

Expressing belief with evidentials: A case study with Cuzco Quechua on the dispensability of illocutionary explanation

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Evidentials indicate a source of evidence for a content, and sometimes do more. Depending on the language, they also express the speaker's belief in that content or its possibility. This paper is about how to explain the expression of belief. It argues that semantic explanations are better than illocutionary explanations in two ways. First, a general argument is provided that a semantic explanation is preferable. Second, a case study is given to the evidentials of Cuzco Quechua to argue that a semantic explanation is preferable to the illocutionary explanation that has been proposed in great detail by Faller (2002, 2012, 2014). The upshot is that illocutionary explanations of how belief is expressed are dispensable for at least some languages with grammaticalized evidentials.

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1 Expressing attitudes

Declaratives convey propositional content about what the world is like. Their use also prompts inferences about the speaker's attitude towards that primary content. Consider (1).

(1) Sandy sang.

It prompts the ATTITUDE INFERENCE OR A-inference that the speaker believes or knows that Sandy sang. The standard explanation of the A-inference is illocutionary. In uttering (1), the speaker performs the speech act of assertion and assertions express or require the speaker to believe their content.¹ In other words, the A-inference is not explained by the conventional meaning of (1) but by what speakers do with (1) in a conversation.

¹For the proposal that assertions express or require belief, see For the proposal that assertions require belief, see Frege (1892), Austin (1962), Searle (1969), Bach and Harnish (1979), Grice (1989), McDowell (1980), Davidson (1984), Brandom (1994), Alston (2000), Williams (2002), Owens (2006), Green (2013), and Hindriks (2007). My own view is that assertions express or require knowledge. I have defended this in van Elswyk (2021a) and van Elswyk and Benton (Forthcoming). Others who see assertion as associating with knowledge as opposed to mere belief include Williamson (2000), Adler (2002), Blauw (2012), Benton (2011, 2012, 2016a,b), DeRose (2002, 2009), Kelp (2018), Reynolds (2002), Sutton (2005), Schaffer (2008), Simion (2016), and Turri (2010, 2011, 2013).

Now consider (2) in Cheyenne (Algonquian: Montana, US) from (Murray, 2010, 122). It contains an evidential morpheme indicating that the speaker has direct, visual evidence for Floyd having won.²

- (2) É-hó'táhéva-∅ Floyd.
3-win-DIR Floyd
'Floyd won, I'm sure.'

It prompts an EVIDENTIAL INFERENCE that the speaker has direct evidence for the primary content. Such an inference is clearly explained by the evidential. The conventional meaning of the evidential is that the speaker has direct, visual evidence. But (2) also prompts an A-inference that the speaker believes that Floyd won. How should that inference be explained?

One option is to just repeat the standard illocutionary explanation. Like (1), (2) prompts the A-inference because a speaker uttering (2) performs the speech act of assertion or at least a sufficiently similar act. That act requires or expresses belief and such a feature of the act is what triggers the A-inference. Another option is to repeat the explanation of the evidential inference. Accordingly, what explains the A-inference is the meaning of the evidential: it indicates both that the speaker has direct evidence for and that the speaker believes the primary proposition. The aim of this paper is to motivate that second option. Regardless of how the A-inference is best explained in languages like English, I will suggest that the best explanation in languages *with* grammaticalized evidentials is semantic. Exactly how I understand the difference between illocutionary and semantic explanations will be clarified shortly in §2.1.

This paper also has a related but less ambitious aim. The reader may not ultimately be convinced that a semantic explanation of the A-inference is better than an illocutionary one. But insofar as this paper motivates that a semantic explanation is no worse than an illocutionary one, it will motivate that we have no *prima facie* reason to prefer an illocutionary explanation. Even though the usual explanation of the A-inference in English is illocutionary, that by itself is not a reason to adopt an illocutionary explanation when it comes to the A-inference in languages with evidentials.

With both aims, this paper intends to make a contribution to theoretical pragmatics, especially with respect to when speech act theory is required to explain linguistic phenomena. Sometimes an illocutionary explanation—an explanation that makes ineliminable appeal to what speech act a speaker performed with an utterance in a context—is called for. But not always. While motivating a semantic explanation of the A-inference, I will provide some considerations for when to opt for and when to forego an illocutionary explanation of some phenomena. These considerations will be broadly applicable.

Important data related to the A-inference is what I will call DISAVOWAL DISCOURSES. For English, Moore (1942, 1962) observed that disavowing belief in the

²For this and subsequent glosses, 1,2,3 = person, DIR = direct evidential, REP = reportative evidential, PROG = progressive, and NEG = negation.

proposition contributed by an immediately prior declarative is defective. It feels like a contradiction. An illustration is (3).

(3) # Sandy sang. But I don't believe it.

The defectiveness of (3) is evidence for the Λ -inference. The reason (3) feels like a contradiction is that *Sandy sang* expresses belief that Sandy sang, and the disavowal contradicts as much. Similar disavowal discourses can be constructed in languages with evidentials. Consider (4) in Cuzco Quechua (Quechuan: Peru) from Faller (2002, 163):

(4) # Para-sha-n-mi, ichaqa mana crei-ni-chu.
rain-PROG-3-DIR but not believe-1-NEG
'It is raining (I see), but I don't believe it.'

It provides the same kind of evidence for the Λ -inference as (3) did. The reason why (4) rings like a contradiction is because *Para-sha-n-mi*, the first part of the discourse, expresses belief in what the second part disavows. So in discussing how to explain the Λ -inference, I will also be discussing how to explain the defectiveness of disavowal discourses like (4).

Additional important data that will be discussed is what AnderBois (2004) calls REPORTATIVE EXCEPTIONALITY. Evidentials differ in the evidence source indicated. A common classification sorts them into direct and indirect sources (Willett, 1988). Examples (2) and (4) were both examples of direct, perceptual evidentials. A representative indirect evidential is a reportative or hearsay evidential. It indicates that the source of evidence is someone else. Though declaratives with direct evidentials are incompatible with a disavowal discourse, reportative evidentials are not. Below is an example in Tagalog (Austronesian: Philippines) from Schwager (2010, 237):

(5) Dadating **daw** siya sa isang oras, pero hindi talaga.
will.come REP he in one hour but not really
'He says he will come in an hour, but in fact he won't.'

Cataloging over twenty languages, AnderBois (2004) notes that reportative evidentials like *daw* in (5) are compatible with the speaker denying the scope proposition or denying belief in the scope proposition. Earlier, the felt contradiction of disavowal discourses motivated the presence of the Λ -inference. Here the absence of the Λ -inference is motivated by the absence of a felt contradiction. Since there is nothing defective about disavowing what one has indicated one has reportative evidence for, reportatives do not license the Λ -inference like direct evidentials do. So in discussing how to explain the Λ -inference, I will also be discussing how to make sense of reportative exceptionality.

A few caveats are merited. First, I am mostly concerned with evidentials that are grammaticalized in the sense that they belong to closed class of morphemes that appear to have a dedicated syntactic position. Such evidentials are or could

be obligatory for grammaticality.³ Second, what I am calling the A-inference is sometimes discussed in terms of whether the speaker is committed to the proposition. I find this terminology potentially misleading. Talk of commitment has a normative connotation that talk of a propositional attitudes like belief does not. In the philosophical literature on assertion, for example, commitment-based theories understand assertion according to the liabilities or responsibilities the act incurs for the speaker (Brandom, 1983; Alston, 2000; MacFarlane, 2011; Shapiro, 2020). To avoid confusion, I will continue to characterize the phenomenon in question doxastically.

The final caveat is the most important for avoiding confusion. This paper explores how to choose between a semantic and an illocutionary explanation of the A-inference. But semantic explanations are occasionally advanced in illocutionary terms. As an example, consider a proposal of Speas and Tenny (2003). They suggest that the left periphery of a clause hosts a *SPEECH ACT PHRASE*. This phrase represents the speaker, the hearer, and a body of information that is indexed either to the speaker or the hearer. Positing such a phrase has proven useful in explaining the behavior of evidentials, especially evidentials in questions (Bhadra, 2018, 2020). A similar proposal is found in the recent work of Krifka (Forthcoming) where multiple phrases—what he calls the *JUDGMENT PHRASE*, *COMMITMENT PHRASE*, and *ACT PHRASE*—hosts elements that specify the speaker’s attitude and public commitment towards an underlying content. But such explanations are ultimately semantic. What explains the behavior of evidentials is facts about the compositional semantics of elements in a dedicated phrase. It is not facts about what type of action was performed by an utterance in a particular context. As a result, some semantic explanations of linguistic phenomena can initially appear illocutionary because of how they are characterized. In this paper, my focus is on how to explain the A-inference as opposed to merely what terminology to invoke. So my target is genuine illocutionary explanations of the A-inference as opposed to semantic ones in illocutionary garb.

Some explanations that can be found in contemporary semantics may not merely be semantic explanations offered in illocutionary vernacular but explanations guilty of category mistakes. McCready (2015, 168) has this worry for Faller (2002):

Consider the question of the effect of evidentials on speech acts. Clearly, Faller’s theory provides an answer to this question: evidentials shift the speech acts performed with the sentences they appear in to different speech acts, in operator-like fashion. . . one could ask whether the analysis is conceptually sensible on its most obvious interpretation. How can it be that sentence-internal operators directly affect what is done with the sentence that contains them? The idea just seems bizarre, like saying that a weight on the handle of a hammer could affect, not the way in which it is swung, but *whether or not* what is done with it *counts* as a swing.

³Following Aikhenvald (2004), one might characterize grammaticalized evidentials as ones which belong to a distinct grammatical category. But it is not obvious exactly how to understand categoryhood, especially in connection to evidentiality. See Boye (2010) for related discussion.

