

A Hamblin Semantics for Evidentials

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The evidential contribution of sentences containing evidentials is typically analyzed as belonging to a separate level of illocutionary meaning (e.g. a sincerity condition, [2]) or as a presupposition (e.g., [6, 7]). In this talk, I discuss the evidential system of Cheyenne, an Algonquian language spoken in Montana. Based primarily on data collected in the field, I argue for a compositional analysis of evidentials in Cheyenne where the evidential contribution is truth-conditional, but not part of the proposition expressed. This analysis separates the evidential and propositional contributions of sentences with evidentials without appealing to a separate level of illocutionary meaning while explaining the informativeness of the evidential contribution.

The Data: A hallmark of ‘illocutionary’ evidentials cross-linguistically is that the reportative doesn’t commit the speaker to the truth, falsity, or possibility of the evidential’s scope [2, 3, 1]. Thus, the speaker can use the reportative evidential to report information she believes to be false. This pattern is exemplified in (1a), adapted from a Quechua example discussed in [2]. Such examples are infelicitous with other evidentials (e.g., direct, conjectural) as well as reportative evidentials in some languages (‘propositional’ evidentials, e.g. St’át’imcets, [7]).

- (1) a. *É-háéána-séstse Floyd naa oha é-sáa-háéána-he-∅*
 3-hungry-RPT.3.SG.A Floyd CNJ only 3-NEG-hungry-*h(an)e-DIR*
 ‘Floyd’s hungry, they say, but (in fact) he isn’t hungry,’
 b. # *É-háéána-séstse Floyd naa oha ná-sáa-né-néstó-he-∅*
 3-hungry-RPT.3.SG.A Floyd CNJ only 1-NEG-AN-hear.B-*h(an)e*
 # ‘Floyd’s hungry, I hear, but I didn’t hear that’

However, the speaker is committed to having reportative evidence for the evidential’s scope. That is, the speaker cannot deny the fact that there was a reporting event where she received the information in the evidential’s scope, as shown by example (1b), adapted from [2].

Proposal: As argued by [2, a.o.], and as illustrated by the data presented above, the propositional and evidential contributions of sentences with evidentials need to be distinguished. I propose to account for this distinction by treating declarative sentences as sets of propositions (a la [5]).

For example, consider the Ty_2 ([4]) translations of the sentences in (1) given in (2): (2i) is the translation the first conjunct of both (1a) and (1b), (2ii) is the second conjunct of (1a), and (2iii) is the second conjunct of (1b). I systematically use the assignment function to represent the context and reserve the variable i to pick out the actual world and the variable x to pick out the speaker.

- (2) i. $\lambda p. (p = \lambda j. hungry(j, floyd)) \wedge hear(i, x, p)$
 ii. $\lambda p. (p = \lambda j. \neg hungry(j, floyd)) \wedge i \in p \wedge believe(i, x, p)$
 iii. $\lambda p. (p = \lambda j. \neg hear(j, x, \lambda j. hungry(j, floyd))) \wedge i \in p \wedge believe(i, x, p)$

Each translation in (2) represents (the characteristic function of) a set of propositions. If each condition is met, this set will be the singleton of the scopal proposition (e.g. $\{[\lambda j. hungry(j, floyd)]^{\mathcal{M},g}\}$ for (2i)). If a condition is not met, this set will be empty. Thus, if the speaker does not have the specified type of evidence for the scopal proposition, the sentence will denote the empty set.

Given the shift to sets of propositions, the definition of truth must be modified accordingly, as follows. A sentence has a truth value if it denotes a singleton set of propositions. The proposition expressed is *the* proposition in the sentence’s denotation-set. A sentence is true if and only if the proposition it expresses is true. These ideas are formalized below in Definitions 1 and 2.

D1 (Has a Truth Value). An $(st)t$ term Φ has a truth value in \mathcal{M} under g iff $\exists p([\Phi]^{\mathcal{M},g} = \{p\})$.

D2 (Truth). An $(st)t$ term Φ is true in \mathcal{M} under g , written $\models_{\mathcal{M},g} \Phi$, iff $\exists p([\Phi]^{\mathcal{M},g} = \{p\} \wedge g(i) \in p)$.

In this analysis, the evidential contribution is not part of the proposition expressed – the ‘main point’ [8, 9] of a sentence. The proposition expressed is the proposition in the scope of the evidential. However, the evidential contribution is truth conditional. If the evidential condition is met, the scopal proposition makes it into the denotation set, giving the sentence a chance to be true (or false). If the evidential condition is not met, the resulting expression lacks a truth-value.

This analysis accounts for the data given in (1) as follows. The two conjuncts of (1a), translated in (2i) and (2ii), are compatible – there are models and assignments where they both can have truth values. Intuitively, this is because the scope of the evidential is not asserted (as observed by [2]). In the proposed analysis, the scope of the evidential is only asserted if it is entailed by the evidential contribution. The contribution of the reportative evidential ($\text{RPT} \rightsquigarrow \lambda q. \lambda p. (p = q) \wedge \text{hear}(i, x, p)$) does not entail the proposition in its scope and thus that proposition is not asserted.

In contrast, the two conjuncts of (1b), translated as (2i) and (2iii), are incompatible. The evidential contribution of the first conjunct must be true for the first conjunct to have a truth value: the evidential contribution *itself* is asserted. However, it conflicts with the proposition in the scope of the direct evidential in the second conjunct, which is also asserted. Thus, whenever the first conjunct has a truth value, the second conjunct cannot be true. [It has been argued that the evidential contribution is not asserted based on, e.g., the assent/dissent test [3, 8]. However, in this analysis the evidential contribution is not part of the proposition expressed.]

Alternative Proposals: Previous work on evidentials has appealed to evidential presuppositions or separate levels of illocutionary meaning to capture the distinction between the evidential and propositional contribution of sentences with evidentials. On a presuppositional account (e.g., [6, 7]), the data in (1b) would be infelicitous because the presupposition of the first conjunct conflicts with the assertion of the second. This type of analysis has only been proposed for languages with propositional evidentials (see [3, 7]) and it’s unclear how it could account for the data in (1a). More generally, this type of approach cannot account for the fact that evidentials, which occur on every sentence in some languages, typically contribute new information.

The speech act modifier approach (e.g., [2]) accounts for the data in (1a) because the reportative evidential shifts the illocutionary force of the speech act from assertion to presentation. Thus, the scope of the reportative evidential in the first conjunct is not asserted. However, in order to accomplish this, one must appeal to an entirely new type of speech act. The infelicity of (1b) is accounted for by appealing to a separate level of illocutionary meaning – the asserted content of the second conjunct conflicts with the sincerity conditions of the first. The result is that the sentence is insincere, not contradictory, as the judgements seem to indicate.

The proposal argued for in this talk is a compositional alternative where the evidential contribution is not presupposed, but new. In addition, it separates the evidential and propositional contributions without appealing to a separate level of illocutionary meaning.

Selected References

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