

UC Santa Cruz

Proceedings of Form and Analysis in Mayan Linguistics 5 (FAMLi 5)

Title

Reportatives and quotatives in Mayan languages

Permalink

<https://escholarship.org/uc/item/2rf3727m>

Journal

Proceedings of Form and Analysis in Mayan Linguistics, 5

Author

AnderBois, Scott

Publication Date

2019-04-01

REPORTATIVES AND QUOTATIVES IN MAYAN LANGUAGES*

SCOTT ANDERBOIS
Brown University

In additional lexical verbs of saying, most Mayan languages have two additional resources for reporting the speech of others: reportative evidentials and quotatives. This paper presents a theoretically informed description of the differences between REP and QUOT, drawing primarily on data from Yucatec Maya *bin* REP and *k(ij)* QUOT. While REP and QUOT both not-at-issue content about another speech act, the latter does so via direct quotation whereas the former does so via an indirect speech report. We explore a variety of different specific syntactic, semantic, and pragmatic properties that reflect this basic distinction as well as highlighting a few points of variation across Mayan languages.

Keywords: Discourse Particles, Illocutionary force, Quotative, Reportative, Speech reports

1 Introduction

Like all languages, Mayan languages have lexical verbs similar to English ‘say’ and ‘tell’ which are used in different ways to give reports of speech acts made by other agents besides the discourse participants themselves. Most Mayan languages, however, also have two kinds of elements for this that English lacks: reportative evidentials and quotative verbs (henceforth REP and QUOT respectively), illustrated in (1), from Ch’orti’.¹

(1) a. **Reportative**

Ayan *ayi* e morwa’r kone’r.
exist REP DEF meeting today

‘They say that there is a meeting today.’

Ch’orti’ (Hull 2003:256)

b. **Quotative**

“Syan ayan e patna’r” *che*.
much exist DEF work QUOT

‘“There is lots of work” he said.’

Ch’orti’ (Hull 2003:267)

One aspect of REP and QUOT that makes it difficult to isolate their contributions is the fact that they very frequently co-occur with one another and/or with lexical verbs of saying, as in (2) from Yucatec Maya (YM).²

*First and foremost, my heartfelt thanks to the native speaker language consultants who shared their language with me and whose hard work and careful thinking helped produce many important insights: Rosa Isela Canche Cen, Margarita Hau Hau, Norma Patricia Kuyoc Kuyoc, and Luis Petul. Thanks also to Pranav Anand, Miguel Oscar Chan Dzul, Donka Farkas, José Alfredo López Jiménez, Irma Yolanda Pomol Cahum, Wilson Silva, and the audiences at FAMILI 5 and Topics at the Semantics-Pragmatics Interface at UC Santa Cruz for helpful comments and ideas about this material.

¹The following abbreviations are used for example glosses: ASSUR: assurative, CLF: numeral classifier, DAT: dative, DEF: definite article, EXIST, IPFV: imperfective aspect, IMPER: imperative, INTERR: interrogative, MIR: mirative, NECESS: necessitative, NEG: negation, NEG.CL: negative/extrafocal clitic, OBLIG: obligative, PFV: perfective aspect, PASS: passive, PL: plural, PREP: preposition, PROG: progressive aspect, PROX: proximal deixis, REL: relational noun suffix, SUBJ: subjunctive mood, TERM: terminative aspect, TOP: topic marker. For agreement morphology, I follow the terminological tradition among Mayanists, referring to Set A (\approx Ergative/Nominative) and Set B (\approx Absolutive/Accusative) markers, e.g. A3 = 3rd person Ergative/Nominative. B3 is phonologically null and therefore left un glossed. All examples are elicited unless otherwise noted. The orthography used for Yucatec Maya examples is that codified in Briceño Chel and Can Tec (2014), with the exception that we make use of the question mark. For examples from other languages, the orthography in the original source is retained.

²All examples are from Yucatec Maya unless stated otherwise. Sources are given for naturalistic examples, all other examples are elicited.

(2) a. **Reportative + Quotative**

Mare, ma' táan —*ki bin* — ...
oh NEG PROG QUOT REP

‘Oh no! —he responded — ...’

(Can Canul and Gutiérrez-Bravo 2016:23)

b. **Reportative + Verb of saying**

Pues, yaan in k'ax-ik t-a pu'uch —k-u y-a'al-a'al *bin*
well OBLIG A1 grab-SS PREP-A2 back IPFV-A3 EP-say-PASS REP

‘Well I have to grab it in the back — he told him.’

(Can Canul and Gutiérrez-Bravo 2016:23)

c. **Quotative + Verb of saying**

Ka t-u y-a'al-aj=e': —P'at t-in k'ab —*ki*
and PFV-A3 EP-say-SS=TOP leave.IMPER PREP-A1 hand QUOT

‘then he said: —Leave it in my hands’

(Can Canul and Gutiérrez-Bravo 2016:31)

d. **Reportative + Quotative + Verb of saying**

K-u y-a'al-ik bin=e': ma' táan —*ki bin*
IPFV-A3 EP-say-SS REP=TOP NEG PROG QUOT REP

‘he responded: no —he said.’

(Can Canul and Gutiérrez-Bravo 2016:22)

While some previous authors do discuss some differences between the two (most notably Lucy 1993, López Jiménez 2010, Curiel 2016), much of the previous literature, in part driven by data of the sort in (2), have focused primarily on understanding what REP and QUOT have in common, for example characterizing both first and foremost as devices for distancing the speaker from the content being reported. While this is a common perlocutionary effect produced by uses of both REP and QUOT, we show here that REP and QUOT have a number of significant differences between them in their semantics, pragmatics, and distributional properties.

Before doing so, a brief terminological note is needed. Related to the aforementioned confusion about REP and QUOT and their co-occurrence, there has been a lot of terminological inconsistency in prior literature. While some authors use the terms ‘reportative’ and ‘quotative’ (‘reportativo’ and ‘citativo’ in Spanish) as we do here, one can find many works that use these terms (and others such as ‘hearsay’) in a variety of different ways that conflict with our usage here. One can also find many authors who use lexical glosses such as ‘they say’ or ‘it is said’ for one or both of these.

While the remainder of the paper clarifies the properties we take to associated with the two labels, we provide in Table 1 a tentative and non-exhaustive list of the morphemes we take to be instances of these two categories across Mayan languages based on prior literature.³ Given the paucity of key data, not all properties are confirmed for each such element, but at least partial evidence for the classifications is found in all cases, and there is no known counterevidence of which I am aware. That said, in most cases, further investigation is needed to confirm how well these elements fit the characterizations given here in certain details.