In this paper, I will not advance this as a worry for Faller’s approach to evidentials. If there are approaches to evidentials that are caught up in such confusion, they can be revised into full-fledged semantic or illocutionary approaches. Then they can be evaluated accordingly.

Here is the plan. I begin by offering a general argument that illocutionary explanations are ill-suited to explain how declaratives with certain evidentials prompt the Λ -inference (§2). After that, I show how a semantic explanation is preferable by focusing on the Λ -inference in Cuzco Quechua (§3-§5). The narrowed focus on Cuzco Quechua serves as a case study of the general argument. Cuzco Quechua merits such attention not because of any distinctive property it has as a language. It merits special attention because of the important body of work that Faller (2002, 2012, 2014) advances to explain evidentials in Cuzco Quechua. Her explanation of the Λ -inference is illocutionary, and her approach more generally is the most prominent illocutionary approach to the semantics and pragmatics of evidentials. Many use her theory as a template for analyzing evidentials in other languages (Chung, 2010; Tantucci, 2016). As a result, her explanation of the Λ -inference provides a perfect foil for comparing illocutionary and semantic explanations. After motivating that a semantic explanation is preferable, I conclude with a brief discussion of how to explain the Λ -inference in languages without grammaticalized evidentials (§6).

2 A general argument

This section offers a general argument for why a semantic explanation is preferable to an illocutionary one. I start in §2.1 by clarifying the difference between a semantic and illocutionary explanation. In §2.2, I identify two typical features of data that makes that data more amenable to an illocutionary explanation than a semantic one. Then, in §2.3, I argue that these features are missing for how declarative with evidentials prompt the Λ -inference. What explanatory approach we have most cause to adopt is a semantic one.

I present the argument general enough so as to apply to evidentials anywhere. But the usual limitations apply. Evidentials differ cross-linguistically in various respects (*e.g.* embeddability, information sources indicated), and the issues related to the Λ -inference have been researched for only some languages. So the arguments in §2.3 that the features are missing may hold for some languages and not others. Even so, the general argument remains probative. When the two features of the data are missing, the argument still facilitates the conclusion that the Λ -inference is better off receiving a semantic explanation.

2.1 Illocutionary explanation

Before considering what it takes for data to require an illocutionary explanation as opposed to a semantic one, it will be beneficial to further specify what an

illocutionary explanation is. Ever since Austin (1962), it is standard to distinguish the following two acts:

LOCUTIONARY ACT

An act performed by the utterance of a sentence that is individuated by its linguistic properties (*e.g.* phonology, syntax, semantics).

ILLOCUTIONARY ACT

An act performed by the utterance of a sentence that is individuated by its semantic content and its force.

To illustrate the distinction between the acts, consider an utterance of a sentence like (6).

(6) The ice is thin over there.

The mere utterance of (6) counts as a locutionary act. But a speaker can do more than just utter a meaningful sentence in a context. For example, (6) can be used to warn an addressee about the danger posed by the ice, if the speaker is concerned the addressee might fall in.

Following Murray and Starr (2018), we can classify theories of illocutionary action according to how they understand **UTTERANCE FORCE** and what **ILLOCUTIONARY MECHANISM** they specify. An understanding of utterance force identifies what it is for locutionary act to count as a more determinate action like a warning. An illocutionary mechanism elaborates the means by which a locutionary act can be one of these more determinate actions. For example, Bach and Harnish (1979) develop a theory where the force of an utterance is determined by the kind and content of the speaker's attitudes that are publicized (*e.g.* beliefs, desires, intentions). Intention recognition is then the mechanism through which these attitudes are made transparent to conversational participants. Putting the pieces together, a warning will be distinguished by the attitudes that are associated with it and the mechanism by which these attitudes are publicized is that an addressee recognizes the speaker's intention to broadcast these attitudes in the situation where the act is performed.

Theories of illocutionary action differ considerably in how they understand utterance force and illocutionary mechanisms. When it comes to assertion, for example, utterance force has been proposed to consist in publicizing the speaker's belief in what's asserted (Bach and Harnish, 1979), rule-governed effects on a body of mutually accepted information (Stalnaker, 1978), incurring responsibility for what's asserted (Brandom, 1983), and being governed by an epistemic norm requiring knowledge in what's asserted (Williamson, 2000). The mechanisms proposed for converting a locutionary act into an illocutionary act include constitutive rules (Searle, 1969), intention recognition (Bach and Harnish, 1979; Harris, 2019), convention (Dummett, 1973), defeasible norms (Roberts, 2018), and some combination of the aforementioned. Despite such variety, theories of illocutionary action are united in being theories of action. They explain what a speaker accomplishes or does with a content.

An illocutionary explanation of data is therefore act-based. It appeals to or cites properties of an action that a speaker performs to account for data. This immediately contrasts with a semantic explanation. A semantic explanation is meaning-based. It appeals to or cites the meaning of a linguistic expression in a context to explain data. So in choosing between a semantic or illocutionary explanation of the Δ -inference prompted by declaratives with evidentials, one is choosing to account for the inference either with the meaning of an evidential or with considerations about what action a speaker performs in uttering such a declarative.

2.2 Illocutionary amenability

I now present two typical features of data that renders the data more amenable to illocutionary explanation. In focusing on *typical* features, I am not aiming to propose necessary and sufficient conditions for when data requires an illocutionary explanation. The aim is to more modestly identify features that are normally exhibited by data that is best explained illocutionarily. The joint presence or absence of these typical features in data then provide an inductive basis for choosing between an illocutionary or semantic explanation. When both are true of data, we have cause for an illocutionary explanation. We have cause for a semantic explanation when both are absent.

The first typical feature I call SEMANTIC RESISTANCE. Historically, a major motivation for giving linguistic data an illocutionary explanation over a semantic one is that the data cannot be explained by citing the meaning of an expression in the sentence associated with that data. Consider (6) again. There is no overt constituent in the declarative that is responsible for making its utterance qualify as an act of warning.

(6) The ice is thin over there.

The problem is compounded by the fact that (6) can be used to perform other illocutionary acts. Between two people looking for the the thinnest ice to drill through for ice fishing, (6) is a suggestion.

In the absence of an overt constituent whose meaning is responsible for the effect, one might consider hypothesizing a covert constituent instead. But hypothesizing the presence of a covert constituent also runs into trouble. The failure of the performative hypothesis owed to Ross (1970) provides an apt illustration. Ross hypothesized that every declarative hosted a performative verb that was often covert. Variation in what a speaker does with a sentence was therefore owed to a difference in the content of the verb. For instance, that *The ice is thin over there* can constitute an assertion or a suggestion is because it is ambiguous between (7) and (8).

(7) I hereby warn you that the ice is thin over there.

(8) I hereby suggest to you that the ice is thin over.

The performative hypothesis offered a semantic explanation for linguistic data that standardly received an illocutionary explanation at the time. But the hypothesis faced a number of problems. To wit, declaratives like (7) and (8) have markedly different truth-conditions from *The ice is thin over there* (Lycan and Boër, 1980). So if one is trying to explain how (6) qualifies as a warning or a suggestion by citing how covert elements contribute to truth-conditions, one will assign the wrong truth-conditions.⁴

When data resists a semantic explanation, looking outside the meanings of a sentence's overt or covert expressions is a promising approach. An illocutionary explanation provides as much by being an act-based explanation instead of a meaning-based explanation. What details are ultimately cited by the act-based explanation will depend on the illocutionary mechanism that converts locutionary acts into illocutionary ones.

The second typical feature I call ILLOCUTIONARY CORRELATION. Clause types associate with illocutionary acts (Sadock and Zwicky, 1985; König and Siemund, 2007). As Williamson (2000, 258) notes of declaratives, "In natural language, the default use of declarative sentences is to make assertions." But this default association is not mandatory. One can use a declarative while performing an illocutionary act other than an assertion, or without performing any illocutionary act at all. Here are the usual examples of mere locutionary acts: actors uses declaratives without illocuting anything to the audience, students learning how to pronounce words in a new language use declaratives without illocuting anything to their peers, and declaratives embedded under operators like negation that are used without being distinct illocutionary acts from whatever additional illocutionary act is associated with the negation.

So whether the utterance of a declarative qualifies as an assertion or another illocutionary act varies. As a result, only data correlated with utterances of declaratives that qualify as illocutionary acts are amenable to an illocutionary explanation. Since the situations in which the data occurs are also situations in which an illocutionary act appears, the performance of that act may be what explains the data. On the flip side, data that does not correlate with the performance of an illocutionary act is not amenable. Without correlation, there are situations in which the data occurs but an illocutionary act does not occur. No act is able to be cited in an explanation.

Whether an utterance of a declarative performs an illocutionary act is determined by the illocutionary mechanism. For example, suppose force is associated

⁴Note that the extent to which data resists a semantic explanation partly depends on the semantic theory being used. The performative hypothesis was initially implemented in a static, unidimensional semantics that traded only in truth-conditions. So attempts to explain what illocutionary act is performed by identifying some element in the logical form of the sentence uttered were doomed to fail. But the hypothesis can be implemented in an alternate semantic framework. For example, see van Elswyk (2021b) for the argument that the performative hypothesis can avoid the problem of assigning incorrect truth-conditions by being implemented in a multidimensional semantics. In §5, I offer a multidimensional semantics for evidentials in Cuzco Quechua.

with an utterance of a declarative as defeasible norm (Roberts, 2018). In the special circumstances where that norm is overridden like those just noted, an utterance can be a mere locutionary act. When an illocutionary mechanism is not specified in advance, it is therefore difficult to determine whether data exhibits illocutionary correlation. But there are still some general failures of correlation that can be noticed. Data that correlates with every utterance of a declarative fails to exhibit illocutionary correlation on the assumption that only some utterances qualify as illocutionary acts.

