst suggest that assertion is governed by this norm:

¹³ <https://www.cougarboard.com/board/message.html?id=26607586>, accessed on 10/29/2021.

EPISTEMIC POSTURING

In performing the speech act of asserting p , act as if you are absolutely certain of p .

We confess to being puzzled by this proposal. Arguing that speakers ought to pretend that assertion is strong does not sit comfortably with the conclusion that assertion is weak, nor sit easily with much of the data that marshalled in favor of weakness. Be that as it may, there are a number of serious problems with EPISTEMIC POSTURING.

We take it for granted that an epistemic norm on assertion performs a social role regulating the quality of information that is shared in conversation.¹⁴ When we are only permitted to assert we believe or know, the information shared through testimony is higher quality. It is higher quality in at least two ways. First, the norm prohibits lying. A necessary, if not necessary and sufficient condition, for lying is asserting p while believing or knowing not p .¹⁵ But given that one also typically realizes, in so lying, that one does not believe one's assertion, this too is prohibited by the epistemic norm. Second, the norm, if sufficiently followed, is widely thought to enable a hearer's belief in what is asserted to be justified. Since a speaker is presumed to comply with the norm in the absence of counter-evidence that they are not, they can be presumed to know or be justified in believing what is asserted. The hearer is then entitled to presume that their belief based on the speaker's assertion has that epistemic property too.

But EPISTEMIC POSTURING cannot play this important role. It requires nothing of the speaker's actual epistemic position. As a result, presumed compliance with the norm does not entitle the hearer to presume that their belief is warranted because compliance does not require the speaker to be warranted. In fact, EPISTEMIC POSTURING is compatible with lying. The speaker can believe and even know that p is false and still properly assert as long as they are acting as if p was certain for them. Conditional on the earlier assumption that a of assertion performs the quality control role, EPISTEMIC POSTURING is not a viable candidate.¹⁶

¹⁴ Social norms help human communication be evolutionarily stable by making communication reliable (Scott-Phillips, 2010; Graham, 2020b). An assertion norm is one such norm. See Turri (2017), Graham (2010, 2012, 2014, 2015, 2020a,b), Kelp (2018), Simion and Kelp (2020), Simion (2021), and van Elswyk (forthcoming). Relatedly, social norms help make testimony reliable. See the aforementioned as well as Greco (2016, 2020) for anti-reductionist epistemologies of testimony that base reliability in social norms.

¹⁵ See Saul (2012), Fallis (2013), Stokke (2013, 2018), Benton (2018), and Holguín (2021) for different perspectives on how to define lying that support this claim.

¹⁶ One way to handle this problem is to posit *another* norm on assertion that can play the quality control role. Then EPISTEMIC POSTURING would explain defective conjunctions and this other norm would ensure quality control. However, there is good reason to think that, to perform the quality control role, the epistemic norm will require knowledge. See the citations in *fn.* 15. Then we return to assertion being strong.

Let's turn to the next problem. For any norm on any speech act, one can perform that act and felicitously state that one is complying with its norm. This point generalizes to non-epistemic norms. Examples are provided by commanding and asserting below.

(16) I'm the manager of this building; please close the garage door after entering.

(17) The garage door is closed—I'm telling you the truth.

Consider (16). Issuing commands requires a kind of authority, and (16) shows that issuing a command is compatible with explicit acknowledgement of compliance with a norm requiring authority. Stating compliance has a social function in providing assurance, especially in contexts where the addressee requires more convincing.¹⁷ In some cases, assurance is provided by making the speaker more liable. In addition to having inappropriately commanded, the speaker of (17) will also have lied if they are not the manager.

Of note is that no pretense norm like EPISTEMIC POSTURING abides by this generalization. Attempts to state that one is complying with the pretense norm are infelicitous. Compare (18) with (19):

(18) ? The garage door is closed, and I'm pretending to be certain of that.

(19) The garage door is open, and I know that.

More than being infelicitous, speakers seem *less* trustworthy for saying that they are pretending. These problems lead us away from EPISTEMIC POSTURING and back to K-signal. We do not need to pretend that assertion is strong. It is strong by associating with knowledge.

4 Challenges to assertion

For many speech acts, participants can challenge the content presented or whether the speaker was in a position to perform that act. Let's call the latter POSITIONAL CHALLENGES. Consider the command issued by uttering the imperative *Close the garage door!*. Since commands require the speaker issuing the command to have authority over the addressee, positional challenges like *You're not the boss of me!* target whether the speaker has this authority.

Assertion is no different. We can challenge the content with *That's false*, or *Well, I don't think so*. But positional challenges are what tell us about the speech

¹⁷ Compare Turri (2013) on the assurance of guaranteeing what one asserts by claiming to know what one asserts. One account of what one is putting on the line can be given in terms of a credibility index (*c.f.* Turri (2010b, 84-86), and Benton and Turri (2014, 1863-65)). We do not take a stand on these details here.

act. Important data for positional theories of assertion is that participants often challenge speakers by probing their epistemic position. Evidence for κ -signal in particular is that we often probe a speaker's knowledge (Unger, 1975; Williamson, 2000).

- (20) (a) The garage door is closed.
- (b) How do you know that?
- (c) You don't know that!

