

Ulwa evidentials: A preliminary overview¹

Andrew Koontz-Garboden
The University of Manchester

This paper provides data and analysis concerning two potential markers of evidentiality in Ulwa (Misumalpan; Nicaragua). The first of these, a sentence final particle *ka*, is argued to be a legitimate direct evidence evidential. The second, what Green (1999) calls the “auditive” inflectional form of the verb, is argued, primarily based on the (previously unknown) fact that it can occur in non-auditory contexts, not to be an evidential. Additional data on *ka* are considered bearing on the question whether it contributes propositional or non-propositional meaning.

1 Introduction

In this paper, I report on work in progress on the grammatical status of two constructions that look, on the surface, like markers of evidentiality in Ulwa (Misumalpan; Nicaragua). The first of these appears to encode direct evidence through the addition of the sentence final particle *ka*, which on the surface appears to be optional in many contexts in which it appears, such as (1).²

- (1) *Wassik ya sang-p-ai ka*.
river the clear-PA-3SING KA
'The river is clear (=not muddy).' (July08-1.139)

¹ I am grateful for collaboration on this and other Ulwa-related work to members of the Ulwa Language Project: Francisco Santiago, Lorinda Martínez Lacayo, Kandler Santiago, Abanel Lacayo, and Clementina Simon. Thanks to Jessica Coon for WSCLA-specific \LaTeX help. This work has been supported by the British Academy under grant SG-48036.

² The orthography used in the Ulwa examples is that adopted by the Ulwa Language Project, itself an adaptation of the Miskitu orthography devised by Moravian missionaries (Green 1999:33). The orthographic conventions are mostly straightforward and are discussed by Green (1999:33ff.). The less self-explanatory conventions are: (a) use of the circumflex above a vowel for contrastively long vowels, (b) *ng* is used for the velar nasal, (c) *h* following any of the sonorants *l, r, n, m* indicates that the sonorant is voiceless.

Glossing conventions throughout the paper are as follows: ACC, accusative case; AUD, audative; -DA-, -*da*- verb class marker; DS, different subject switch reference marking; INF, infinitive; NEG, negative; PA, -*pa*- verb class marker; PAST, past tense; PL, plural; KA, the sentential *ka* marker argued to be a marker of direct evidence; SING, singular; SS, same subject switch reference marking; TA, -*ta*- verb class marker; TOP, topic marker; WA, -*wa*- verb class marker; 1,2,3, 1st, 2nd, 3rd person agreement; < >, Gloss inside angle brackets indicates glossed morpheme is an infix.

The second candidate evidential in Ulwa takes the form of a special inflectional form of the verbal paradigm that has been called the “auditive” (Green 1999:103) (2), and at least on the surface, looks straightforwardly like an auditory evidential.

- (2) *Was ya utuh-p-î ka.*
water the drip-PA-AUD KA
'The water is dripping.' (speaker hears it; July08-1.39)

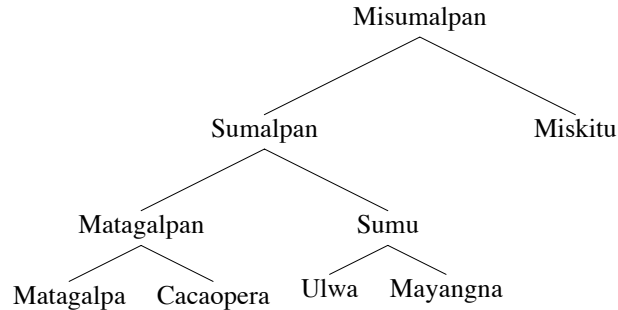
Data from a variety of sources discussed below suggest that the first of these is indeed a (direct evidence) evidential. A broader range of data on the auditive than previously available, however, suggests that it is not. Instead, I show that “auditive” is something of a misnomer, and that its function is instead as some kind of marker of deliberate emphasis on the event named by the verb heading the clause in which it appears, and that as a consequence, it is not an evidential.