To summarize, data that both resists a semantic explanation and which correlates only with utterances that are illocutionary acts is data that is amenable to an illocutionary explanation. In contrast, data that exhibits neither typical feature is data for which we have most cause to pursue a semantic explanation.

2.3 The Λ -inference with evidentials is not amenable

With these two typical features in view, we can now consider whether the Λ -inference as licensed by declaratives with evidentials possesses or lacks the features. If it exhibits both semantic resistance and illocutionary correlation, we have an inductive basis for choosing an illocutionary explanation over a semantic one. The inductive basis supports choosing a semantic explanation if it possesses neither.

As noted earlier, evidentials sort according to whether they indicate direct or indirect sources of evidence. Some languages have as few as two grammaticalized evidentials, and most do not have more than five evidentials (Aikhenvald, 2004; Speas, 2018). Languages with just two often have just a direct and indirect evidential. Languages with more than two may have visual and auditory evidentials for indicating direct sources, and inferential and reportative evidentials for indicating indirect sources.

The diagnostic adopted in §1 for whether the Λ -inference is licensed by a declarative with a particular evidential was considering whether that declarative felt contradictory in a disavowal discourses taking a form like ‘ ϕ , but I don’t believe ϕ ’. If the discourse felt contradictory, that interpretive discord indicates that the Λ -inference was licensed. A discourse free of any feeling of contradiction indicated that the Λ -inference was not licensed. Using these discourses as a diagnostic, Murray (2017, 18) concludes that there is cross-linguistic uniformity with direct and inferential evidentials. Declaratives with a direct evidential are always incompatible with a subsequent disavowal of belief. Likewise, declaratives with inferential evidentials are always incompatible with a subsequent disavowal of belief or at least a disavowal of belief in the epistemic possibility of the scope proposition.

Reportative evidentials are a little more controversial. Overwhelmingly, declaratives with reportatives exhibit the exceptionality mentioned at the outset (AndersonBois, 2004; Murray, 2017). They are compatible with a subsequent disavowal; there is no felt contradiction. A potential outlier is St’át’imcets (Salish: British

Columbia) (Matthewson et al., 2007, 214). But AnderBois (2004) contests this interpretation of its reportative. He proposes that reportative exceptionality is an instance of a general pragmatic phenomenon known as PERSPECTIVE-SHIFT (Harris and Potts, 2009). An evidential typically indicates the speaker's source of evidence. But reportatives make salient another agent. They indicate that the speaker's evidence is another person. In making another person salient, AnderBois proposes that the perspective to which the evidential is anchored shifts from the speaker to the third-party. So declaratives with reportatives can be felicitously followed with a disavowal because the A-inference is not licensed for the speaker. The inference is licensed for the third-party. When it comes to St'át'incets, AnderBois suggests that perspective-shift is not happening. In what follows, I remain neutral on the extent to which reportatives display exceptionality.

What does the preceding shows us about illocutionary correlation? I submit that it shows that the A-inference as licensed by declaratives with direct or inferential evidentials does not correlate. The uniformity cataloged by Murray (2017) demonstrates that declaratives with certain evidentials are *always* incompatible with a subsequent disavowal. It does not vary with context, for example, whether the disavowal is defective. But not every use of a declarative qualifies as an illocutionary act. As noted in §2.2, some uses are mere locutionary acts. So we have a simple failure of correlation. Every use of a declarative with a direct or inferential evidential prompts the inference (given that a defective disavowal is our guide to when the inference is present), but only a proper subset of those uses constitute illocutionary acts. The performance of an illocutionary act cannot therefore explain the A-inference.

Some might object that the data catalogued by Murray does not explicitly include declaratives that perform mere locutionary acts (*e.g.* actors on stages, students practicing pronunciation). Accordingly, the data cannot support my conclusion that the A-inference fails to correlate exclusively with illocutionary acts.⁵ I acknowledge the data is limited in this respect. Settling the issue definitively will require fieldwork to determine whether disavowals feel like contradictions to native speakers in contexts where a mere locutionary act is being performed. Nevertheless, there is reason to think such contexts would not be an exception to Murray's cross-linguistic generalization.

There is no precedent for disavowal discourses with a particular linguistic form being contradiction-like in one context and not another. The opposite is true. Disavowal discourses still feel like contradictions in languages without grammaticalized evidentials (van Elswyk, 2021a). For example, if students are practicing clause types in English and utter *Sandy sang but I don't believe that*, it still rings contradiction-like even when we know full well that the student is not performing an assertion or some other speech act. That the discourse is defective is entirely independent of what the speaker may be doing with the utterance. When it comes to languages with grammaticalized evidentials, Murray (2017, 19) is also

⁵Thanks to an anonymous referee for raising this objection.

explicit that disavowals in Cheyenne “are not merely infelicitous; these sentences are not acceptable in any context—they are contradictions.” Perhaps some direct and indirect evidentials behave completely different in other languages, but that would be very surprising.

The next feature of data that it makes it more amenable to an illocutionary explanation is semantic resistance. The Λ -inference as licensed by declaratives with direct or inferential evidentials is not resistant in this way. There is a clear lexical item contained in the sentence that can be hypothesized to be the cause. It is the direct or inferential evidential itself that licenses the Λ -inference as a matter of its semantic meaning. Unlike *The ice is thin over there* that lacks any lexical item that can be identified as what causes the utterance to be a warning or suggestion, declaratives license the Λ -inference only when they contain the direct or inferential evidential. So it is straightforward to add the Λ -inference to the semantic contributions of the evidentials. In §5, a multidimensional semantics is presented that does as much.

3 Evidentials in Cuzco Quechua

The general argument provides a *prima facie* reason that it is a mistake to explain the Λ -inference illocutionarily. That conclusion, in effect, yields a prediction. For any language with grammaticalized evidentials that has evidentials licensing the Λ -inference, semantic explanations of that inference are preferable to illocutionary explanations. In what remains of the paper, I will argue that this prediction is plausibly vindicated by considering the Λ -inference in Cuzco Quechua. In this section, I briefly introduce the evidential system of Cuzco Quechua. My introduction closely follows Faller (2002) and departs only when I think her characterization is more theory-laden than necessary.

Cuzco Quechua has three overt evidentials that occupy a distinct morphological slot in declaratives: *-mi* indicates an individual has the best possible evidence for p (DIRECT), *-si* indicates that p was reported to the individual (REPORTATIVE), and *-chá* indicates that p was inferred by the individual (CONJECTURAL). The direct evidential is glossed as indicating that the individual has the best possible grounds because it can be felicitously used in a broad range of situations. A speaker need not have perceived the event first-hand, for example. Faller notes that what she calls ENCYCLOPEDIA KNOWLEDGE can also underwrite a use of *-mi*. A speaker can use *-mi* in speaking about historical events, or unwitnessed events that are common knowledge.

Declaratives without an overt evidential still express the speaker’s attitude. Depending on the context, they are interpreted as if they hosted one of the overt evidentials. Typically they are interpreted the same as declaratives with *-mi* but Faller (2002, §4.4) provides discourses where they are interpreted akin to declaratives with *-si*. Faller does not analyze declaratives without overt evidentials as hosting a null or zero expressed evidential. Accordingly, she does not regard evidentials as being grammatically obligatory in Cuzco Quechua. We will revisit

this choice-point shortly.

Unqualified declaratives and declaratives with the direct evidential license the Λ -inference in Cuzco Quechua. Using the disavowal diagnostic, both declaratives are infelicitous with a subsequent disavowal. Examples (9) and (10) from Faller (2002, 161-3) illustrate.

- (9) # Para-sha-n, ichaqa mana crei-ni-chu.
rain-PROG-3 but not believe-1-NEG
'It is raining (I see), but I don't believe it.'
- (10) # Para-sha-n-mi, ichaqa mana crei-ni-chu.
rain-PROG-3-DIR but not believe-1-NEG
'It is raining (I see), but I don't believe it.'

The conjectural *-chá* is slightly different. Faller does not consider the behavior of *chá* in a disavowal discourse. But she does note that it is incompatible with a denial of the scope proposition. Faller (2002, 178) provides the following as an example of incompatibility.

- (11) # Llave-qa muchila-y-pi-chá ka-sha-n, ichaqa mana-n.
Key-TOP backpack-1-LOC-INDR be-PROG-3 but not-DIR there-LOC-NEG
'The keys may be in my backpack, but they are not there.'

She concludes from such incompatibility that *-chá* requires the individual to believe that the at-issue content is epistemically possible. Accordingly, *-chá* represents belief too. But instead of representing belief in the at-issue content, it represents belief that the at-issue content is epistemically possible—i.e., belief that the content might be the case as opposed to belief that it is the case.

The evidentials of Cuzco Quechua constitute an ideal evidential system with which to consider how the Λ -inference is licensed. The unqualified declarative and evidential declaratives alike both license the inference. So we can investigate whether the inference is best explained in Cuzco Quechua by a semantic or illocutionary explanation.

4 Faller's illocutionary explanation

Let's now consider Faller's own explanation of the Λ -inference. As noted in §1, the focus on evidentials in Cuzco Quechua is not owed to any particular property of Cuzco Quechua as a language. It is owed to the important and influential work of Faller (2002, 2012, 2014) in developing an illocutionary explanation of the semantics and pragmatics of evidentials in Cuzco Quechua. To assess whether a semantic explanation of the Λ -inference is better than an illocutionary explanation, we should consider the best illocutionary explanation on offer. Faller's explanation fits this description.