(20b) and (20c) are natural challenges. Both target the speaker's knowledge differently. The former presupposes that the speaker knows via the '*How p?*' construction, but requests the speaker to explain their evidence. The latter does not presuppose that the speaker knows. It denies that knowledge outright. The κ -signal explains why participants challenge with (20b) and (20c). The speaker signaled that they knew, and this epistemic authority is challenged. But there are ways of problematizing how positional challenge data support strong assertion. In this section, we consider two such ways.

4.1 Occasionally improper knowledge challenges

Knowledge-oriented challenges are not always proper, as some have observed (McGlynn, 123-124; Mandelkern and Dorst). For example, Mark's challenge to Liam's statement in (21d) is inappropriate in the context.

- (21) (a) (Mark) What will John bring?
- (b) (Liam) I just don't know.
- (c) (Mark) Well, fine, but what do you think?
- (d) (Liam) Hm, ok, let's see. He'll get Indian. That's his favorite, after all.
- (e) (Mark) ? How do you know he'll get Indian?

From the inappropriateness of (21e), Mandelkern and Dorst conclude that a challenge like *how do you know?* "does not show that assertion in general requires knowledge (p. 14)." But this conclusion is too quick. After Liam states *I just don't know* in (21b), it becomes mutual knowledge that Liam does not know what John is bringing. For Mark to challenge with *How do you know?* at a later point is thus to ask a defective question. The presupposition of that question contradicts what was made mutually known a moment earlier.¹⁸

¹⁸ We offer this explanation in terms of mutual knowledge but it could be made in terms of common ground. Saith Stalnaker (1970, 280), "One cannot normally assert, command, promise, or even conjecture what is inconsistent with what is presupposed." We can add *question* to his list. See Kirk-Giannini (2018) for this same point.

Given that Liam's disavowal of knowledge is what makes Mark's challenge inappropriate, the puzzle that lingers is why Liam can assert John will bring Indian after disavowing knowledge of what John will bring. But this assertion is just another textbook case of an excused assertion. Consider how the dialogue unfolds. Initially, Liam tries to abstain because he does not know.¹⁹ Then Mark changes his question so that Liam can state what John will bring without having to know as much. Only then does Liam answer. Altogether, Liam's assertion is blameless after disavowing knowledge because he excusably violates κ -norm to cooperatively answer Mark's question. Mark gets an answer to his question only after he is explicitly warned that this answer is not known. If there is anyone who cannot challenge Liam, it is Mark who cannot.²⁰

This raises the question of whether *someone else* can challenge Liam's signaled knowledge. They can. Imagine that a third-party enters the conversation right before Liam's final statement in the dialogue. Having not witnessed Liam's initial abstention, or Mark's prodding, the third-party could appropriately challenge Liam with *How do you know?*

(22) I don't—I was just telling Mark what I think because he asked.

Liam would naturally reply with (22). This natural continuation of INDIAN FOOD is instructive in three ways. First, the third-party is not aware of the excuse. This supports the idea that Mark's challenge is inappropriate because Liam is excused. Second, Liam naturally replies by giving an excuse. This too supports the idea that Mark's challenge is inappropriate because Liam is excused. And third, Liam's disavowal of knowledge in (22) doesn't come off as infelicitous precisely because of the excuse.

4.2 Aggressiveness in challenge

Some positional challenges are perhaps harder to explain if assertion is strong. For example:

- (23) (a) (Liam) John will bring Indian.
(b) (Mark) Do you know that?

¹⁹ Incidentally, abstaining with *I don't know* is argued to provide evidence for assertion being strong (Reynolds, 2002; Turri, 2011). If assertion does not require knowledge, it is difficult to make sense of why we would abstain by saying we lack knowledge. A further difficulty is explaining why an abstention is often followed by a hedged statement such as *I don't know, but my guess is that he'll bring Indian*.

²⁰ Compare a teacher who might similarly prod their students to offer a guess or a half-baked idea. It is noteworthy that the teacher, who typically knows more about the topic than their students, cannot appropriately challenge them after installing such lower standards in order to encourage participation.

(c) (Mark) ? Do you think that?

As Mandelkern and Dorst gloss it, (23c) is more aggressive than (23b). This contrast requires explanation. Their explanation of the contrast has two parts given the assumption that assertion is weak. The first part is that (23c) is aggressive because it directly challenges the signal that the speaker believes. The second part is that (23b) is less aggressive because it does not challenge this signal. Instead, it just queries whether what the speaker thinks counts as knowledge.

By itself, drawing attention to new data involving positional challenges does not make trouble for the explanation of knowledge-oriented challenges provided by κ -signal (§4.1). But if Mandelkern and Dorst are correct about how to explain the contrast between (23b) and (23c), it would reveal that at least some challenge data is best explained by assertion being weak.

But no such thing is revealed. Such an explanation misfires and a better explanation is available that is compatible with assertion being strong. Let's start with their explanation. The problem is the second part. If *Do you know that?* were a proper challenge to a bare declarative even though assertion was weak, it would also be a proper challenge to a declarative hosting a *think*-parenthetical. But (24b) shows it is not.

(24) (a) (Liam) John will bring Indian, I think.

(b) (Mark) ? Do you know that?

(c) (Mark) ? Do you think that?