³For Eastern Mayan, there are various authors working on different languages who mention reportative and/or quotative forms (e.g. Ayres 1991 on Ixil *tchih*, England 1983 on Cajolá Mam *-ch*, Barrett 1999 on Sipakapense *cha'*). However, there is typically not enough published data available to distinguish whether how grammaticized these elements are (since they are often related to lexical verbs of saying) and whether they pattern with reportatives, quotatives, or neither (see §6 for further discussion). One exception is Kockelman 2006, who describes a reportative form *len* REP which does not trigger shifted pronouns and another form *chan* QUOT, which does.

Language/Branch	REPORTATIVE	QUOTATIVE
Wastek	<i>kwa'</i>	??
Yucatecan	<i>bin</i>	<i>ki(j)</i>
Yokot'an	<i>a'i'</i>	??
Ch'ol	<i>bi</i>	<i>che'</i>
Ch'orti'	<i>ayi</i>	<i>che</i>
Tzeltalan	<i>la</i>	<i>xi</i>
Tojolab'al	<i>b'i</i>	<i>chi'</i>
Chuj	<i>ab'</i>	<i>chi</i>
Q'anjob'al	<i>(h)ab'</i>	<i>xi</i>
Akatek	<i>ab'</i>	<i>xhi</i>
Popti'	<i>ab'lob'</i>	<i>xi</i>
Mocho'	<i>ab'labi'/bi'</i>	<i>ki</i>

Table 1: Tentative list of reportatives and quotatives in Mayan Languages

2 Faithfulness to the original speech act

The first and arguably most central set of properties on which REP and QUOT differ is in the extent to which the rest of the sentence in which they occur needs to be faithful to the utterance of the original speaker. Put briefly, QUOT, as the name suggests, involve direct quotation, whereas REP do not. One clear indication of the quotational nature of the material with QUOT is the fact that deictic expressions such as first- and second-person pronouns are interpreted relative to the original speaker being quoted, rather than to the actual speaker uttering the sentence containing the quotative morpheme itself. For example, in (3), we see the first person pronoun *teen* ‘me’ (as well as the first person Set A agreement) used not to refer to the actual speaker uttering (3), but instead to the original speaker being quoted.⁴ Similarly, the second person agreement marker *a* A2 in (4) refers to the addressee of the original speech act with no regard for whether or how that relates to the conversation in which (3-4) are uttered.

- (3) Teen=e' chéen t-in máan —*ki bin*— kux túun teech?
 1SG=TOP only PROG-A1 pass QUOT REP CTQ then 2SG
 ‘I’m just passing by —he said— and you?’ (Can Canul and Gutiérrez-Bravo 2016:22)
- (4) Jats'uts a wóok'ot —*kij* teen Luis.
 bueno A2 bailar QUOT DAT.1SG Luis
 ‘You dance well —Luis told me.’

The deictic anchoring we have seen here is not only found for first and second person pronouns, but for all different kinds of deictic expressions such as the presentational deictic *je'* in (5), speaker-oriented adverbials and interjections such as *mare* ‘wow’ in (7), and discourse particles such as *bakáan* MIR in (6). In short, deictic and other speaker-oriented expressions the scope of QUOT are uniformly used as the original speaker would, rather than being anchored in the actual conversation in which the sentences here are uttered.

- (5) **Context:** My friend told me that the bus was coming and I tell you what he said:

⁴The example in (3) in fact has both a QUOT and, outside its scope, a REP. This sort of concord use is quite frequent in many Mayan languages including Yucatec Maya. As best I can tell, such sentences are systematically identical to their counterparts without the REP present. For textual examples, we of course leave the original form unaltered, but in the cases where I have tried substituting a minimally different sentence with only the QUOT, the sentence remains felicitous, and seemingly has the same meaning/use.

Je' k-u taal le autobus=o' *-kij* teen
 PRES IPFV-A3 come DEF bus=DIST QUOT DAT.1SG

'“Here comes the bus” –he said to me.'

- (6) **Context:** María is studying and sees storm clouds on the horizon and realizes she needs to put stop studying in order to get home before the rains come. She tells me this and I report it to a third party:

K'abéet bakáan in ts'o'oksik in xook *-kij* teen
 NECES MIR A1 finish A1 study QUOT DAT.1SG

'“I need to finish studying” – she told me.'

- (7) Mare, ma' táan —*ki* *bin* — ...

oh NEG PROG QUOT REP

'“Oh no!” —he responded — “...”'

(Can Canul and Gutiérrez-Bravo 2016:23)

In contrast, such expressions with REP are consistently interpreted relative to the actual speaker uttering the sentence. Consider a minimal pair with (6) in (8). The first person pronouns from (6) result in infelicity given the context since as in a matrix utterance with no reported speech devices, it sounds like it is referring to the work of actual speaker of (8) rather than to María's. In contrast, the use of third person pronouns with REP is felicitous and results in approximately the same interpretation as in (6). In short, deictic expressions and other speaker-oriented expressions with REP are uniformly used as the actual speaker otherwise would in sentences with no REP present.

- (8) **Context:** María is studying and sees storm clouds on the horizon and realizes she needs to put stop studying in order to get home before the rains come. She tells me this and I report it to a third party:

K'abéet *bin* u ts'o'oksik u xook.
 NECES REP A3 finish A3 study

'She needs to finish her studies, she says.'

Beyond deictic expressions, QUOT differ from REP in other aspects of how faithful they must be to the original speech act. For example, we can consider an original speech event in which a speaker utters (9). In referencing this original speech event subsequently with REP, coreferential expressions can be substituted for one another (similar to other attitude reports), as illustrated in (10a). Specifically, we see the expression used to refer to the child in the original speech act is *in iijo* 'my son', while in the reported speech event, it is an entirely different lexical expression *le champaalo* 'the little boy', but one which has the same reference in context. In contrast, with QUOT coreferential expressions cannot be felicitously substituted, as seen in (10b), either by merely changing the pronouns or with more substantial lexical changes, as here. As a direct quote, it is the words themselves must be more or less identical, rather than the reference/meaning.

- (9) **Context:** A mother tells you that her son is afraid of being bit by a dog:

In iijo=e' sajak káa chi'ibik tumeen le péek'=o'
 A1 son=TOP afraid for bite.PASS.SUBJ by DEF dog=DIST

'My son is afraid that the dog will bite him.'