In what follows, I begin by detailing her core proposal (§4.1).⁶ That presentation will incorporate some refinements and omit some components that are not immediately relevant to the paper’s focus. Then I present some problems with her proposal (§4.2).

4.1 The explanation

Faller (2002, 2012, 2014) takes the theory developed by Searle (1969) and Searle and Vanderveken (1985) as her point of departure. Like any theory of speech acts, we can distinguish their theory according to how it characterizes utterance force and what illocutionary mechanism it specifies for transforming the mere utterance of a sentence into an act with such illocutionary force. For them, an act A ’s utterance force is individuated by a variety of components including, but not limited to, pre-conditions on the performance of A . Of special importance to Faller are *SINCERITY CONDITIONS*. These conditions identify attitudes that the speaker must possess for the performance of A to be sincere. For example, an act of promising has the sincerity condition that the speaker *intends* to do the future action they promised to undertake.

The illocutionary mechanism within this theory is not the easiest to discern. Were we to focus on Searle (1969), the natural interpretation is that the theory’s mechanism is *CONSTITUTIVE RULES*. This is how Murray and Starr (2018) interpret Searle. In contrast to a regulative rule that merely governs an activity, constitutive rules determine what it is to conduct that activity. Chess rules identifying how pieces move are the boilerplate example. So an act A has the utterance force it does because there is a constitutive rule for A determining as much. But the proposal there are constitutive rules is not enough. What is still required is an account of when an utterance falls under a certain constitutive rule. Since utterances of sentences like *The ice is thin over there* can perform many different acts, the theory does not have an illocutionary mechanism until such an account is provided. That account will identify when an utterance has force by identifying when it falls under a rule.

⁶Faller implements her ideas in a few different frameworks. In Faller (2002, 2012, 2014), she implements them in what I would characterize as a static, unidimensional semantics that is supplemented by speech act theory in the style of Searle and Vanderveken (1985). Faller (2007) implements them in Segmented Discourse Representation Theory (SDRT) of Asher and Lascarides (2003). Finally, Faller (2019) implements them in the discourse framework of Farkas and Bruce (2010). I focus on the first implementation for two reasons. First, it is the most influential in the relevant literature on evidentials. Second, both of the other frameworks blur the boundary between semantics and pragmatics in unhelpful ways. The first does not distinguish between the force of an utterance and its grammatical mood. The second blurs in other ways. For example, Faller (2019, 3) characterizes what she is offering as a semantics but defines semantics to include “conventionally encoded discourse effects.” This is a natural approach when working in Farkas and Bruce’s framework. But her definition cannot distinguish between locutionary effects and illocutionary effects where the mechanism producing illocutionary effects is convention (§2.1). So the best way to see a contrast between a semantic explanation and an illocutionary one is to focus on the first proposal.

In later work, speaker intention is given a privileged role. For example, Searle and Vanderveken (1985, 21) write that “whether or not an utterance has a certain force is a matter of the illocutionary intentions of the speaker, but whether or not an illocutionary act with that force is successfully and nondefectively performed involves a good deal more.” Vanderveken (1983, 378) follows suit. I therefore interpret their theory as identifying speaker intention with the illocutionary mechanism. But it is not obvious this is Faller’s own view. Faller (2002, 17) is explicit that she is not concerned with this issue and assuming the result of whatever process determines force for an utterance. I think this uncertainty is worth highlighting because it bears on whether an illocutionary explanation makes correct predictions. We will return to the importance of detailing an illocutionary mechanism in the next section.

Turn now to declaratives. A declarative performs what Faller (2002) calls an ACT OF PRESENTATION.⁷ An act of presentation is one which a speaker merely puts forward a proposition in a conversation. The sincerity conditions of an act of presentation are empty. To present a speaker is not required to adopt a particular attitude towards the proposition. However, other more determinate speech acts are performed when the declarative contains an expression that adds to sincerity conditions. Evidentials perform this role.

The direct evidential *-mi* imposes two sincerity conditions: that the speaker has the best possible grounds for p and that the speaker believes p . The reportative *-si* adds that the speaker has reported evidence. The conjectural *-cha* is more complicated because Faller (2002) has it modify the truth-conditional content of a declarative too. It first weakens that content to be that p is epistemically possible or $\diamond p$. Then what it adds to the sincerity conditions that the speaker inferred p and that the speaker believes $\diamond p$. Finally, the unqualified declarative, according to Faller, typically conversationally implicates what *-mi* contributes. So it implicates that the speaker has the best possible grounds for p and that the speaker believes p .

By being tied to the sincerity conditions of the speech act being performed by the evidential declarative, the Λ -inference receives an illocutionary explanation. In particular, that the speaker believes the primary proposition is a pre-condition what it takes to sincerely perform the act being performed. Accordingly, the inference happens at the level of action—what a speaker does with an utterance—as opposed to being a byproduct of the sentence’s compositional meaning.

4.2 Problems

We now turn to the problems with the approach taken in Faller (2002, 2012, 2014). I raise three issues: first, with the initial choice to pursue an illocutionary explanation; second, with indeterminacy related to what the illocutionary mechanism

⁷In Faller (2012) she refers to this simple act performed by a declarative as an act of PUTTING, but returns to describing it as presentation in Faller (2019). I stick with the initial terminology in my discussion. For critical discussion of theorizing with such an act, see Murray (2017).

is; and third, with her explanation of unqualified declaratives.

Within Faller's work, the main reason for pursuing an illocutionary explanation is that it outperforms a semantic explanation. For example, Faller (2014) finds shortcomings with the multidimensional approach sketched by Potts (2007) and McCready (2010) and Faller (2019) does the same for Murray (2014). I regard this reason as the strongest. Accordingly, the next section will argue that it does *not* outperform a semantic one. But note that this reason is a general reason for theory choice. It is not a particular reason for adopting a theory that provides an illocutionary explanation. In any domain, we should adopt one theory over alternatives if it better explains the phenomenon under investigation. I stress as much because it means that Faller has not given a reason for a distinctively *illocutionary* explanation.

Given the general argument against an illocutionary explanation of the Λ -inference (§2), a semantic explanation is to be preferred as long as it is equally explanatory. Two problems with the explanatory approach in Faller (2002, 2012, 2014) push us further towards a semantic explanation. The first is owed to the indeterminacy concerning what the illocutionary mechanism is. Though an array of options are available to choose from within the literature on speech acts, the choice matters. In selecting a mechanism, the conditions under which that mechanism applies to an utterance will also be specified. In specifying these conditions, the theory makes a prediction about when an utterance has force. It has force in all and only the situations in which the mechanism is operative. Speech act theories can therefore be assessed according to whether such predictions about utterance force are correct or not.

Not resolving what the illocutionary mechanism is leaves the theory incomplete, as developed in Faller (2002, 2012, 2014). It does not make testable predictions. We cannot consult her theory to identify which situations are ones where evidential declaratives will perform acts with certain illocutionary force and then evaluate whether the situations identified are truly ones where the declaratives have that force.

A consequence of being incomplete is that theory of Faller (2002, 2012, 2014) cannot be defended by arguing that the Λ -inference *does* correlate with illocutionary acts. In other words, one way to motivate the illocutionary explanation offered by Faller's theory is to rejoin the general argument (§3). That would involve showing that the Λ -inference does correlate with illocutionary acts. But we cannot explore the plausibility of such a correlation if we are in the dark about when the use of a declarative constitutes an illocutionary act.

Note too that Faller cannot help herself to the illocutionary mechanism that Searle and Vanderveken (1985) adopt. As discussed, they make speaker intention a necessary condition on whether an utterance has particular force. The prediction is thereby made that utterances will lack force \mathcal{F} in all situations where the speaker does not intend the utterance to have \mathcal{F} . Applied to the approach in Faller (2002, 2012, 2014), we should therefore have evidential declaratives that lack sincerity conditions requiring the speaker to believe the primary proposition. After all, utterance force for Searle and Vanderveken consists partially in sincerity

conditions. So forceless utterances will lack sincerity conditions.

But there are no uses of evidential declaratives that lack sincerity conditions. Consider *-mi*. It adds the sincerity condition that the speaker believes the scope proposition. It is the existence of that condition that explains why disavowal discourses like (12) are infelicitous. The discourse is infelicitous because the sincerity conditions of the first segment of the discourse *Para-sha-n-mi* contradicts the content of the second segment *ichaqa mana crei-ni-chu*.

- (12) # Para-sha-n-mi, ichaqa mana crei-ni-chu.
rain-PROG-3-DIR but not believe-1-NEG
'It is raining (I see), but I don't believe it.'

But the discourse above is presumably defective.⁸ Whether it is contradiction-like or not does not depend on whether the speaker intends to perform an act requiring belief for its sincerity. So if Faller adopts Searle and Vanderveken's illocutionary mechanism, the theory will fail to explain the Λ -inference involved with (12). It will predict that there are contexts in which (12) is proper because the speaker's intention is missing.

The next problem I highlight concerns unqualified declaratives. Faller does not propose that evidentials in Cuzco Quechua are obligatory. Instead, she proposes that the declarative without an overt evidential usually conversationally implicates what *-mi* indicates. But there is a notable problem with this proposal. Conversational implicatures can be canceled (Grice, 1989). Indeed, cancellation is the hallmark diagnostic for whether content is a conversational implicature as opposed to another variety of content (e.g. conventional implicatures, presuppositions, expressive content). Interestingly, Faller herself gives examples of unqualified declaratives failing cancellation. Recall example (9). She provided it to show that unqualified declaratives are akin to declaratives with *-mi* by being incompatible with a subsequent disavowal of belief.