The felt aggressiveness of (24c) still remains, but the knowledge-oriented challenge (24b) became infelicitous. Accordingly, their explanation for why the knowledge-oriented challenge is felicitous but less aggressive than *Do you think that?* is mistaken.²¹ It overpredicts felicity.

²¹ Mandelkern and Dorst (fn. 15) consider a similar objection attributed to Diego Feinmann. They note that attitude reports of the form 'I think that p ' carry the scalar implicature that the speaker does not know p since *think* and *know* are alternatives. A bare declarative does not similarly carry this implicature. On the assumption that parenthetical verbs carry the same implicatures, they could say that the reason (24b) is infelicitous is because it asks a question for which the answer was just implicated by (24a). But this reply does not work for two reasons. First, asking what was just answered via a scalar implicature is not aggressive like *Do you think that?*. Consider the following exchange.

(I) (a) I ate some of the pizza.

(b) Did you eat all of it?

The felt aggressiveness of *Do you think that?* cannot therefore be explained by general considerations about querying what was just implicated. Second, we are now owed an explanation for why bare declaratives do not carry this same implicature. Bare declaratives are also alternatives. They are structural alternatives that can be produced from a declarative with a parenthetical verb via deletion of that parenthetical verb (Katzir, 2007), and they are scalemates that are stronger than declaratives

Let's turn to an alternative explanation. Cooperative participants who are skeptical about what a speaker asserted are put in a difficult position. To be cooperative, they must alert the speaker to any discrepancy in belief between them (Walker, 1996; Faller, 2019). A challenge is a way to indicate a discrepancy. But the challenge should also be polite. The purpose of politeness in conversation is to avoid conflict (Brown and Levinson, 1987; Kasper, 2000). To avoid conflict, the speaker should choose a challenge that is the least aggressive of the challenges that reflect the discrepancy in belief.

The reason *Do you think that?* is marked is that it is one of the most aggressive positional challenges on the assumption that assertion is strong. It is a challenge that, for most contexts, the speaker had a less aggressive challenge available to them.

- | | |
|-----------------------------|-------|
| (25) How do you know that? | T, K |
| (26) Why do you think that? | T, ¬K |
| (27) Do you think that? | T? |

The challenges above order from less aggressive to more aggressive. What underwrites this ordering is what they presuppose about the speaker's position.²² A challenge like (25) is the least aggressive because it presupposes that the speaker both thinks and knows *p*. (26) is slightly more aggressive. It presupposes that the speaker thinks *p* because 'Why *p*?' presupposes *p* (Bromberger, 1966). But it also implicates that the initial speaker does not know *p*. The challenge *Do you think that?* is even more aggressive because it lacks any presuppositions about the speaker's attitude. It asks whether the speaker even thinks *p*. As a result, when a participant merely disbelieves what was asserted by the speaker, *Do you think that?* will always be more aggressive than *Why do you think that?*

Another way to put the point is in terms of norm violation. Defenders of κ -norm regularly distinguish between primary and secondary violations of the norm (Williamson, 2000; DeRose, 2002). A speaker primarily violates κ -norm when they

with parenthetical verbs. But the best explanation for why bare declaratives do not carry this implicature is that they signal knowledge in the style of the κ -signal. So their reply just leads us back to assertion being strong. For related discussion, see Benton and van Elswyk (2020) and van Elswyk (forthcoming).

²² Compare (25) through (27) with the aggressive challenges considered by Williamson (2000, 253), and Turri (2011, 38):

- | | |
|---------------------------------|-------|
| (II) Do you (really) know that? | T, K? |
| (III) You don't know that! | ¬K |

Since neither challenges whether the speaker thinks *p*, the aggressiveness of these challenges is difficult to explain if assertion is weak. In contrast, the aggressiveness is easily explained if assertion is strong. (II) explicitly challenges a speaker's authority to assert, and (III) explicitly rejects that authority.

assert p without knowing p . They secondarily violate κ -norm when they assert p without even thinking that they know p . Most violations of κ -norm will be primary but not secondary. A speaker will think they know but be mistaken. What's especially aggressive about *Do you think that?* is that it questions whether the speaker violated κ -norm primarily *and* secondarily. In contrast, *Do you know that?* only inquires about the speaker being guilty of a primary violation of the κ -norm.

5 New data

5.1 Solicited assertion

A window into assertion is how we solicit or prompt assertion. Since assertions provide answers to questions, we can look at what questions they answer as a guide to what asserting involves. In this vein, Mandelkern and Dorst are struck by the fact that we often solicit assertions by asking about what the addressee thinks. (28a) illustrates.

- (28) (a) What do you think happened in the race?
 (b) Joe won.

This fact about prompts is easily explained if assertion is weak. It is supposed to be puzzling if assertion is strong by being associated with knowledge or certainty. But there is no puzzle here. If assertions carry the κ -signal, then asserting p signals what the speaker thinks. It just does not signal what the speaker *merely* thinks—it signals what they think because they know.²³

The question, then, is which explanation is best. That assertions answer *What do you think?* by only signaling what the speaker thinks, or that they answer it by signaling what the speaker knows. We submit that the latter explanation is better for three reasons. First, Turri (2010a) notes that questions like (29) and (30) are practically interchangeable.

- (29) What happened in the race?
 (30) Do you know what happened in the race?