- (10) **Context:** After talking to the mother, you tell your friend about the conversation you had with the mother:

a. Le champaal=o' sajak *bin* káa chi'ibik tumeen le péek'=o'
 DEF boy=DIST afraid REP for bite.PASS.SUBJ by DEF dog=DIST

'The boy is afraid that the dog will bite him (she says).'

- b. # Le champaal=o' sajak káa chi'ibik tumeen le péek'=o' -*kij*
 DEF boy=DIST afraid for bite.PASS.SUBJ by DEF dog=DIST QUOT
 Intended: 'The boy is afraid that the dog will bite him (she says).'

While it is clear that QUOT require a very high degree of faithfulness to the original speaker's words, the exact limits of how 'unfaithful' the scope of REP must be is at this point unclear. Minimally, the scope material should have the same truth-conditional content as the original speech act has. In the case of attitude reports with verba dicendi like English *say*, Brasoveanu and Farkas 2007 have argued that more stringent requirements are found, such as the requirement for faithfulness to the specific meaning components in the original speech act (e.g. presupposition vs. at-issue assertion). At a glance, the requirements for REP are quite similar, though we leave it to future work to investigate both sets of requirements further. To summarize, the properties discussed in this section can be summarized as follows:

(11) **Quotational properties of QUOT and REP:**

	Property	REP	QUOT
A1	Deictic expressions interpreted relative to original speaker	✗	✓
A2	Substitution of coreferring expression possible	✓	✗

3 Illocutionary moods

Cross-linguistically, one of the kinds of data that has been crucial to understanding the semantics/pragmatics of evidentials is the interactions that they show with different sentence types, i.e. different illocutionary moods like declarative, interrogative, and imperative (e.g. Faller 2002, Matthewson et al. 2007, Murray 2010, 2014, 2017). Reportatives show these sorts of complex interactions even more so than other evidentials. For example, reportatives are the only evidentials which are possible in imperative sentences with any regularity (Aikhenvald 2004). These interactions have been of particular interest as well since – despite some definite patterns – they represent a quite clear point of cross-linguistic variation.

This is perhaps clearest in the case of imperatives, where reportatives in imperatives are simply ungrammatical in most languages, as illustrated in (12) for Cuzco Quechua. In contrast, in other languages such as Tagalog, this combination is robustly possible, as illustrated in (13). We return to examine imperatives with reportatives and quotatives in Mayan languages in a moment.

- (12) *T'anta-yki-ta-*si* mikhu-y
 bread-2-ACC-REP eat-IMP
 Intended: 'Eat your bread (they say)!' **Cuzco Quechua** (Faller 2002:266)
- (13) Kumuha ka *daw* ng tinapay.
 take.AGT.TRIG you.DIR REP INDIR bread
 'Take some bread (she says/they say)!' **Tagalog** (AnderBois 2017)

For interrogatives, there are also some languages in which REP are ungrammatical on any interpretation (Aikhenvald 2004:242). In languages where they are grammatical, there are two distinct readings which are firmly attested cross-linguistically.⁵ First, we find in many languages what has come to be known as the 'interrogative flip' reading in which the reportative meaning is applied to the expected answer of the addressee.

⁵Bhadra 2017 claims that Bangla *naki* has reportative uses in polar interrogatives which exhibit a third reading. They are described as being more like tag-questions, with the reportative applied to the actual speaker's evidence for the scope content (i.e. "I heard that *p*, is that true?"). We set this case aside here as it seems clear that the reportative applies to the declarative-like component of the tag question rather than the interrogative component. In any case, such uses are not attested in Mayan languages.

Second, we find cases of what we can call ‘interrogative by proxy’ in which the reportative meaning is applied to the question itself, in effect passing along the question from the original speaker, indicating that the desire for the question to be asked originates with the original speaker (though presumably is also shared to some extent by the current speaker since they nonetheless perform an illocutionary question). In some languages, such as Cuzco Quechua (Faller 2002:§6.3.2) and Tagalog, (14), both interpretations are found, while in other languages such as Cheyenne (Murray 2010) and St’át’imcets (Matthewson et al. 2007), only the flip reading is attested.

- (14) Sino *daw* yung kumanta?
 who REP DEM.LNK singer
 ‘Who was the singer?’

Tagalog

- a. ✓ **By-proxy context:** You went to a concert. My roommate wants to know about the concert and asked me to ask you about it.
 b. ✓ **Flip context:** Your roommate went to a concert, but I know you didn’t. I ask you about the concert with the expectation that you will respond according to what you’ve been told by your roommate.

Returning to Mayan languages, we find that the behavior of REP differs at least somewhat across languages. In some languages, such as Q’anjob’al, we find that the REP are ungrammatical in non-declaratives on any interpretation, as illustrated in (15). Note that whereas in some languages, the impossibility of reportatives with certain sentence types can be attributed to independent syntactic restrictions (e.g. if the evidential occupies the same morphological slot as illocutionary mood), there is no such independently motivated explanation here so far as I know.

- (15) a. Tzet (**hab*) lanan y-a’-on taj ix txutx?
 what REP PROG A3-give-DEP cook CLF mother
 ‘What is mother cooking for him (**they* ask)?’

Q’anjob’al

- b. Jas (**hab*) b’ay na.
 hurry REP PREP house
 ‘Hurry home (Mom orders).’

Q’anjob’al

Since this is a negative judgment, it is not clear how many Mayan languages share such a restriction, as opposed to simply lacking attested data of such forms. However, in several cases, we do have affirmative evidence that such combinations are possible (e.g. Haviland 2004 for Tsotsil, Curiel 2016 for Tojolab’al). Yucatec Maya patterns with this latter type, freely allowing REP to occur in both interrogatives and imperatives, (16-17).

(16) **Interrogative w/ REP**

Uts-chaj wáaj *bin* le cha’an=o’
 good-PROC INTERR REP DEF spectacle=DIST

‘Was the concert good?’

- a. ✓ **By-proxy context:** You went to a concert. My roommate wants to know about the concert and asked me to ask you about it.
 b. # **Flip context:** Your roommate went to a concert, but I know you didn’t. I ask you about the concert with the expectation that you will respond according to what you’ve been told by your roommate.

- (17) **Order Scenario:** Our mother has told me to make sure that my younger sibling eats their dinner. After talking to her, I tell my sibling:

Uk' bin a wo'och k'eyem=o'
 drink.IMPER REP your meal pozole-DISTAL

'Drink your pozole (she orders)!'