- (9) # Para-sha-n, ichaqa mana crei-ni-chu.
rain-PROG-3 but not believe-1-NEG
'It is raining (I see), but I don't believe it.'

But if *Para-sha-n* conversationally implicates that the speaker believes that it is raining, then (9) should be a non-defective discourse. The subsequent disavowal *ichaqa mana crei-ni-chu* would just cancel the implicature that the speaker believes. And yet, (9) is contradiction-like. Unqualified declaratives cannot license the Λ -inference via conversational implicature.

⁸As discussed in §2.3, it remains a possibility that there are contexts where discourses like (12) do not crash as if contradictions. If this possibility is actual, my argument here does not succeed. But, as also discussed, we have good reason to presume that a discourse like (12) is defective in any context.

One might respond that the conversational implicature is non-cancellable because it is MANDATORY in the sense of Lauer (2014).⁹ But this response carries its own cost. As noted in §3, Faller (2002, §4.4) is clear that unqualified declaratives are sometimes interpreted as if they host the reportative *-si* as opposed to the direct evidential *-mi*. Were the implicature mandatory, the unqualified declarative could not also occasionally be interpreted as if it hosted *-si* instead. So what is required is an explanation of why disavowals with unqualified declaratives are defective only after it is settled in the context which evidential the unqualified declarative should be interpreted as hosting.

As noted in §1, the usual explanation why unqualified declaratives in English are incompatible with a subsequent disavowal of belief is illocutionary. The first part of the discourse is an assertion, assertions license the Δ -inference, and so the disavowal contradicts that inference. What if unqualified declaratives in Cuzco Quechua were explained the same?¹⁰ The problems just reappear. In particular, an illocutionary mechanism still needs to be specified. Without an informative account of *when* the use of an unqualified declarative is an act of assertion, this alternative is incapable of predicting the Δ -inference for unqualified declaratives in Cuzco Quechua. Making predictions is especially important here because unqualified declaratives in Cuzco Quechua are not interpreted as being evidential-less like unqualified declaratives are in English. They are interpreted as if they hosted *-mi* or *-si*. Since *-si* does not license the Δ -inference, specifying the illocutionary mechanism is necessary to neither under-predict nor over-predict when the inference is licensed.

These problems point to a common source. The Δ -inference is consistently licensed. There do not appear to be situations in which *-mi* fails to indicate that an agent has best possible grounds for the at-issue content and that the agent believes it too. It persistently indicates as much. The unqualified declarative is similar. Though an unqualified declarative sometimes behaves as if it hosts the hearsay evidential *-si* as opposed to *-mi*, it still consistently licenses the Δ -inference when interpreted as if it hosts *-si*. What is consistent in its contribution is presumably conventional. What is conventional is plausibly semantic (Lewis, 1969; Lepore and Stone, 2015).

5 A semantic explanation

Having raised problems with Faller's illocutionary explanation, I now turn to my own semantic explanation to argue that it is preferable by solving or avoiding these problems. The semantics I propose is multidimensional in that it analyzes the semantic contribution of an evidential as taking place in a separate layer of meaning from the scope proposition. In §5.1, I introduce that semantics. Next,

⁹Such a response has some precedent in the literature on the semantics and pragmatics of evidentials. See Mandelkern (2019), but then consult von Stechow and Gillies (2021) for a compelling reply.

¹⁰Thanks to the editors for raising this question.

that semantics is argued in §5.2 to better explain the Λ -inference licensed by certain declaratives in Cuzco Quechua. I conclude the discussion in §5.3 by considering some loose ends.

In advancing a multidimensional semantics, my motive is not to argue that only a multidimensional semantics can outperform an illocutionary explanation of the Λ -inference. Accordingly, I will not argue against other semantic explanations. My primary aim is to vindicate the prediction compelled by the general argument of §2 that the Λ -inference is better explained semantically than illocutionarily. Insofar as there are other semantic theories that can account for the inference, these alternative theories also vindicate that prediction.¹¹

However, I do have two ulterior motives. The first is showcasing what can be accomplished by offering an entirely semantic explanation. A multidimensional semantics for evidentials in Cuzco Quechua is also pursued by McCready (2010). But McCready’s proposal has drawbacks noted by Faller (2014). In what follows, I argue that these drawbacks can be solved by jettisoning all of the illocutionary components from McCready’s explanation. The best explanation the Λ -inference is entirely semantic.

The second ulterior aim is motivating that grammaticalized and ungrammaticalized evidentials alike can be uniformly explained with a multidimensional semantics. Parenthetical verbs like the sentence-final *I think* attached to *Sandy sang, I think* are widely thought to be evidentials in English or to at least play an evidential-like role (Simons, 2007; Rooryck, 2001a,b; Murray, 2017). A plausible semantics for parenthetical verbs is a multidimensional one on which they contribute to a different layer of meaning than truth-conditions (Jayez and Rossari, 2004; van Elswyk, 2021a). Providing a semantics for grammaticalized evidentials in Cuzco Quechua that is also multidimensional therefore provides further reason to think that most, if not all evidentials, can be explained in a multidimensional semantics.

5.1 The explanation

The multidimensional semantics I work with draws on a proposal inaugurated by Kaplan (2004) and formally refined by Gutzmann (2015). Central to this semantics is a distinction between terms that are DESCRIPTIVE and EXPRESSIVE. Descriptive expressions contribute to truth-conditions. Truth-conditional meaning or *t*-meaning—given a dedicated assignment function $\| \cdot \|^t$ —is familiarly represented as a set of worlds in which a sentence is true. The *t*-meaning of *Stan salted the driveway* is found below.

$$(13) \| \text{Stan salted the driveway} \|^t = \{w \mid \text{Stan salted the driveway in } w\}$$

A *t*-meaning is assessed for its truth. For example, *Stan salted the driveway* is true at a world *w* if and only if $w \in \| \text{Stan salted the driveway} \|^t$. In contrast,

¹¹Other semantic theories can explain the inference. The update semantics of Murray (2010, 2017) is a clear example.

expressives contribute to use-conditions where use-conditional meaning or *u*-meaning—given its own assignment function $\| \cdot \| ^c$ —is representable as a set of contexts (Kaplan, 2004). Let’s assume that a context is a tuple $\langle c_S, c_w, \dots \rangle$ consisting of objects such as c_S , the speaker of the context, and c_w , the world of the context.

$$(14) \ \|Ouch\|^u = \{c \mid c_S \text{ is in pain in } c_w\}$$

Then an expressive like *ouch* has a *u*-meaning along the lines of (14). It is the set of contexts in which the speaker of that context is pained in the world of the context. A *u*-meaning is assessed for felicity. An instance of *Ouch* is felicitous at a context c if and only if $c \in \|Ouch\|^u$.

A natural question to answer at this juncture is how the descriptive/expressive distinction relates to the distinction between AT-ISSUE and NOT-AT-ISSUE CONTENT. Where at-issue content is the primary content contributed by a sentence in a context (i.e. the “main point”), not-at-issue content is backgrounded. For Gutzmann (2015, 169-272), the distinctions are independent of one another. I proceed differently. How to answer this question depends on both (a) how to diagnose at-issue status, and (b) which expressions are assigned an expressive meaning in a multidimensional semantics. Following Tonhauser (2012), Murray (2014, 2017), and others, I assume a proposition-centric understanding of at-issue content. As such, at-issue content is propositional content that is typically available for propositional anaphora (Faller, 2002; von Stechow and Gillies, 2007; Matthewson et al., 2007).¹² So to analyze terms as having expressive meaning is to analyze them as contributing to not-at-issue content. The reason is ontological. Propositions are represented as sets of worlds. Unlike truth-conditional content, use-conditional content is a set of contexts.

When it comes to the evidentials of Cuzco Quechua, I propose to analyze them as contributing to use-conditional content. I offer the following lexical entries with inspiration from McCready (2010, 48).

$$(15) \ (A) \ \|mi\|^t = \lambda p.p$$

$$(B) \ \|mi\|^u = \lambda p.\{c \mid c_S \text{ believes } p \text{ and } c_S \text{ has the best possible grounds for } p \text{ in } c_w\}$$

$$(16) \ (A) \ \|cha\|^t = \lambda p.\diamond p$$

$$(B) \ \|cha\|^u = \lambda p.\{c \mid c_S \text{ believes } \diamond p \text{ and inferred } p \text{ in } c_w\}$$

$$(17) \ (A) \ \|si\|^t = \lambda p.p$$

$$(B) \ \|si\|^u = \lambda p.\{c \mid c_S \text{ has reportative evidence for } p \text{ in } c_w\}$$

¹²This perspective stands in stark contrast to Snider (2017) who argues that the anaphoric availability of propositions does not characterize at-issue content. A response to Snider cannot be provided here. As I see it, how to diagnose at-issue status itself turns on much broader issues about how to understand the role of the at-issue/not-at-issue distinction in linguistic theorizing in the first place. For relevant discussion about diagnosing at-issue status that is applied to evidentials, see Korotkova (2020).

Let's start with what happens at the dimension of *t*-meaning. With the exception of *-cha* in (16A), the evidentials contribute nothing at the level of truth-conditions. An identity function ensures as much. Where *-cha* differs is that it modalizes the truth-conditional content. This is in line with what Faller proposes for *-cha* based on her research.