²³ This is an instance of a more general phenomenon. In some languages with evidentials, evidentials can be used in a question. When they are, the evidential can be interpreted as specifying the evidence source the addressee is expected to back their answer with. This is known as INTERROGATIVE FLIP (Speas, 2008; Bhadra, 2020). Languages differ in whether a speaker has to answer with the expected evidential. In some languages, one must (Roque et al., 2017). But in languages like German, one can answer with a stronger evidential (Eckardt and Beltrama, 2019). Answering *What do you think?* with an assertion is parallel. It provides an answer that is epistemically stronger than expected.

In response to (30), cooperative addressees will jump right to answering what happened. They will only answer with a mere *yes* if being playful or humorous. But this practical interchangeability cannot be explained if assertion is weak. (30) could not stand-in for (29) because it would demand an epistemic position that is stronger than what assertion signals. As Turri argues, the interchangeability is best explained by assertion being strong. Second, (28a) is not practically interchangeable with (29), for (28a), much like Mark's prodding in (21c), can be used explicitly to invite one to answer (excusably) with less than knowledge; but (29) cannot similarly be used. Strength explains all this; if assertion is weak, these interchangeability data are unexplained.

The third reason a strong explanation is better is that it can explain judgments about when particular answers are preferable. The most direct answer to *What do you think?* is one like (31b) that makes explicit that the answer is what the speaker thinks.

- (31) (a) What do you think happened in the race?
- (b) What I think happened in the race is that Joe won.
- (c) I think Joe won.

Accordingly, asserting *p* competes with *What I think is p* or *I think p* as replies to *What do you think?*. But sometimes the bare assertion is dispreferred if not wholly infelicitous. To illustrate, suppose that the person being asked the question does not take themselves to know what happened. But they do have an opinion about who won.

- (32) (a) What do you think happened in the race?
- (b) ? Joe won.

Then (32b) is dispreferred to answers like (31b) or (31c).²⁴ If assertion is strong, the dispreference is expected. The assertion signals that the speaker knows *p* whereas the *What I think is p* does not. As such, stating what they think more accurately conveys their epistemic position. But if assertion is weak, the dispreference is puzzling. If anything, one should disprefer *What I think is p* or *I think p* to the bare *p* because they are redundant, uneconomical ways of communicating the speaker's position.

²⁴ Mileage may vary. In our experience, when we have consulted native speakers who aren't professional philosophers or linguists, they overwhelmingly voice this dispreference. See van Elswyk (2021, 163-164) for related discussion. Notice too that *That Joe won* is a different sentence from (32b). Namely, it is one in which the subject and matrix verb have been elided to give a fragment answer (Merchant, 2004; Merchant et al., 2013). As such, to find *That Joe won* preferable to *Joe won* just is to prefer (31c).

5.2 Reported assertion

Another window into assertion is how we report the assertions of others. Mandelkern and Dorst offer two observations about how assertions are typically reported to a third-party:

- (A) Participants do not attribute strong epistemic positions when reporting a speaker's assertion (*e.g.* knowing, taking oneself to know)
- (B) Participants do attribute weak epistemic positions when reporting a speaker's assertion (*e.g.* thinking, saying)

Together, these two observations are better explained if assertion is weak. The reason why we attribute a weak position when reporting assertions is that a weak position is signaled by an assertion.

How we report assertions is constrained by the language we can use to report. Consider the verb *know*. Since *know* presupposes its complement, a participant cannot attribute knowledge of *p* to a third-party without knowing or at least believing *p* themselves. This means that speakers cannot attribute knowledge when reporting an assertion if they disbelieve or suspend belief about the content of what was asserted. Appreciating this constraint brings into focus what is wrong with Mandelkern and Dorst's argument.

The first problem is that (B) is false. When we consider contexts where the participant knows or at least believes the content of what they are reporting, knowledge is regularly attributed. We will offer two examples that are slight variants on an example from Mandelkern and Dorst. In the first example, the participant is reporting an assertion that changed their beliefs as an act of testimony. Suppose Ezra is on the phone with Liam, and Mark hears Ezra ask *What is John bringing for dinner?*

(33) (Mark) Did you find out what John is bringing for dinner?

(34) (Ezra) Yes, Liam knew. John is bringing Indian food.

After the call ends, Mark asks (33) to follow-up with Ezra and see if Ezra had his question answered by Liam. In reporting Liam's assertion about Indian food in (34), Ezra naturally attributes knowledge.

The next example is different. It involves a participant reporting a third-party's assertion of information that was already known by the participant. Suppose that Ezra and Mark already know that John is bringing Indian food to the party. But they are trying to conceal this fact from Liam because it is intended as a surprise for him. As a result, Ezra, while on the phone with Liam, is trying to discern if Liam has figured out the surprise. After the call, Mark follows-up on the conversation by asking (35).

- (35) (Mark) What did Liam say about what John is bringing for dinner?
(36) (Ezra) Liam knew that John is bringing Indian food.

It is again natural for Ezra to attribute knowledge to Liam. The only distinctive feature about these examples is that they involve participants reporting assertions for which they know or believe the content because this feature helped control the confound introduced by the verb *know*.