As the contrast in acceptability between YM (16b) and Tagalog (14) illustrates, reportatives in interrogatives in YM allow only for by-proxy interpretations, being infelicitous in flip scenarios where the by-proxy reading is ruled out. While the issue remains mostly unexplored in other Mayan languages, we can find clear examples of by-proxy interpretations in the literature, e.g. (18) from Tsotsil, but no clear attestations of flip readings.

- (18) Mi ch-a-bat *la*?
 INTERR ICP-A2-go REP

"Will you go (someone asks)?"

Tsotsil (Haviland 2004)

For imperatives, we find a similar situation: imperatives with REP in YM only have a by-proxy interpretation in which they indicate that the authority for the imperative is rooted in a third party (the mother in (17)). It is crucial to note, however, that in both sentence types, the sentences are used in discourse in the same ways as ordinary interrogatives and imperatives with no evidential. For example, AnderBois 2017 describes in detail the range of illocutionary acts imperatives with reportatives contribute in discourse, showing that various imperative speech acts are possible (e.g. orders, advice, well-wishes, permissions), while more declarative-like illocutionary acts are not. Similarly, the range of responses in both cases is the same as those found for minimal pairs with no REP present.

We can contrast the above situation with what happens with QUOT. First, whereas REP show some amount of variability across languages in the sentence types with which they may co-occur, no such variability is found for QUOT. Instead, QUOT are consistently possible with all sentence types, (19), even in cases like (19a) from Q'anjob'al, where the language disallows REP with the sentence type in question (here, imperatives). In short, QUOT exhibit no sensitivity to the internal nature of the sentence in which they are occur, whereas REP have the potential to select for particular sentence types.

- (19) a. Jas b'ay na -xhi ix txutx.
 hurry PREP house QUOT CLF mother
 'Mom said "Hurry home".'

Q'anjob'al

- b. **Context:** I went to the doctor and am recounting for my friend how it went.
 K'oja'an-ech áa -*kij* teen.
 sick-B2SG INTERR QUOT DAT.1SG
 '“Are you sick?” he asked me.'

Beyond the difference in sensitivity to sentence type, in cases where both QUOT and REP are possible, we also find key differences in how this illocutionary force impacts a discourse. In the case of REP, utterances of a sentence of illocutionary sentence type *I* are used to perform the same range of speech acts as corresponding sentences of type *I* with no QUOT, REP, or other such marker present. For example, if a speaker utters (16), the addressee is typically expected to respond by answering the question. Similarly, for imperatives, AnderBois 2017 shows in detail for YM that they have the same range of responses in discourse, as exemplified in (20a-20b).⁶

⁶As AnderBois 2017 details, the reported speaker may indirectly play a pragmatic role in strengthening or weakening the directive force of an imperative (e.g. determining whether a given utterance is felt to be a command or, say, a request). However,

- (20) A: Uk' bin a wo'och k'eyem=o'
 drink.IMPER REP your meal pozole-DISTAL
 'Drink your pozole (she orders)!' (AnderBois 2017)
- a. B: Ma'alob túun. // #Jaaj // #Uk'.
 okay then true drink.IMPER
 'Okay then.' // #'True.' // #'Yes.'
- b. B: Ma', (min jantik). // Mix táan. // #Ma' jaaj=i'.
 No NEG.1SG eat NEG PROG NEG true=NEG.CL
 'No, (I won't).' // 'I won't.' // #'It's not true.'

In contrast, QUOT do not typically produce any overt response from the actual addressee regardless of their sentence type. Instead, they usually lead to responses appropriate to the sentence type in question within the context of the narrative itself by another character in that narrative. While the addressee could happen to be an interlocutor in the original conversation being quoted, even here the actual speaker of the narrative is still the one who would utter whatever sort of response was appropriate.⁷ This property is clearest looking at interrogatives with QUOT, as in (21), where one and the same speaker utters the question, (21a) and its answer, (21b), consecutively rather than the actual addressee (i.e. the audience for the narrative) providing such responses.

- (21) a. -Hijo,- *k-en* ti', -buka'aj le tikin muuk a meentmaj-e'ex=o'?
 son QUOT-B1SG DAT.3SG how.many DEF dry seed A2 do-A2PL=DIST
 '“Son,” I say to him, “how many dry plantings did you do?”'
- b. To'on=e'-, *ki*, -casi veinte yaale'.
 we=TOP QUOT.BS3G almost twenty ??
 '“Us”, he says, “almost 20 units of land”.'
- Monforte et al. (2010:275)

In this section, we have seen that REP and QUOT differ dramatically in their behavior in discourse with non-declarative sentences. On the one hand, QUOT behave uniformly in discourse in two respects: (i) showing no restrictions by sentence type, and (ii) having an illocutionary force distinct from that of the sentence with which they occur. On the other hand, REP differ from QUOT in both respects: (i) showing restrictions to certain sentence types in some languages, and (ii) “passing on” the illocutionary force of the sentence type in which they occur. Beyond highlighting the differences between QUOT and REP, these data also argue against the idea (e.g. Korotkova (2015)) that certain uses of REP should be analyzed as being quotative in nature. We summarize these two properties of QUOT and REP as follows:

(22) **Illocutionary properties of QUOT and REP:**

	Property	REP	QUOT
B1	Selectivity for sentence type	%	✗
B2	Illocutionary potential of scope unaltered	✓	✗

4 Encoding the original reporter

Thus far, we have seen that REP and QUOT differ in ways that stem directly from the idea that the latter encode direct quotation, while the former do not. The remaining properties of the two types of morphemes

this sort of pragmatic reasoning is found in imperative sentences generally and crucially is the same sort of reasoning required for interpreting imperatives of all kinds.

⁷The actual addressee being a conversational participant in the quoted conversation may of course be pragmatically odd in some cases since after all the speaker is telling the addressee a narrative about a conversation that they themselves were present for. While this is apt to be odd in some cases, it is possible, for example, in cases where the addressee is apt to have forgotten.

in Mayan languages, however, do not seem to be related to the quotational nature of QUOT, at least not directly. In this section, we examine the syntax and semantics of the encoding of the original speaker whose words/content are passed along, while in §5 we turn to examine syntactic/prosodic factors distinguishing the two.

Looking at what seems to be the most common sort of example in most languages, it is not immediately obvious that there is in fact a difference between the two. For example, in the context given in (23), both REP and QUOT plainly convey in context that the original speaker is Alfredo since he is the one on the phone .