Where the evidentials make a significant contribution is at the dimension of *u*-meaning. Each is a function from the underlying truth-conditional content to a use-conditional content that requires the context to be a certain way. The direct evidential *-mi* requires the context to be one where the speaker believes the truth-conditional content and has the best possible grounds. The conjectural *-cha* requires the speaker to have inferred the truth-conditional content and believe its possibility. Finally, the reportative *-si* requires the context to be such that the speaker has hearsay evidence. It does not require the speaker to take a particular attitude. This follows Faller in how to explain reportative exceptionality. But note that it is very easy to implement AnderBois's explanation of exceptionality in terms of perspective-shift. One option is to add a belief requirement to the use-conditional content of *-si* like (18) does, and just say that this requirement is often perspective-shifted.

$$(18) \|si\|^u = \lambda p. \{c \mid c_S \text{ has reportative evidence for } p \text{ and } c_S \text{ believes } p \text{ in } c_w\}$$

Another option is to introduce quantification over the third-party whose testimony is the source of evidence. On this option, anchoring the belief in the scope proposition to the third-party is the default as opposed to the effect of a pragmatic process.

$$(19) \|si\|^u = \lambda p. \{c \mid \exists x \text{ such that } c_S \text{ has reportative evidence for } p \text{ from } x \text{ and } x \text{ believes } p \text{ in } c_w\}$$

Either way, an explanation of the presence and absence of the Λ -inference can be given by a multidimensional semantics.

When it comes to the unqualified declarative, I propose that it does host a zero expressed evidential that I represent as \emptyset . Zero expressed grammaticalized evidentials can be found in other languages. Cheyenne is a notable example (Murray, 2010). Unlike the other evidentials in Cuzco Quechua, \emptyset is underspecified at the level of use-conditions. It requires that the speaker be related to the truth-conditional content in manner \mathcal{E}_c , but it is left to context to determine what that is.

$$(20) \text{ (A) } \|\emptyset\|^t = \lambda p. p$$

$$\text{ (B) } \|\emptyset\|^u = \lambda p. \{c \mid c_S \mathcal{E}_c p \text{ in } c_w\}$$

But context cannot assign any value. What can be assigned is limited to the closed set of evidential morphemes in Cuzco Quechua or perhaps limited to just

the direct and reportative evidentials.¹³ By default, \mathcal{E}_c receives the same value in a context that *-mi* has invariantly. Accordingly, \emptyset will usually have the use-conditional content specified in (16b). But it can also receive different values depending on context. The various uses attested by Faller where an unqualified declarative is interpreted as if it hosts *-si* are thereby accounted for as non-standard values assigned to \mathcal{E}_c in a context.

A consequence of the semantics above is that evidentials are, following a suggestion in Potts (2007), analyzed as expressive terms as opposed to descriptive terms. This is not a mandatory consequence of going multidimensional. The multidimensional semantics given by McCready (2010) analyzes them as conventional implicatures. But this consequence is a desirable one. Analyzing them as expressives treats them more akin to *Ouch!* than *I am in pain*. Terms like *Ouch!* are notoriously difficult to translate. The way past this difficulty for Kaplan (2004) was giving them use-conditions instead of truth-conditions. Giving use-conditions enables us characterize their meaning without specifying what they contribute to a proposition. That captures their resistance to translation into truth-conditions. Importantly, Faller (2002, 3 fn.4) notes that the evidentials in Cuzco Quechua are also “notoriously difficult to translate.” As a result, the semantics presented offers one way to capture that resistance to translation by giving them meanings that mostly or entirely consist in use-conditions as opposed to truth-conditions. It is worth noting that an expressive approach echoes how Urmson (1952, 495-497) describes parenthetical verbs,

They themselves have not... any descriptive sense but rather function as signals guiding the hearer to a proper appreciation of the statement in its context... They are not part of the statement made, or additional statements, but function with regard to a statement made rather as ‘READ WITH CARE’ functions in relation to a subjoined notice, or as ... to such stage-directions as ‘said in a mournful (confident) tone’ with reference to the lines of the play. They help the understanding and assessment of what is said rather than being a part of what is said.

If evidentials in Cuzco Quechua are akin to parenthetical verbs in English, this parallel is unsurprising.

5.2 Problems averted

The entries proposed for the three evidentials are very similar to those found in McCready (2010, 48). The biggest difference is in how the Δ -inference is explained. McCready appears to offer an explanation that divides explanatory labor between

¹³Why might it be so limited? I do not have an answer. But notice that Faller does not similarly have an illocutionary explanation for why unqualified declaratives are limited to being interpreted as if they hosted only *-si* or *-mi*. Where my explanation differs is treating this fact as conventional as opposed to illocutionary. By giving it use-conditional meaning, my explanation also encourages the thought that this limitation is somehow owed to on-going pragmaticalization processes in Cuzco Quechua. See Davis and Gutzmann (2015) for relevant discussion of pragmaticalization.

a multidimensional semantics and speech act theory. In particular, McCready assumes that the primary content is asserted. Since an act of assertion has a sincerity condition requiring belief, the Δ -inference is licensed at level of action as opposed to within the grammar. For *-mi*, belief in p is thereby expressed because p is the primary content. Since *-cha* modalizes the content, believe in $\diamond p$ is what is expressed at the level of action. However, such an approach is posed to make the wrong prediction for *-si*. It does not license the Δ -inference. To avoid this problem, McCready proposes that *-si* entirely empties a declarative of primary content. It has only secondary content indicating the speaker has reportative evidence for a proposition.

A problem for McCready's explanation noted by Faller (2014) is that declaratives with *-si* do have primary or at-issue content. A declarative like *Para-sha-n-si* has the at-issue content that it is raining, and the evidential contributes that the speaker heard as much. That at-issue content can be targeted for disagreement and be used to answer questions in line with the diagnostics of Tonhauser (2012). The lesson Faller (2014, 80) draws is that we "must allow for the propositions conveyed with the reportative to act as at-issue content without, however, requiring that this content be asserted." The semantics I offered heeds this lesson by not having anything count as an assertion.¹⁴

Where McCready went wrong was relying on an illocutionary explanation to account for the Δ -inference. The entries I proposed move the job of expressing belief into the secondary content or what conceived of as use-conditional content following Gutzmann (2015). Accordingly, the direct and conjectural evidentials express belief because that is part of their use-conditional meanings. What is at-issue can then be identified with the truth-conditional content of the declaratives. Since declaratives with *-si* have truth-conditional content, they have at-issue content.

Moving the contribution of the evidentials to the secondary content solves the first problem noted above for Faller (2002, 2012, 2014) (§4.2). Without detailing an illocutionary mechanism, the theory is incomplete because it does not make testable predictions. At worse, the theory is faulty by making bad predictions. McCready's explanation inherits this problem. By still leaving a job for illocutionary acts to explain how the Δ -inference is licensed, McCready needs to specify a mechanism. Otherwise we will not know the conditions under which a declarative expresses belief because we will not know the conditions under which it qualifies as an act like assertion. But there is no need for illocutionary mechanisms on my proposal. That a speaker believes the at-issue content is encoded into the use-conditional content of the evidentials.

The second problem with the explanation in Faller (2002, 2012, 2014) was how

¹⁴McCready (2015, §5) partly addresses this issue by positing a dedicated rule for reintroducing at-issue content when needed. I find this proposal hard to evaluate. McCready herself refers to this rule as "mysterious" and "pragmatically induced." With respect to the present problem, it is difficult to see how it offers a solution. At-issue content reintroduced via this rule will have to somehow not count as being asserted, and merely being reintroduced via a rule cannot deliver this result.

it handled unqualified declaratives. She proposed that unqualified declaratives typically implicated what *-mi* contributes overtly. That proposal ran into problems with disavowal discourses. Such discourses should constitute a cancellation of the implicature. They do not. Accordingly, Faller was without an adequate explanation for how unqualified declaratives license the Λ -inference. Repurposing the illocutionary explanation for how unqualified declaratives in English license the Λ -inference does no better. Without specifying an illocutionary mechanism, we have no way to make sense of why unqualified declarative can be interpreted as if they hosted *-mi* and *-si*. A better explanation is enabled by taking declaratives without overt evidentials to be qualified with a zero expressed evidential \emptyset that is partially underspecified. Disavowal discourses like (9) are infelicitous because \emptyset is typically in a context interpreted as *-mi*.¹⁵

5.3 Summary

In §2, I offered an argument why the Λ -inference as licensed by evidential declaratives is more amenable to a semantic explanation than an illocutionary explanation. That general argument produces a prediction. A semantic explanation will outperform an illocutionary explanation. The last few sections have attempted to vindicate that prediction by dwelling on the evidentials of Cuzco Quechua as a case study. Since such evidentials have received a prominent illocutionary explanation from Faller (2002, 2012, 2014), and that explanation has been the template for other illocutionary approaches to evidentials (Chung, 2010; Tantucci, 2016), developing a semantic explanation of the evidentials in Cuzco Quechua to rival Faller's explanation is an especially useful case study. What I have argued is that a multidimensional semantics can explain the Λ -inference while solving or avoiding the problems that I raised for Faller's illocutionary approach.

It should be reiterated that my alternative explanation is just an alternative to Faller's initial, core proposal. I have not shown that my alternative can be extended in every way hers has been richly extended. But I see no reason why it cannot be. Consider her most recent extension. Faller (2019) extends the theory to explain why the reportative *-si* can associate with belief in the primary content, especially when a speaker uses a declarative with *-si* to resolve a question. Key to her extension is adopting the COLLABORATIVE PRINCIPLE of Walker (1996). A variant can be stated in the following way:

¹⁵In not specifying how the underspecified \emptyset is interpreted in a context, my proposal cannot fully predict Λ -inference similar to how Faller's proposal cannot by not specifying an illocutionary mechanism. But where there is an important difference between our proposals is that my proposal cannot under-predict the Λ -inference by being semantic. Once it is settled in a context which evidential to interpret an unqualified declarative as hosting, my proposal will predict that the Λ -inference is licensed if *-mi* is selected but not if *-si* is selected. In contrast, Faller's proposal will not because there is the further matter of whether that declarative is an illocutionary act. This is the point I stress in §4.2.