Yet another way to see that (B) is false is to consider reports where the participant is attempting to be neutral about the epistemic status of the content asserted. Journalist contexts are helpful here. The Associated Press Stylebook contains many instructions about which language to avoid. For example, journalists are advised to use *rebut* instead of *refute* because the latter indicates “editorial judgment” (Froke, 2020, 256). Within such contexts, the construction ‘*S* thinks he/she/they know’ is widely used.

- (37) “You can’t bring back the whales until you bring back their food,”
Savoca said. And he thinks he knows how to do that.²⁵
(38) Authorities think they know what’s behind those jetpack sightings
over Los Angeles.²⁶

(37) and (38) are examples from recent articles. In neither context are the journalists reporting an assertion the subject made about their own mental states. These are reports of assertions that avoid editorial judgement by embedding *know* under another attitude anchored to the speaker. Were ‘*S* knows *p*’ used, judgment about *p* would have been indicated. Similarly, ‘*S* knows *Q*’ would indicate judgment about *S* knowing the answer to *Q*. Only ‘*S* thinks he/she/they know’ dodges these editorial judgments.

So what best explains how we report assertions? In view of the data above, assertion being strong provides the best explanation. Though weak assertion can explain why we attribute weak positions when reporting, it cannot explain why we attribute knowledge. Consider data such as (34) and (36). If assertion is weak, such reports should be defective because they attribute a position stronger than what the speaker occupies. But they are not. They are as ordinary as they are non-defective. Likewise, reporting assertions with ‘*S* thinks he/she/they know’ should similarly be defective. Not only does it attribute a stronger position, it does so in a far less economical way. But such reporting is not defective either. In stark contrast, the naturalness of attributing knowledge when reporting assertion is exactly what we would predict if assertion is strong.

²⁵ <https://www.theatlantic.com/science/archive/2021/11/whaling-whales-food-krill-iron/620604/>, accessed on 11/14/2021.

²⁶ <https://www.nbcnews.com/news/us-news/authorities-think-they-know-whats-behind-those-jetpack-sightings-over-n1282932>, accessed 11/14/2021.

Strong assertion is also compatible with reports that attribute weak positions. Since *know* presupposes its complement, participants disbelieving, suspending belief, or just attempting to be neutral about what was asserted will avoid attributing knowledge when reporting. Reporting that they said or think *p* is a natural alternative.²⁷

6 Theorizing about assertion

Our audit has come to end. What we have learned? As advertised, we have learned that assertion remains strong. This lesson was provided in two distinct ways. First, Moorean conjunctions and knowledge-oriented challenges like *How do you know?* are still best explained by assertion being strong (§3-§4). Second, the new data introduced by Mandelkern and Dorst is also best explained if assertion is strong. In particular, strong assertion better explains the aggressiveness of *Do you think that?* challenges (§4.2), why assertions are solicited by *Do you know?* and *What do you think?* (§5.1), and how assertions are reported while attributing strong and weak epistemic positions (§5.2). Far from diminishing the case for strength, the new data grows the case for strength.

At the outset, we noted that weak theories of assertion typically do not have the explanatory coverage that strong theories do. Instead of uniformly explaining the data, auxiliary hypotheses have to be introduced to cover the data that weak theories fail to explain. Mandelkern and Dorst’s defense of weak assertion illustrates. They appealed to weakness to explain how we report and solicit assertion, but then introduced EPISTEMIC POSTURING to explain Moorean conjunctions. But there is no need to proliferate hypotheses. Given that EPISTEMIC POSTURING is not plausible as an epistemic norm (§3.3), we can and should stick with strong assertion for a uniform explanation of the data considered.

Another lesson learned from the audit is the importance of distinguishing κ -signal and κ -norm (*esp.* §3.1 and §4.1). Though we motivated this distinction independently (§2), the distinction proved crucial to identifying the shortcoming of objections to the support that Moorean conjunctions and knowledge-oriented

²⁷ It might be argued that ‘*S* thinks *p*’ carries the scalar implicature that *S* does not know *p*. As a result, *think*-reporting is incompatible with assertion being strong. We do not dispute that *think* sometimes implicates a lack of knowledge. But it does not always. First, if it did always implicate ignorance, journalists would always implicate that people are ignorant with *think*-reporting. They clearly do not. Second, the insertion of exhaustification terms like *merely* or *just* makes a significant difference to how we interpret a report. Compare (IV) with (V):

(IV) Liam thinks that John is bringing Indian.

(V) Liam merely/just thinks that John is bringing Indian.

The insertion of such a term should not make such a difference to interpretation if (IV) already implicated that the Liam doesn’t know that John is bringing Indian food. And yet it does make a difference.

challenges provide for strong assertion. As such, advocates of strong assertion would do well to be clear on the different ways assertion can be strong. Assertion can be strong by being associated with a semantic or pragmatic signal that the speaker knows, and/or it can be strong by being associated with a norm requiring the speaker to know what they assert.

Two observations about our defense of strong assertion are worth highlighting. First, we never disputed whether a particular example of assertion was actually an assertion. However, many encountering some of the conversational data from §3-§4 will be tempted to dispute as much. For instance, many of Mandelkern and Dorst's examples involve speakers guessing, and guessing is traditionally regarded as a speech act weaker than assertion that does not even require belief in what's said (Bach and Harnish, 1979; Searle and Vanderveken, 1985). But absent clear criteria distinguishing assertions from guesses and other acts, we find the denial of their examples being assertions to be methodologically suspect. It moves the goalpost in a way that risks making strong theories unfalsifiable.