- (23) **Context:** I am talking with you when my friend Alfredo calls on the phone. I tell you after the call:
- a. Le péek'=o' t-u jantaj paastel *-kij*
 DEF dog=DIST PFV-A3 eat cake QUOT
 'The dog ate birthday cake –he (Alfredo) says'
- b. Le péek'=o' t-u jantaj *bin* paastel
 DEF dog=DIST PFV-A3 eat REP cake
 'The dog ate birthday cake, he (Alfredo says)'

Considering a broader range of examples, however, we find that QUOT in fact show set B agreement (which happens to be null for third person singular here), whereas REP do not in fact show any overt encoding of the original speaker and correspondingly allow for non-specific or generic original speakers as well. For YM, Lucy 1993 makes this observation already, pointing to the existence of an entire paradigm of quotative forms inflected with set B markers for different persons and number, (24). An example sentence with overt *-o'ob* B3PL agreement is found in (25) and similar examples are found above in (21a) Additionally, the original speaker being quoted can be realized with an overt argument, (26a), and the original addressee can be realized via a dative/prepositional phrase, (26b)

(24) **Yucatec Maya Quotative Paradigm:**

k-en	k-ech	ki(j)	k-o'on	k-e'ex	ki(j)-o'ob
QUOT-B1SG	QUOT-B2SG	QUOT-B3SG	QUOT-B1PL	QUOT-B2PL	QUOT-B3PL
'I said'	'you said'	's/he said'	'we said'	'you all said'	'they said'

- (25) Bey=a' leti' le bey k'a'abéet=a', —*kij*-o'ob.
 así=PROX 3SG DEF así necesita=PROX QUOT-B3PL

' "This, this was what he needed" – they said.'

Monforte et al. (2010:275)

- (26) a. Jats'uts a wóok'ot —*kij* teen Luis.
 bueno A2 bailar QUOT DAT.1SG Luis
 ' "You dance well" —Luis told me.'

- b. **Context:** A character in a story ask the question 'Are there ghosts in Espita?'. Another character responds:

Yaan wáay t-u kaj-il espita —*ki* teen
 EXIST ghost PREP-A3 town-REL espita QUOT.B3SG DAT.1SG

' "There's ghosts in Espita" –he tells me.'

In contrast, REP do not allow for either the original speaker or the addressee to be explicitly realized. Note that this is so despite the fact that REP in context often may be interpreted as reporting the speech of an original speaker who is salient in discourse and therefore produces a seemingly anaphoric interpretation, as above in (23b). Even in such pragmatic situations, however, the original speaker may not be realized via an overt argument (27b) or clausal topic (27c), nor as set A (27d) or set B agreement (27e). In short, though

their identity may be quite explicit in context, the original speaker may not be formally realized in any way with REP, in clear contrast with what we have seen with QUOT.

- (27) **Scenario:** I was talking to my friend Luis earlier about the Xtáabay (a mythical woman who seduces and attacks drunk men in the jungle) and now tell you:
- a. Chowak bin u tso'ots-el u pool le ixtáabay=o'.
 long REP A3 hair-REL A3 head DEF Xtáabay=DISTAL
 'I was told (by Luis) that the Xtáabay's hair is long.'
 - b. * Chowak bin {leti'/Luis} u tso'ots-el u pool le ixtáabay=o'.
 long REP him/Luis A3 hair-REL A3 head DEF Xtáabay=DISTAL
 Intended *'I was told by {him/Luis} that the Xtáabay's hair is long.'
 - c. * Luis=e' chowak bin u tso'ots-el u pool le ixtáabay=o'.
 Luis=TOP long REP A3 hair-REL A3 head DEF Xtáabay=DISTAL
 Intended *'As for Luis, I was told by him that the Xtáabay's hair is long.'
 - d. * Chowak u bin u tso'ots-el u pool le ixtáabay=o'.
 long A3 REP A3 hair-REL A3 head DEF Xtáabay=DISTAL
 Intended *'I was told by him/her that the Xtáabay's hair is long.'
 - e. * Chowak (u) bin-o'ob u tso'ots-el u pool le ixtáabay=o'.
 long A3 REP-B3PL A3 hair-REL A3 head DEF Xtáabay=DISTAL
 Intended *'I was told by them that the Xtáabay's hair is long.'

In addition to the syntactic difference between REP and QUOT, there is an additional (related) semantic distinction. As is the case generally in YM, when no overt argument is present, the set B marker can only be interpreted anaphorically. Since QUOT do not allow for the possibility of an indefinite or generic original speaker, QUOT are therefore unacceptable in out of the blue contexts where a specific original speaker is not made salient for anaphoric reference, (28a).⁸ In contrast, REP are felicitous in such situations, and give rise to an indefinite or generic-like interpretation for the original speaker (i.e. the original speaker is an unspecified 'someone' or the proverbial 'they'), as seen in (28b). While we have seen that REP allow for a broader range of original speaker in one respect, their range of possible original speakers is narrower in another respect since they require the speaker to be third person, whereas we have already seen examples like (21a) in which other persons are possible for QUOT when explicitly marked.

- (28) **Context:** We are talking about the town I am from, when you tell me a rumor about it:
- a. # Yaan wáay t-u kaj-il Espita *-kij*
 EXIST ghost PREP-A3 town-REL Espita QUOT
 Intended: 'They say there's ghosts in Espita.'
 - b. Yaan *bin* wáay t-u kaj-il Espita
 EXIST REP ghost PREP-A3 town-REL Espita
 'They say there's ghosts in Espita.'

Further support for this position comes from concord data in which overt verba dicendi co-occur with REP and QUOT.

In these cases, there is no apparent shift in interpretation, most notably in that they do not require a third-hand interpretation (e.g. "They said that he said that ..."). For both REP and QUOT, such concord

⁸One question for further research is whether overt original speakers with QUOT can be indefinite or generic. I have found no clear examples of this sort naturally occurring, but given the discourse pragmatics of QUOT we would not expect them to be frequent regardless.

uses are possible with transitive verba dicendi such as *tu ya'alaj* 'she said it' in (29a-29b). In this case, the main point conveyed is about whether there are ghosts in Espita and the original speaker of the REP/QUOT is coreferential with the subject of the verbum dicendi (indeed, the same speech event is referred to by both). In contrast, with a passive verbum dicendi such as *ku ya'ala'al* 'it is said' in (29c-29d), concord is possible with REP, but is not possible with QUOT. This is since the anaphoric requirement of null third-person singular agreement of the QUOT cannot be met by the existential/indefinite implicit agent of the passive verbum dicendi.⁹