COLLABORATIVE PRINCIPLE

Discourse participants must provide evidence of a detected discrepancy in belief as soon as possible. Otherwise they are regarded as believing by conversational participants.

The guiding idea is that participants are interpreted as believing the primary content of a declarative with *-si* unless they indicate disbelief in that proposition. Applied to declaratives hosting *-si*, the principle predicts that the speaker believes the content unless they indicate otherwise like through a subsequent disavowal. Note there is nothing distinctively illocutionary about this explanation. It is pragmatic because it appeals to how participants will respond to behaviors exhibited by a speaker. But it does not involve an appeal to a speaker performing an illocutionary act typed in a certain way. As a result, nothing prevents the multidimensional semantics I presented from offering a similar explanation in conjunction with the COLLABORATIVE PRINCIPLE.

6 Looking ahead

At the end of her initial explanation of evidentials, Faller (2002, 274-275) concludes:

Speech act theory should not only be developed further “downwards,” that is, to interface better with propositional meaning, but also “upwards” or “sideways” to account better for the interactional natural of evidentials and other elements.

Against the backdrop of this paper’s discussion of how to explain the Λ -inference, I offer a very different recommendation. We should set aside speech act theory as a theoretical tool unless we have good cause to deploy it, and we have good cause only in certain situations. In §2.2, I took a pass at detailing what those situations are. More work needs to be done clarifying when an illocutionary explanation as opposed to a semantic explanation is demanded. But with the development of alternative semantic frameworks that were unavailable when speech act theory was first developed in the early and middle of the 20th century (*e.g.* multidimensional theories, dynamic theories), I submit we will continue to see its applicability shrink.

At various points throughout this paper, I noted limitations of my arguments and how further fieldwork could help adjudicate the choice between a semantic or illocutionary explanation of the Λ -inference. A lot turns, for example, on how persistently bad disavowal discourses are when the initial declarative contains direct and inferential evidentials. If it turns out that there are contexts where a mere locutionary act is performed and that disavowal discourses featuring such evidentials do not feel contradiction-like, then a strong reason to prefer an illocutionary explanation would be uncovered. That the choice-point turns on empirical matters highlights that choosing between a semantic or illocutionary

explanation is a substantive choice. It does not merely involve which technical terms or concepts to invoke when explaining the Λ -inference. It turns on how to explain the Λ -inference at all.

This paper began by noting that the Λ -inference in English standardly receives an illocutionary explanation. Having argued in §5 that the inference should receive a semantic explanation in Cuzco Quechua, I have therefore argued for a departure from how the inference is standardly explained. Some might see this as a problem with the explanation offered. Would it not be simpler and more uniform to offer an illocutionary explanation of the inference in both languages? It would be. But such purely theoretical considerations such as simplicity should concern us only when we have equally explanatory theories. I argued that we do not (§4.2). A semantic explanation of the Λ -inference is more probative than an illocutionary one.

Suppose, as argued, that the best explanation the Λ -inference in languages like Cuzco Quechua with grammaticalized evidentials is semantic. We have at least two ways to respond to the outcome that the Λ -inference requires different kinds of explanations in different languages. The first is to accept the outcome as is. Other linguistic phenomena plausibly receive a semantic explanation in one language, and a pragmatic explanation in another. Temporality is a good example. Information about the time at which an event occurs is conveyed semantically in English with the help of grammaticalized tense morphemes. But temporal information is plausibly conveyed pragmatically in a tenseless language like Yukatek Maya (Bohnemeyer, 2002, 2009). The second response is to reconsider how the Λ -inference is explained in English. What is standard need not be what is true nor explanatory.

I want to encourage the second response. Instead of applying the standard explanation for the Λ -inference in English to languages with grammaticalized evidentials, we should consider whether what best explains the inference in these languages also works for English. We should entertain that the Λ -inference can also receive a semantic explanation. As we wind down, two such semantic theories that are also multidimensional are worth mentioning. The first is due to Gutzmann (2015), who offers a semantics for the declarative mood in German that explains the Λ -inference. The basic idea is that the use-conditions of the declarative mood require what an act of assertion does. Since asserting expresses or requires belief, the felicitous use of a declarative does too. The second semantic theory I have developed in van Elswyk (2021a). My proposal is that declaratives in English host a covert parenthetical verb akin to *I know* or *I believe*. In giving parenthetical verbs a multidimensional semantics, declaratives have use-conditions that require the speaker to believe the primary, truth-conditional content. For both of these proposals, the Λ -inference receives a semantic as opposed to illocutionary explanation. The meanings of constituents in a sentence are called upon to explain the inference, as opposed to properties of the illocutionary act that is performed in uttering the sentence. Accordingly, there may be uniformity in how the Λ -inference is explained cross-linguistically. But that uniformity requires us to set aside the more familiar illocutionary explanation for what I have argued is a better

explanation.

An important loose end is embedding. Evidentials in Cuzco Quechua do not embed in clausal complements (Lefebvre and Muysken, 1987). Neither do parenthetical verbs in English (van Elswyk, 2021a). Since the Λ -inference is not licensed by embedded declaratives, evidentials and parenthetical verbs in these languages are both well-positioned to carry the load of explaining why the Λ -inference is licensed by unembedded declaratives. But evidentials embed in clausal complements in other languages such as Turkish (Korotkova, 2021). So the semantics developed here for explaining the Λ -inference in Cuzco Quechua with its evidentials cannot be immediately repurposed to explain the Λ -inference in other languages with evidentials if those evidentials embed. Whether this is a problem turns on whether evidentials constitute a heterogeneous class or not. If they do, embeddability can be understood as what marks the difference in kind. The inability to extend to a different kind of evidential is therefore not a problem. But if evidentials are a homogeneous class, difficulty extending to embedded evidentials could be seen as a problem.¹⁶ Such a problem might encourage a return to an illocutionary explanation of the Λ -inference. I do not wade into the heterogeneity/homogeneity issue here. But I want to flag that, again, the choice between a semantic or illocutionary explanation of the Λ -inference is a substantive one that depends on the data and which theoretical framework is best suited to account for that data.¹⁷

References

- Jonathan Adler. *Belief's Own Ethics*. MIT Press, 2002.
- Alexandra Aikhenvald. *Evidentiality*. Oxford University Press, 2004.
- William P. Alston. *Illocutionary Acts and Sentence Meaning*. Cornell University Press, 2000.
- Scott AnderBois. On the exceptional status of reportative evidentials. *Proceedings of SALT*, 24:234–254, 2004. doi: <https://doi.org/10.3765/salt.v24i0.2424>.
- Nicholas Asher and Alex Lascarides. *Logics of Conversation*. Cambridge University Press, 2003.
- 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.
- Matthew Benton. Two more for knowledge account of assertion. *Analysis*, 71:684–687, 2011.

¹⁶See Faller (2002), Matthewson et al. (2007), McCready and Ogata (2007) on heterogeneity. See Korotkova (2021) for a defense of homogeneity.

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- Matthew Benton. Assertion, knowledge, and predictions. *Analysis*, 72:102–105, 2012.
- Matthew Benton. Expert opinion and second-hand knowledge. *Philosophy and Phenomenological Research*, 92(2):492–508, 2016a.
- Matthew Benton. Gricean quality. *Nous*, 50(4):689–703, 2016b.
- Diti Bhadra. Evidentials are syntax-sensitive: The view from Bangla. *Glossa*, 3(1): <https://www.glossa-journal.org/articles/10.5334/gjgl.449/>, 2018.
- Diti Bhadra. The semantics of evidentials in questions. *Journal of Semantics*, 37:367–423, 2020.
- Martijn Blaauw. Reinforcing the knowledge account of assertion. *Analysis*, 72:105–108, 2012.
- Jurgen Bohmeyer. *The Grammar of Time Reference in Yukatek Maya*. Munch: Lincom, 2002.
- Jurgen Bohmeyer. Temporal anaphora in a tenseless language. In W. Klein and P. Li, editors, *The Expression of Time in Language*, pages 83–128. De Gruyter Mouton, 2009.
- Kasper Boye. Semantic maps and the identification of cross-linguistic generic categories: Evidentiality and its relation to epistemic modality. *Linguistic Discovery*, 8(1):4–22, 2010.
- Robert Brandom. Asserting. *Nous*, 17(4):637–650, 1983.
- Robert Brandom. *Making It Explicit: Reasoning, Representing, and Discursive Commitment*. Harvard University Press, 1994.
- Kyung-Sook Chung. Korean evidentials and assertion. *Lingua*, 120(4):932–952, 2010.
- Donald Davidson. Communication and convention. *Synthese*, 1:3–17, 1984.
- Christopher Davis and Daniel Gutzmann. Use-conditional meaning and the semantics of pragmaticalization. In Eva Csipak and Hedde Zeijlstra, editors, *Sinn und Bedeutung*, pages 197–213. 19, 2015.
- Keith DeRose. Assertion, knowledge, and context. *Philosophical Review*, 111:167–203, 2002.
- Keith DeRose. *The Case for Contextualism: Knowledge, Skepticism, and Context*, volume 1. Oxford University Press, 2009.
- Michael Dummett. *Frege: Philosophy of Language*. Duckworth, 1973.
- Martina Faller. *Semantics and Pragmatics of Evidentials in Cuzco Quechua*. PhD thesis, Stanford University, 2002.
- Martina Faller. The cusco quechua reportative evidential and rhetorical relations. In Andrew Simpson and Peter Austin, editors, *Endangered languages*, pages 223–251. Hamburg: Helmut Buske, 2007.