Second, some of how we defended assertion being strong was knowledge-centric. As a result, not all of our arguments will be useful to defending that assertion is strong by being associated with certainty. Consider the reporting data (§5.2). We argued that it's a mistake to suppose that knowledge is not being attributed when assertions are reported because speakers regularly use the construction 'S thinks he/she/they know' to report. But there is not a similar construction that is used to attribute certainty. Corpus searches are telling. In contrast to 'S thinks he/she/they know', we found no instances of 'S thinks he/she/they is/are certain' in the Corpus of Contemporary American English (COCA) (Davies, 2008-present). We take such considerations to motivate that assertion is strong, but that knowledge satisfies.

The preceding discussion has been directed at those who adopt positional theories of assertion, i.e., theories that characterize assertion by associating it with an epistemic position. It is an intramural dispute among positional theories whether assertion is weak or strong. This is not to say the data discussed does not bear on other theories. Insofar as positional theories whether they are weak or strong can better explain the data, we have cause to prefer positional theories of assertion.²⁸

²⁸ We are grateful to Ben Holguín, Matt Mandelkern, Juan Ignacio Murillo Vargas, and two anonymous referees for helpful comments. This paper was written while both of us were independently supported by grants from The Honesty Project at Wake Forest University and the John Templeton Foundation. We are grateful for this support and note that the views expressed do not necessarily reflect the views of The Honesty Project, Wake Forest University, or the John Templeton Foundation. Wake Forest University, or the John Templeton Foundation.

References

- William P. Alston. *Illocutionary Acts and Sentence Meaning*. Cornell University Press, 2000.
- J.L. Austin. *How To Do Things With Words*. Harvard University Press, 1962.
- Kent Bach and R. Harnish. *Linguistic Communication and Speech Acts*. MIT Press, 1979.
- Mathew Benton and Peter van Elswyk. Hedged assertion. In Sandy Goldberg, editor, *Oxford Handbook of Assertion*. Oxford University Press, 2020.
- Matthew Benton. Two more for knowledge account of assertion. *Analysis*, 71: 684–687, 2011.
- Matthew Benton. Gricean quality. *Nous*, 50(4):689–703, 2016.
- Matthew Benton. Lying, belief, and knowledge. In Jorg Meibauer, editor, *Oxford Handbook of Lying*. Oxford University Press, 2018.
- Matthew Benton. Knowledge is the norm of assertion. In B. Roeber, J. Turri, M. Steup, and E. Sosa, editors, *Contemporary Debates in Epistemology*. Blackwell, 3rd edition, forthcoming.
- Matthew Benton and John Turri. Iffy predictions and proper expectations. *Synthese*, 191(8):1857–1866, 2014.
- Diti Bhadra. The semantics of evidentials in questions. *Journal of Semantics*, 37:367–423, 2020.
- Dylan Black. A non-normative account of assertion. *Ratio*, 32:53–62, 2019.
- Max Black. Saying and disbelieving. *Analysis*, 13:25–33, 1952.
- Robert Brandom. Asserting. *Nous*, 17 (4):637–650, 1983.
- Sylvain Bromberger. Why-questions. In R. Colodny, editor, *Mind and Cosmos: Essays in Contemporary Science and Philosophy*, pages 68–111. University of Pittsburgh Press, 1966.
- Penelope Brown and Stephen Levinson. *Politeness: Some Universals in Language Usage*. Cambridge University Press, 1987.
- Brian Buccola and Andreas Haida. Obligatory irrelevance and the computation of ignorance inferences. *Journal of Semantics*, 36:583–616, 2019.
- Herman Cappelen. Against assertion. In Jessica Brown and Herman Cappelen, editors, *Assertion*. Oxford: Oxford University Press, 2011.
- Gennaro Chierchia. Broaden your views. implicatures of domain widening and the ‘logicality’ of language. *Linguistic Inquiry*, 37(4):535–590, 2006.
- Donald Davidson. Communication and convention. *Synthese*, 1:3–17, 1984.
- Mark Davies. The corpus of contemporary american english: 520 million words, 1990-present. <http://corpus.byu.edu/coca/>, 2008-present.