- (29) a. T-u ya'alaj=e' yaan *bin* wáay t-u kaj-il Espita
 PFV-A3 say=TOP EXIST REP ghost PREP-A3 town-REL Espita
 'She said there's ghosts in Espita.' [Transitive verbum dicendi w/ REP]
- b. T-u ya'alaj=e' yaan wáay t-u kaj-il Espita *-kij*
 PFV-A3 say=TOP EXIST ghost PREP-A3 town-REL Espita QUOT
 'She said there's ghosts in Espita.' [Transitive verbum dicendi w/ QUOT]
- c. K-u ya'ala'al=e' yaan *bin* wáay t-u kaj-il Espita
 IPFV-A3 say.PASS=TOP EXIST REP ghost PREP-A3 town-REL Espita
 'It's said that there's ghosts in Espita.' [Passive verbum dicendi w/ REP]
- d. #K-u ya'ala'al=e' yaan wáay t-u kaj-il Espita *-kij*
 IPFV-A3 say.PASS=TOP EXIST ghost PREP-A3 town-REL Espita QUOT
 Intended: 'It's said "there's ghosts in Espita".' [Passive verbum dicendi w/ QUOT]

In sum, while obscured by the preponderance of third person singular uses for which the set B agreement marker is null, the original speaker and addressee with QUOT are encoded as verbal arguments in YM (and so far as I know in other Mayan languages, though further investigation is warranted). In contrast, the original speaker with REP is not overtly encoded at all; its existence is entailed by the REP but – aside from the impossibility of first and second person original speakers – is not semantically constrained. These properties are summarized as follows:

(30) **Encoding and interpretation of the original speech act participants with QUOT and REP:**

	Property	REP	QUOT
C1	Original speaker overtly expressed	✗	✓
C2a	Existential/generic original speaker possible	✓	✗
C2b	(Apparently) anaphoric original speaker possible	✓	✓
C3	Original addressee overtly expressed	✗	✓

⁹The sentence in (29d) theoretically should have an irrelevant *non-concord* reading in which the speaker quotes the original speaker's utterance, which itself includes *ku ya'ala'al* 'it is said'. This reading is dispreferred since the use of the topic marker in the original utterance indicates that the original speaker take the facts about ghosts to be at-issue (AnderBois (2017)). However, the fact that the current speaker is quoting the original speech act indicates that the current speaker does not. Such a mismatch should not be impossible, but likely requires more extensive context to be supported. We leave exploration of such cases to future work since the consultants here have simply rejected this possibility for the simpler contexts considered here.

5 Formal properties

Thus far, we have considered aspects of QUOT and REP which are primarily semantic in nature. In this section we turn to examine the formal properties of the two categories. Whereas reportative evidentials cross-linguistically can be realized in a variety of different ways morphosyntactically, in Mayan languages they appear to always occur as discourse particles/clitics, with their position being determined – or, in some cases, merely constrained – prosodically rather than syntactically or morphologically.

The first point of differentiation formally between REP and QUOT concerns their linear position within a sentence. Across the Mayan family, QUOT most typically occur in clause/utterance-final position following the quoted material, as we have seen in (26b), among other cases. Somewhat less commonly, it seems, QUOT will occur in a phrase medial position, as seen in both sentences in the dialogue in (21). In contrast, REP show one of two different patterns across Mayan languages. In many languages, such as Ch’ol (Vázquez Álvarez 2011) and Tojolab’al (Curiel 2016), REP are second position clitics, occurring consistently at the end of the first phonological word of a clause/intonational phrase. In YM and possibly other languages, we find that REP – and, as claimed by AnderBois (2018), various other clitics such as mirative *bakáan* MIR – can occur at any prosodic word break, as illustrated in (31).

- (31) Ma’ (*bin*) t-u máansaj (*bin*) u examen (*bin*) Carmen (*bin*)-i’.
 NEG (REP) PFV-A3 pass (REP) A3 exam (REP) Carmen (REP)-NEG.CL
 ‘Carmen didn’t pass the exam (they say).’ AnderBois (2018)

The second, related, point of differentiation between REP and QUOT concerns their degree of integration into the prosodic structure of the sentence in which they occur. As seen in (32), REP typically occur in an intonational phrase-medial position with no particular pause or other prosodic break preceding or following. Indeed, REP in Mayan languages are usually, or perhaps always, enclitics which require a phonological host preceding them. In contrast, QUOT always occur with a substantial pause preceding them and in the clause-medial cases, a substantial pause after the QUOT and the original speaker and addressee arguments (if present), as seen in (33-34). One further indication of the degree of prosodic separation that QUOT exhibit is the fact that the quoted material can even contain a deictic clitic such as =*a*’ PROX or =*o*’ DIST, which are rigidly phrase-final in the language, as seen in (33).¹⁰

- (32) [T-u jantaj *bin* paanucho le máak=o’]_{IntP}
 PFV-A3 eat REP paanucho DEF person=DIST
 ‘That guy ate panuchos, I heard.’
- (33) [T-u jantaj paanucho le máak=o’]_{IntP} [*kij* teen Margarita]_{IntP}
 PFV-A3 eat paanucho DEF person=DIST QUOT DAT.1SG Margarita
 ‘“That guy ate panuchos” – Margarita told me.’
- (34) [T-u jantaj]_{IntP} [*kij* teen Margarita]_{IntP} [paanucho le máak=o’]_{IntP}
 PFV-A3 eat QUOT DAT.1SG Margarita paanucho DEF person=DIST
 ‘“That guy” – Margarita told me – “ate panuchos”.’

A third point of formal variation between QUOT and REP concerns their ability to occur multiple times within a single sentence. For QUOT, this possibility is robustly ungrammatical, as exemplified in (35). In contrast, REP can in principle be repeated an unlimited number of times within a clause. In such cases, there is no clear interpretive difference, but the sense one gets is that by emphasizing the secondhand nature of

¹⁰Curiel (2016:123-4) reports that this is not possible with phrase-final clitics in Tojolab’al. We leave it to future work to determine whether this reflects a difference in the prosodic properties of the phrase-final clitics themselves, the QUOT, or the interaction of the two.

the information, the speaker ensures that the addressee knows that the speaker does not necessarily vouch for the content in question.

- (35) **Context:** My friend Norma told me there were ghosts in Espita. I am recounting our conversation to you later:

*Yaan — *kij* — wáay t-u kaj-il Espita —*kij*
 EXIST QUOT ghost PREP-A3 town-REL Espita QUOT

Intended: ‘There’s ghosts in Espita, she said.’