Having shown that Ulwa does seem to have one genuine evidential, the direct evidence *ka*, I then consider additional data bearing on the broader question whether the meaning contributed by *ka* is propositional (e.g., St’at’imcets; Matthewson et al. To appear) or non-propositional (e.g., Quechua; Faller 2002). The data are somewhat equivocal. Some possible reasons for the murky outcome of the diagnostics are considered. I begin in the next section, however, by first giving some brief background on Ulwa, sources of data, etc.

2 Some background on Ulwa

Ulwa is spoken by approximately 350 adults (Green 1999:18) in the village of Karawala, on Nicaragua’s Atlantic coast and is an uncontroversial member of the Misumalpan family. The name of the family is formed by the concatenation of the the sub-family names of its members, Miskitu, Sumu, and Matagalpan. Ulwa belongs to the Sumu subfamily, which itself has two members, Mayangna and Ulwa. Mayangna is considered to have three separate, but mutually comprehensible, dialects: Panamahka, Tawahka, and Tuahka (Benedicto and Hale 2000). By contrast, Ulwa is not mutually comprehensible with these dialects. The Sumu languages, in turn, are generally grouped together in a larger sub-family along with the now-extinct Matagalpan languages. It is only more distantly that these languages are presumed to be related to Miskitu (Campbell 1997:167; Benedicto and Hale 2000). These relationships are illustrated by the family tree in (3), taken from Benedicto and Hale (2000).

(3) Misumalpan family tree (Benedicto and Hale 2000:93)



Ulwa, like Misumalpan more generally, has as part of its typological profile SOV word order, more head than dependent marking, nominative–accusative alignment, semantically and syntactically conditioned verb class morphology (Hale and Salamanca 2002; Hale and Keyser 2002; Koontz-Garboden 2009), and subject switch-reference marking, which figures in a typologically marked causative construction that has attracted some attention (Young and Givón 1990; Hale 1991; 1997; Bittner 1999). The data reported on in the discussion that follows come from approximately fourteen months of my own fieldwork (2004–2008) and from Green’s (1999) sketch grammar and dictionary.

3 Arguments that *ka* marks direct evidence

As mentioned in the introduction *ka* can be (optionally) used in present tense utterances with verbal and nonverbal predicates, as shown in (4).³

- (4) a. *Yang yâka al-ka ya wal-ta-sing ka.*
 1SING that man-3SING.POSS the like-TA-1SING.NEG KA
 ‘I do not like that man.’ (dict)
- b. *Dî as yam-ka lau kat abal-naka ya*
 thing one good-3SING.POSS sit when bad-3SING.INF the
dut-ka ka.
 bad-3SING.POSS KA
 ‘When something is good it is bad to mess it up.’ (dict)

In this section I consider arguments from speakers’ intuitions, degree of certainty, and use in content questions supporting the idea that *ka* marks direct evidence.

³ To the best of my knowledge, the *ka* appearing on property concept words like *dutka* ‘bad’ in (4b) is a possessive suffix (Koontz-Garboden and Francez In press) and altogether different from the *ka* under consideration here. One argument in favor of this is that the cognates of property concept *-ka* and direct evidence *ka* in Mayangna, *-ni* and *ki* respectively, are not syncretic in that language, suggesting (albeit only circumstantially) that the homophony in Ulwa may be accidental.

3.1 Intuitions: *ka* generally requires direct evidence

The first, most obvious argument for the direct evidence status of *ka* comes from speakers' reports about changes in the meaning of a sentence conditioned by its presence/absence. In this section I discuss several examples.

I was once asked whether a piece of particle board was big enough to be used to mend a particular desk. I responded with the sentence in (5).

- (5) *Amang-ka ka.*
enough-3SING.POSS KA
'It is big enough.' (notes, 747)

In response to (5), I was asked if I had measured it (I had) and was told that if I had measured the desk and board, then using (5), with *ka* would be appropriate. My consultant, on the other hand, reported that since she had not measured the desk and board, she could not respond with (5), even if it appeared to her that the particle board would be enough to get the job done. Instead, her response would have to be without *ka*, or perhaps with another particle that hedges her response.