- Keith DeRose. Assertion, knowledge, and context. *Philosophical Review*, 111: 167–203, 2002.
- Kevin Dorst. Lockeans maximize expected accuracy. *Mind*, 128(509): 175–211, 2019. doi: <https://doi.org/10.1093/mind/fzx028>.
- Kevin Dorst and Matthew Mandelkern. Good guesses. *Philosophy and Phenomenological Research*, forthcoming. doi: <https://doi.org/10.1111/phpr.12831>.
- Regine Eckardt and Andrea Beltrama. Evidentials in questions. *Empirical issues in syntax and semantics*, 12:121–155, 2019.
- David Fagundes. The social norms of waiting in line. *Law and Social Inquiry*, 42(4):1179–1207, 2017.
- Martina Faller. The discourse commitments of illocutionary reportatives. *Semantics and Pragmatics*, 12(8):1–46, 2019.
- Don Fallis. Davidson was almost right about lying. *Australasian Journal of Philosophy*, 91(2):337–353, 2013. doi: <https://doi.org/10.1080/00048402.2012.688980>.
- Gottlob Frege. Über Sinn und Bedeutung. *Zeitschrift für Philosophie und philosophische Kritik*, 100:25–50, 1892.
- Paula Froke. *The Associated Press Stylebook*. Basic Books, 55 edition, 2020.
- Peter Graham. Testimonial entitlement and the function of comprehension. In Alan Millar and Adrian Haddock, editors, *Social Epistemology*. Oxford University Press, 2010.
- Peter Graham. Testimony, trust, and social norms. *Abstracta*, 6(3):92–116, 2012.
- Peter Graham. Functions, warrant, history. In Abrol Fairweather and Owen Flanagan, editors, *Naturalizing epistemic virtue*, pages 15–35. Cambridge University Press, 2014.
- Peter Graham. Epistemic normativity and social norms. In David Henderson and John Greco, editors, *Epistemic evaluations: purposeful epistemology*, pages 243–273. Oxford University Press, 2015.
- Peter Graham. The function of assertion and social norms. In Sanford Goldberg, editor, *Oxford Handbook of Assertion*, pages 727–748. Oxford University Press, 2020a.
- Peter Graham. Assertions, handicaps, and social norms. *Episteme*, 17(3):349–363, 2020b. doi: <https://doi.org/10.1017/epi.2019.53>.
- John Greco. What is transmission? *Episteme*, 13(4):481–498, 2016. doi: <https://doi.org/10.1017/epi.2016.25>.
- John Greco. *The transmission of knowledge*. Cambridge: Cambridge University Press, 2020.
- Paul Grice. *Studies in the Way of Words*. Harvard University Press, 1989.

- John Hawthorne. *Knowledge and Lotteries*. Oxford University Press, 2003.
- John Hawthorne, Daniel Rothschild, and Levi Spectre. Belief is weak. *Philosophical Studies*, 173: 1393–1404, 2016. doi: <https://doi.org/10.1007/s11098-015-0553-7>.
- Ben Holguín. Lying and knowing. *Synthese*, 198(6):5351–5371, 2021. doi: <https://doi.org/10.1007/s11229-019-02407-2>.
- Ben Holguín. Thinking, guessing, believing. *Philosopher’s Imprint*, 22, 2022. doi: <https://doi.org/10.3998/phimp.2123>.
- Anders Holmberg. The syntax of answers to polar questions in english and swedish. *Lingua*, 128:31–50, 2013.
- Joan B. Hooper. On assertive predicates. In John P. Kimball, editor, *Syntax and Semantics 4*, pages 91–123. Academic Press, 1975.
- Gabriele Kasper. Linguistic politeness: current research issues. *Journal of Pragmatics*, 14(2):192–218, 2000. doi: [https://doi.org/10.1016/0378-2166\(90\)90080-W](https://doi.org/10.1016/0378-2166(90)90080-W).
- R. Katzir. Structurally-defined alternatives. *Linguistics and Philosophy*, 30(6): 669–690, 2007.
- Christopher Kelp. Assertion: A function first account. *Nous*, 52(2):411–442, 2018. doi: <https://doi.org/10.1111/nous.12153>.
- Cameron D. Kirk-Giannini. Uniformity motivated. *Linguistics and Philosophy*, 41:665–684, 2018.
- Manfred Krifka. Response particles as propositional anaphors. In Todd Snider, editor, *Proceedings of SALT*, volume 23, pages 1–18, 2013.
- Jennifer Lackey. Norms of assertion. *Nous*, 41:594–626, 2007.
- Ishani Maitra and Brian Weatherson. Assertion, knowledge, and action. *Philosophical Studies*, 149:99–118, 2010.
- Matthew Mandelkern and Kevin Dorst. Assertion is weak. *Philosophers’ Imprint*, forthcoming. URL <https://philpapers.org/archive/MANAIW.pdf>.
- Paul Marty and Jacopo Romoli. Presupposed free choice and the theory of scalar implicatures. *Linguistics and Philosophy*, forthcoming.
- Christopher McCammon. Representing yourself as knowing. *American Philosophical Quarterly*, 51(2):133–144, 2014.
- Elin McCready. *Reliability in Pragmatics*. Oxford University Press, 2015.
- Aidan McGlynn. *Knowledge First?* Palgrave Macmillan, 2014.
- Rachel McKinnon. The supportive reasons norm of assertion. *American Philosophical Quarterly*, 50(2):121–135, 2013.
- Rachel McKinnon. *The Norms of Assertion: Truth, Lies, and Warrant*. Palgrave Macmillan, 2015.