Given the flexibility of YM *bin* REP, this can result in cases like (36a), from a text where the speaker is berating the lazy attitude of his son. While it remains in general an open question whether REP in other Mayan languages can be repeated in a sentence, we do have one example of this sort from a language whose REP is limited to second position from Tojolab’al. Since the topic *ja’xa me Lubyá* forms a separate prosodic unit from the rest of the sentence, the second position =*b’i* REP can occur both within the topic and in the main clause, as seen in (36b). In contrast to YM, the rigidly second position nature of Tojolab’al =*b’i* REP lessens the potential for sentences with multiple occurrences, we nonetheless find that such a case is possible.

- (36) a. **Context:** A man describing his son who doesn’t work in the milpa:
 Jach táaj u k’áat-e’ chéen ka p’áat-ak *bin* ichnaj *bin*, jach *bin* táaj chokoj k’iin *bin*
 truly really A3 want-TOP only for stay-SUBJ REP inside REP truly REP very hot sun REP
 ‘He just wants to stay at home because (he says) the sun is very hot.’ Monforte et al. (2010:202)
- b. Ja’xa=*b’i* me Lubyá y-e’n=*b’i* wan-∅ talna-n-el
 CTOP=REP CLF Lubyá A3-PRON=REP PROG-B3 cuidar-ANT-NF
 ‘Lubyá – they say – was a caregiver’ **Tojolab’al** (Curiel 2016:84)

These differences in formal/prosodic properties of QUOT and REP in Mayan languages are summarized as follows:

- (37) **Formal/Prosodic properties of QUOT and REP:**

	Property	REP	QUOT
D1a	Linear position: phrase-final	✗	✓
D1b	Linear position: flexibly phrase-medial	%	✓
D1c	Linear position: second in phrase	%	✗
D2	Prosodically integrated?	✓	✗
D3	Repeatable within a sentence	✓	✗

6 Conclusions

In this paper, we have examined in detail the properties of two types of reported speech devices in Mayan languages. With some minor exceptions, we have seen that outside of Eastern Mayan languages – where the basic empirical situation remains somewhat less clear – Mayan languages robustly have quotative and reportative morphemes in oral discourse. While the two both make reference to a prior speech event and therefore may have similar perlocutionary effects in many cases, we have seen that they also have substantial differences as well. A list of the major differences is found in Table 2.

At a high level, the difference between the two can be summarized as follows: QUOT present again the *words* of the original speaker, whereas REP indicate that the semantic content of the current speaker’s

	Property	REP	QUOT
A1	Deictic expressions interpreted relative to original speaker	✗	✓
A2	Substitution of coreferring expression possible	✓	✗
B1	Selectivity for sentence type	%	✗
B2	Illocutionary potential of scope unaltered	✓	✗
C1	Original speaker overtly expressed	✗	✓
C2a	Existential/generic original speaker possible	✓	✗
C2b	(Apparently) anaphoric original speaker possible	✓	✓
C3	Original addressee overtly expressed	✗	✓
D1a	Linear position: phrase-final	✗	✓
D1b	Linear position: flexibly phrase-medial	%	✓
D1c	Linear position: second in phrase	%	✗
D2	Prosodically integrated?	✓	✗
D3	Repeatable within a sentence	✓	✗

Table 2: Summary of the major properties distinguishing QUOT and REP in (non-Eastern) Mayan languages

utterance has its source a prior speech event. While the specific properties found for QUOT and REP are not all entailed by this description, there are nonetheless natural reasons why they pattern in this way and not the reverse. For the differences in A properties, this follows since the original speaker’s words are what matters for QUOT while content is what matters for REP. The B properties are quite similar. Since REP make reference to the current speaker’s semantic content, they can be sensitive to the illocutionary mood of this content. In contrast, the current speaker merely presents the original speaker’s words with QUOT and so the effects of its illocutionary moods are not felt.

The C properties concern the level of detail that can or must be encoded regarding the original speech event. It is of course logically possible to imagine, say, that a REP might require or allow for the original speech event participants to be explicitly encoded. However, it is nonetheless natural that it is QUOT which make this possible since they are more fundamentally concerned with the details of the original speech event, while REP are much less so. Moreover, in the few other cases where quotatives cross-linguistically have been described in enough detail to distinguish them clearly from both reportatives and lexical verba dicendi (e.g. Blain and Déchaine (2007), Michael (2008)), we similarly find that quotatives require/allow for at least as detailed an encoding of the original speech event as REP do. As in the case of the C properties, although there is no logical necessity that REP have one prosodic profile while QUOT have another, the pattern of D properties we find nonetheless seems motivated. Since QUOT specifically involve presenting the linguistic form of the original speech act, it is natural that they are more prosodically separate so as not to interrupt the original linguistic form unduly, whereas no REP present no such need.

We have focused here on the differences between REP and QUOT, but they of course also have much in common. Both elements make reference to a prior speech event, just as verba dicendi do. Beyond this though, there is a deeper property REP and QUOT share – but which verba dicendi lack – the information about the original speech event is strictly not-at-issue (i.e. this property is semantically encoded). This property has perhaps been implicitly assumed in the preceding discussion, most clearly in the B properties relating to illocutionary force. For reportatives cross-linguistically, this property is well-known from previous literature (e.g. Faller 2002, Matthewson et al. 2007, Murray 2010, 2014, 2017), although there is some debate about how universal it is. For QUOT (or at least for YM *ki(j)* QUOT, however, this is also true. Space precludes showing this systematically, but one piece of support for this position, beyond the illocutionary properties already discussed, is the sensitivity of QUOT to the Question Under Discussion (QUD). Parallel to REP, QUOT are used in scenarios where the quoted material itself has ‘main point’ status, i.e. addresses

the QUD.¹¹ Just as REP alone are infelicitous when the QUD concerns who said what, so too with QUOT. In the former case, indirect speech reports with *verba dicendi* are used instead, while in the latter it is direct speech report with *verba dicendi* which play this role.

- (38) Yaan wáay t-u kaj-il espita –ki teen
 EXIST ghost PREP-A3 town-REL espita –QUOT.B3SG DAT.1SG
 ‘ “There’s ghosts in Espita” –he tells me.’
- a. ✓ **Scope-at-issue QUD:** Are there ghosts in Espita?
 b. ✗ **Report-at-issue QUD:** What did Luis say?