- Martina Faller. Evidential scalar implicatures. *Linguistics and Philosophy*, 35(4):285–312, 2012.
- Martina Faller. Reportativity, (non-)at-issueness and assertion. *Berkeley Linguistics Society*, 40:62–84, 2014.
- Martina Faller. The discourse commitments of illocutionary reportatives. *Semantics and Pragmatics*, 12(8):1–46, 2019.
- Donka Farkas and Kim B. Bruce. On reacting to assertions and polar questions. *Journal of Semantics*, 27(1):81–118, 2010.
- Gottlob Frege. Über Sinn und Bedeutung. *Zeitschrift für Philosophie und philosophische Kritik*, 100:25–50, 1892.
- Mitchell Green. Assertions. In M. Sbisà and K. Turner, editors, *Pragmatics of Speech Actions, Vol. II of the Handbook of Pragmatics*. Mouton de Gruyter, 2013.
- Paul Grice. *Studies in the Way of Words*. Harvard University Press, 1989.
- Daniel Gutzmann. *Use-conditional meaning*. Oxford University Press, 2015.
- Daniel Harris. Intention recognition as the mechanism of human communication. In *Sensations, Thoughts, Language: Essays in Honor of Brian Loar*, pages 11–37. Routledge, 2019.
- Jesse Harris and Christopher Potts. Perspective-shifting with appositives and expressives. *Linguistics and Philosophy*, 32(6):523–552, 2009.
- Frank Hindriks. The status of the knowledge account of assertion. *Linguistics and Philosophy*, 30(3):393–406, 2007.
- Jacques Jayez and Corinne Rossari. Parentheticals as conventional implicatures. In F. Corbin and H. de Swart, editors, *Handbook of French Semantics*, pages 221–229. Stanford CSLI, 2004.
- David Kaplan. The meaning of *ouch* and *oops*: Explorations in the theory of meaning as use. Howison Lecture at U.C. Berkeley. Transcribed by Elizabeth Coppock, 2004.
- Christopher Kelp. Assertion: A function first account. *Noûs*, 52(2):411–442, 2018. doi: <https://doi.org/10.1111/nous.12153>.
- E. König and P. Siemund. Speech act distinctions in grammar. In T. Shopen, editor, *Language Typology and Syntactic Description*, volume 1. Cambridge University Press, 2007.
- Natasha Korotkova. Evidential meaning and (not-)at-issueness. *Semantics and Pragmatics*, 13(4):1–24, 2020.
- Natasha Korotkova. The embedding puzzle: Constraints on evidentials in complement clauses. *Linguistic Inquiry*, 52(1):210–226, 2021.

- Manfred Krifka. Layers of assertive clauses: propositions, judgments, commitments, acts. In *Propositional Arguments in Cross-linguistic Research: Theoretical and Empirical Issues*. Gunter Narr Verlag, Forthcoming.
- Sven Lauer. Mandatory implicatures in Gricean pragmatics. In J. Degen, M. Franke, and N. Goodman, editors, *Proceedings of Formal and Experimental Pragmatics*, pages 21–28, 2014.
- Claire Lefebvre and Pieter Muysken. *Mixed categories: Nominalizations in Quechua*. Springer, 1987.
- Ernest Lepore and Matthew Stone. *Imagination and Convention: Distinguishing Grammar and Inference in Language*. Oxford University Press, 2015.
- David Lewis. *Convention*. Oxford: Blackwell, 1969.
- William Lycan and Steven Boër. A performatox in truth-conditional semantics. *Linguistics and Philosophy*, 4(1):71–100, 1980.
- John MacFarlane. What is assertion? In Jessica Brown and Herman Cappelen, editors, *Assertion*. Oxford University Press, 2011.
- Matthew Mandelkern. Bounded modality. *Philosophical Review*, 128(1):1–61, 2019.
- Lisa Matthewson, Hotze Rullmann, and Henry Davis. Evidentials as epistemic modals. *The Linguistic Variation Yearbook*, 7:201–254, 2007.
- Elin McCready. Varieties of conventional implicature. *Semantics and Pragmatics*, 3(8):1–57, 2010.
- Elin McCready. *Reliability in Pragmatics*. Oxford University Press, 2015.
- Elin McCready and N. Ogata. Evidentiality, modality, and probability. *Linguistics and Philosophy*, 30(2):147–206, 2007.
- John McDowell. Meaning, communication, and knowledge. In Z. van Straaten, editor, *Philosophical Subjects: Essays Presented to P.F. Strawson*. Oxford: Clarendon Press, 1980.
- 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. *Evidentiality and the Structure of Speech Acts*. PhD thesis, Rutgers University, New Brunswick, 2010.
- Sarah Murray. Varieties of update. *Semantics and Pragmatics*, 7:1–53, 2014.
- Sarah Murray. *The Semantics of Evidentials*. Oxford: Oxford University Press, 2017.
- 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.

- David Owens. Testimony and assertion. *Philosophical Studies*, 130:105–129, 2006. doi: <https://doi.org/10.1007/s11098-005-3237-x>.
- Christopher Potts. The expressive dimension. *Theoretical Linguistics*, 33(2):165–198, 2007.
- Stephen Reynolds. Testimony, knowledge, and epistemic goals. *Philosophical Studies*, 110: 139–161, 2002. doi: <https://doi.org/10.1023/A:1020254327114>.
- Craige Roberts. Speech acts in discourse context. In Dan Fogal, Daniel Harris, and Matt Moss, editors, *New Work On Speech Acts*. Oxford University Press, 2018.
- Johan Rooryck. Evidentiality, Part I. *Glott International*, 5(4):125–133, 2001a.
- Johan Rooryck. Evidentiality, Part II. *Glott International*, 5(5):161–168, 2001b.
- John Ross. On declarative sentences. In Roderick Jacobs and Peter Rosenbaum, editors, *Readings in English transformational grammar*, pages 222–272. Ginn & Co, 1970.
- Jerrold Sadock and Arnold Zwicky. Speech act distinctions in syntax. In Timothy Shopen, editor, *Language Typology and Syntactic Description*, pages 155–196. Cambridge University Press, 1985.
- Jonathan Schaffer. Knowledge in the image of assertion. *Philosophical Issues*, 18(1):1–19, 2008.
- Magdalena Schwager. On what has been said in tagalog. In Tyler Peterson and Uli Sauerland, editors, *Evidence from Evidentials*, pages 221–246. University of British Columbia Working Papers in Linguistics, 2010.
- John Searle. *Speech Acts*. Cambridge: Cambridge University Press, 1969.
- John Searle and David Vanderveken. *Foundations of Illocutionary Logic*. Cambridge: Cambridge University Press, 1985.
- Lionel Shapiro. Commitment accounts of assertion. In Sanford Goldberg, editor, *The Oxford Handbook of Assertion*. Oxford University Press, 2020.
- Mona Simion. Assertion: knowledge is enough. *Synthese*, 193(10):3041–3056, 2016.
- Mandy Simons. Observations on embedding verbs, evidentiality, and presupposition. *Lingua*, 117(6):1034–1056, 2007.
- Todd Snider. At-issuiness ≠ anaphoric availability. *Proceedings of the Annual Meeting of the Linguistic Society of American*, 2(39):1–15, 2017.
- Margaret Speas. Evidentiality and formal semantic theories. In Alexandra Aikhenvald, editor, *The Oxford Handbook of Evidentiality*. Oxford University Press, 2018.
- Margaret Speas and Carol Tenny. Configurational properties of point of view roles. In Anna Maria Di Sciullo, editor, *Asymmetry in grammar*, pages 315–344. John Benjamins, 2003.

- Robert Stalnaker. Assertion. In *Syntax and Semantics 9: Pragmatics*, pages 315–332. Academic Press, 1978.
- Jonathan Sutton. Stick to what you know. *Nous*, 39(3):359–396, 2005.
- Vittorio Tantucci. Towards a typology of constative speech acts: Actions beyond evidentiality, epistemic modality, and factuality. *Intercultural Pragmatics*, 13(2):181–209, 2016.
- Judith Tonhauser. Diagnosing (not-)at-issue content. *Proceedings of Semantics of Under-represented Languages of the Americas*, 6:239–254, 2012.
- John Turri. Prompting challenges. *Analysis*, 70:456–462, 2010. doi: <https://doi.org/10.1093/analys/anq027>.
- 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.
- J.O. Urmson. Parenthetical verbs. *Mind*, 61(244):480–496, 1952.
- Peter van Elswyk. Representing knowledge. *The Philosophical Review*, 130(1):97–143, 2021a. doi: <https://doi.org/10.1215/00318108-8699695>.
- Peter van Elswyk. Reviving the performative hypothesis? *Thought*, 10(4):240–248, 2021b.
- Peter van Elswyk and Matthew Benton. Assertion remains strong. *Philosophical Studies*, Forthcoming.
- Daniel Vanderveken. A model-theoretical semantics for illocutionary forces. *Logique et Analyse*, 26(103/104):359–394, 1983.
- Kai von Fintel and Anthony S. Gillies. Still going strong. *Natural Language Semantics*, 29(1):91–113, 2021.
- Kai von Fintel and Thony Gillies. An opinionated guide to epistemic modality. *Oxford Studies in Epistemology*, 2:32–62, 2007.
- Marilyn Walker. Inferring acceptance and rejection in dialog by default rules of inference. *Language and Speech*, 39(2-3):265–304, 1996.
- Thomas Willett. A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language*, 12(1):51–97, 1988.
- Bernard Williams. *Truth and truthfulness: an essay in genealogy*. Princeton: Princeton University Press, 2002.
- Timothy Williamson. *Knowledge and Its Limits*. Oxford University Press, 2000.