- Jason Merchant. Fragments and ellipsis. *Linguistics and Philosophy*, 27(6): 661–738, 2004.
- Jason Merchant, Lyn Frazier, Charles Clifton Jr., and Thomas Weskott. Fragment answers to questions: A case of inaudible syntax. In Laurence Goldstein, editor, *Brevity*. Oxford University Press, 2013.
- Marie-Christine Meyer. *Ignorance and grammar*. PhD thesis, Massachusetts Institute of Technology, 2013. URL <https://dspace.mit.edu/handle/1721.1/84420>.
- G.E. Moore. A reply to my critics. In Paul Schilpp, editor, *The Philosophy of G.E. Moore*. La Salle: Open Court Press, 3rd edition, 1942.
- G.E. Moore. *Commonplace Book: 1919-1953*. London: George Allen and Unwin, 1962.
- Sarah Murray and Will Starr. Force and conversational states. In Daniel Fogal, Daniel Harris, and Matt Moss, editors, *New Work On Speech Acts*. Oxford University Press, 2018.
- Peter Pagin. Is assertion social? *Journal of Pragmatics*, 36:833–859, 2004.
- Charles Pelling. Assertion and the provision of knowledge. *Philosophical Quarterly*, 63(251):293–312, 2013.
- Ellen F. Prince, Joel Frader, and Charles Bosk. On hedging in physician-physician discourse. In R. D. Pietro, editor, *Linguistics and the professions*, pages 83–97. Ablex: Norwood, NJ, 1982.
- Stephen Reynolds. Testimony, knowledge, and epistemic goals. *Philosophical Studies*, 110:139–161, 2002. doi: <https://doi.org/10.1023/A:1020254327114>.
- Lila San Roque, Simeon Floyd, and Elisabeth Norcliffe. Evidentiality and interrogativity. *Lingua*, 186-187:120–143, 2017.
- Daniel Rothschild. What it takes to believe. *Philosophical Studies*, 177:1345–1362, 2020. doi: <https://doi.org/10.1007/s11098-019-01256-6>.
- Jennifer Saul. *Lying, misleading, and what is said: An exploration in philosophy of language and in ethics*. Oxford: Oxford University Press, 2012.
- Thomas C. Scott-Phillips. Evolutionary stable communication and pragmatics. In Anton Benz, Christian Ebert, Gerhard Jäger, and Robert van Rooij, editors, *Language, Games, and Evolution*, pages 117–133. Springer, 2010.
- John Searle. *Speech Acts*. Cambridge: Cambridge University Press, 1969.
- John Searle and David Vanderveken. *Foundations of Illocutionary Logic*. Cambridge: Cambridge University Press, 1985.
- Mona Simion. Testimonial contractarianism. *Noûs*, 44(4):891–916, 2021. doi: <https://doi.org/10.1111/nous.12337>.
- Mona Simion and Christoph Kelp. How to be an anti-reductionist.

- Synthese*, 197(7):2849–2866, 2020. doi: <https://doi.org/10.1007/s11229-018-1722-y>.
- M.A. Slote. Assertion and belief. In J. Dancy, editor, *Papers on Language and Logic*. Keele: Keele University Library, 1979.
- Margaret Speas. On the syntax and semantics of evidentials. *Language and Linguistics Compass*, 2:940–965, 2008.
- Robert Stalnaker. Pragmatics. *Synthese*, 22:272–289, 1970.
- Robert Stalnaker. Assertion. In *Syntax and Semantics 9: Pragmatics*, pages 315–332. Academic Press, 1978.
- Andreas Stokke. Lying and asserting. *Journal of Philosophy*, 110(1):33–60, 2013. doi: <https://doi.org/10.5840/jphil2013110144>.
- Andreas Stokke. *Lying and Insincerity*. Oxford University Press, 2018.
- Nicholas Tebbens. Selfless assertions and the knowledge norm. *Synthese*, 12: 1–20, 2020.
- John Turri. Prompting challenges. *Analysis*, 70:456–462, 2010a. doi: <https://doi.org/10.1093/analysis/anq027>.
- John Turri. Epistemic invariantism and speech act contextualism. *Philosophical Review*, 119(1):77–95, 2010b.
- John Turri. The express knowledge account of assertion. *Australasian Journal of Philosophy*, 89:37–45, 2011.
- John Turri. Knowledge guaranteed. *Nous*, 47:602–612, 2013.
- John Turri. Selfless assertions: Some empirical evidence. *Synthese*, 192(4): 1221–1233, 2015.
- John Turri. Experimental work on the norms of assertion. *Philosophy Compass*, 12(7):e12425, 2017. doi: <https://doi.org/10.1111/phc3.12425>.
- John Turri. Excuse validation: a cross-cultural study. *Cognitive Science*, 43: e27148., 2019.
- John Turri and Peter Blouw. Excuse validation: A study in rule-breaking. *Philosophical Studies*, 172:615–634, 2015.
- Peter Unger. *Ignorance: The Case for Skepticism*. Oxford: Clarendon Press, 1975.
- Peter van Elswyk. Propositional anaphors. *Philosophical Studies*, 176(4): 1055–1075., 2019.
- Peter van Elswyk. Representing knowledge. *The Philosophical Review*, 130(1): 97–143, 2021. doi: <https://doi.org/10.1215/00318108-8699695>.
- Peter van Elswyk. Hedged testimony. *Noûs*, forthcoming.
- Peter van Elswyk and Yasha Sapor. Hedging and the ignorance norm on inquiry. *Synthese*, 199(3-4):5837–5859, 2021. doi: <https://doi.org/10.1007/s11229-021-03048-0>.
- Marilyn Walker. Inferring acceptance and rejection in dialog by default rules of inference. *Language and Speech*, 39(2-3):265–304, 1996.

Timothy Williamson. Knowing and asserting. *The Philosophical Review*, 105 (4):489–523, 1996.

Timothy Williamson. *Knowledge and Its Limits*. Oxford University Press, 2000.