We close by noting several open questions and places of attested or potential variation between the REP and QUOT of different languages with the Mayan family. At the outset, we made clear that many of the properties detailed here are the results of detailed primary investigation of REP and QUOT in Yucatec Maya and consultation of secondary sources for other Mayan languages. There are two cases where we have presented clear evidence for variation within Mayan. First, whereas REP in most Mayan languages are strictly second-position clitics, in others, including Yucatec Maya, their linear position is quite a bit more flexible. Second, whereas REP in most Mayan languages can occur across all three major sentence types, we have seen that Q’anjob’al restricts their use to declarative sentences alone. More detailed future investigation may of course uncover other points of variation across Mayan languages.

One other large unresolved question is what the grammar of reported speech devices is like in Eastern Mayan languages. Here, there are numerous textual examples with elements whose glosses make clear reference a prior speech event in some way, but where the published evidence is insufficient to determine whether these elements pattern with QUOT or REP in the semantic properties A-C above. Moreover, in some of these cases, we find that even the brief descriptions that do exist suggest that these elements might not pattern with either QUOT or REP as discussed here, but rather represent a mix of the properties of the two. For example, Ayres (1991) notes the existence in Ixil of a particle *tchi(h)* or *chi* (depending on the dialect) which “is used in stories to indicate that one is only repeating what another person has said”, seen in (39).

- (39) Etchetz ib’ant naqe tchih u vinaq va’l u kaaxha tze’
 like.that make CL.MASC ?? A3 man man A3 box wood
 ‘That way, the man made a box of wood, it’s said.’ Ixil (Ayres 1991:175-176)

On the one hand, Ayres (1991) describes on p. 175 that *tchi(h)* occurs in particular phrase-medial positions and mentions on p. 115 that the original speaker (at least in the Chajul dialect) can be interpreted as an indefinite, which seems more in line with REP than QUOT. On the other hand, the phonetic form itself is clearly cognate with QUOT in non-Eastern Mayan languages (see Table 2) and Ayres (1991:115) notes that the original speaker can be overtly encoded by set B agreement, facts more in line with QUOT than with REP. While further evidence is needed (especially of things like first and second-person pronouns and non-declarative sentence types), the evidence we do have suggests that these elements may in fact display a mix of the properties associated with QUOT and REP here (or else may have both QUOT and REP-like uses). While this is unlike what we have seen outside of Eastern Mayan languages, it is not necessarily surprising given that many lexical *verba dicendi* can be used with both direct and indirect discourse and so nothing obvious precludes more grammaticized reported speech devices from being similarly flexible.

¹¹While framed in quite different terms, this general intuition is to some extent prefigured by Lucy 1993’s claim that the YM *ki(j)* QUOT is ‘metapragmatic’.

References

- Aikhenvald, Alexandra. 2004. *Evidentiality*. Oxford University Press.
- AnderBois, Scott. 2017. An illocutionary account of reportative evidentials in imperatives. *Proceedings of SALT 27* 459–479.
- AnderBois, Scott. 2018. Illocutionary revelations: Yucatec Maya *bakáan* and the typology of miratives. *Journal of Semantics* 35:171–206.
- Ayres, Glenn. 1991. *La gramática ixil*. Centro de Investigaciones Regionales de Mesoamérica.
- Barrett, Edward Rush. 1999. A grammar of Sipakapense Maya. Doctoral Dissertation, University of Texas at Austin.
- Bhadra, Diti. 2017. Evidentiality and questions: Bangla at the interface. Doctoral Dissertation, Rutgers.
- Blain, Eleanor M., and Rose-Marie Déchaine. 2007. Evidential types: Evidence from Cree dialects. *International Journal of American Linguistics* 73:257–291.
- Brasoveanu, Adrian, and Donka Farkas. 2007. Say reports, assertion events and meaning dimensions. In *Pitar moş: A building with a view. papers in honour of alexandra cornilescu*, ed. L. Avram & D. Isac G. Alboiu, A. Avram, 23–43. Editura Universităţii din Bucureşti.
- Briceño Chel, Fidencio, and Gerónimo Ricardo Can Tec. 2014. *U nu'ukbesajil u ts'ibta'al maayat'aan / normas de escritura para la lengua maya*. INALI.
- Can Canul, Cesar, and Rodrigo Gutiérrez-Bravo. 2016. *Maayáaj tsikbalilo'ob kaampech*. INALI.
- Curiel, Alejandro. 2016. Estructura narrativa y evidencialidad en tojolabal. Doctoral Dissertation, UNAM.
- England, Nora. 1983. *A grammar of Mam, a Mayan language*. University of Texas Press.
- Faller, Martina. 2002. Semantics and pragmatics of evidentials in cuzco quechua. Doctoral Dissertation, Stanford.
- Haviland, John. 2004. Evidential mastery. In *Proceedings of CLS 38-2, The Panels*, 349–368.
- Hull, Kerry. 2003. Verbal art and performance in Ch'orti' and Maya hieroglyphic writing. Doctoral Dissertation, UT Austin.
- Kockelman, Paul. 2006. Psychological depth is the internalization of dialogical breadth: Modal clitics and mental states in Q'eqchi'-Maya. *Language & Communication* 26:55–116.
- Korotkova, Natasha. 2015. Evidentials and (relayed) speech acts: Hearsay as quotation. In *Proceedings of SALT 25*, 676–694.
- López Jiménez, José Alfredo. 2010. Estructura, actuación y multimodalidad en la narrativa personal oral (lo'il a'yey) de la comunidad tsotsil de romerillo, chamula, chiapas. Master's thesis, CIESAS, México.
- Lucy, John. 1993. Metapragmatic presentationals: Reporting speech with quotatives in Yucatec Maya. In *Reflexive language: reported speech and metapragmatics*, ed. John Lucy, 91–125. Cambridge University Press.
- Matthewson, Lisa, Henry Davis, and Hotze Rullman. 2007. Evidentials as epistemic modals: evidence from St'átimcets. *Linguistic Variation Yearbook* 7:201–254.
- Michael, Lev. 2008. Nanti evidential practice: Language, knowledge, and social action in an amazonian society. Doctoral Dissertation, UC Berkeley.
- Monforte, Jorge, Lázaro Dzul, and Rodrigo Gutiérrez Bravo. 2010. *Narraciones mayas*. Instituto Nacional de Lenguas Indígenas (INALI).
- Murray, Sarah. 2010. Evidentiality and the structure of speech acts. Doctoral Dissertation, Rutgers.
- Murray, Sarah. 2014. Varieties of update. *Semantics & Pragmatics* 7:1–53.
- Murray, Sarah. 2017. *The semantics of evidentials*. Oxford University Press.
- Vázquez Álvarez, Juan Jesús. 2011. A grammar of Chol, a mayan language. Doctoral Dissertation, University of Texas.