Another similar example concerns the data in (6). If I give a workshop on the nature of snow, I am told that although as part of it I can say (6a), with *ka*, one of my consultants could not say it, e.g. in reporting what he learned at the workshop back to his family members. Instead, he would have to say something like (6b), with the quotative/reportative verb *atnaka* 'be/say'.⁴

- (6) a. *Snow ya dî rip-ka ka.*
snow the thing cold-3SING.POSS KA
'Snow is cold.' (notes, 744)
- b. *Snow yâka dî rip-ka at-dai.*
snow the thing cold-3SING.POSS say-3PRES.PL
'They say that snow is cold.' (notes, 744)

Similarly, when *ka* is present in sentences like (7), in the general case the speaker must have actually gone to the river and observed for herself that the river is clear.

⁴ This raises the somewhat obvious question whether *atdai* in e.g., (6b) is a reportative evidential. I'm inclined to think that it is not a grammaticalized evidential, but rather a simple reportative verb, given the fact that it inflects for person/number, tense, etc., just as any other Ulwa verb can. Additionally, it can be outscoped by negation (when inflected for it; July08-1.151), appear in the antecedent of a conditional (July08-1.58), and be challenged (July08-1.51). Of course, the latter three properties are not unexpected if the meaning of the particle is propositional, but the fact that it doesn't behave morphosyntactically unlike a normal verb, in combination with these facts, leads to the conclusion that it's not an evidential. One could argue about these things, however, and ultimately all of this depends on what one considers an evidential in the first place, which itself is not an entirely uncontroversial question in the literature (see, e.g., Aikhenveld's 2004 position that they must be obligatory versus Matthewson et al.'s To appear and Faller's 2002 that they needn't be).

- (7) *Wassik ya sang-p-ai (ka).*
 river the clear-PA-3SING KA
 ‘The river is clear (=not muddy).’ (July08-1.139)

This contrasts with the corresponding sentence lacking *ka*, for which the speaker may or may not have direct evidence.

Judgements about cases involving general knowledge, however, do seem to vary; in at least some cases, speakers allow use of *ka* with general knowledge, even if they have no genuine direct evidence. I have been told, for example, that because it is generally known in the village that there are lots of white people in the U.S., an Ulwa speaker who has never visited the US can still use *ka* in a sentence making such an assertion (July08-1.122–123). The same is true for an assertion about the presence of hanging vines in the forest, which is a fact that everyone in Karawala knows (July 1.122-123). Additionally, speakers report other contexts in which *ka* can be used in which the evidence seems conjectural rather than properly direct. The data in (8) illustrate one such case.

- (8) *Wassik ya sang-pa-sa ka.*
 river the clear-PA-3SING.NEG KA
 ‘The river is not clear.’ (CONTEXT: has not been to see the river, but it’s raining at the moment, so not possible that river is clear; July08-1.139)

Similarly, at least one speaker reports that he can use (7) if he has not been to see the river, but observes that the swamp beside the village is dry (which means there has been no rain, and the river will be clear).

One might take such uses to mean that *ka* does not, in fact, mark direct evidence. I believe such a conclusion to be unwarranted, however. Quechua *-mi*, for example, is generally taken as an uncontroversial direct evidence evidential, and as Faller (2002:133ff.) discusses, it has very similar uses to these, uses which she calls “encyclopedic.” How exactly such uses should be analyzed does not seem to me a simple question. But to the extent that such uses do not disqualify *-mi* from an analysis as a direct evidence evidential (whatever the right analysis of these), there seems no reason to me that the uses discussed above should disqualify *ka*.

Nevertheless, it could instead be that *ka* has a modal meaning something like “100% certainty”, the meaning Benedicto (2007) argues the Mayangna counterpart of Ulwa *ka, ki*, has in that language. On such an analysis encyclopedic uses are expected, since everyone is certain of these things; they are general knowledge. Additionally, the requirement of direct evidence in non-encyclopedic cases makes sense, since if one doesn’t know something from general knowledge, one has to meet a high threshold of evidence to be certain. Despite the initial appeal of an analysis along these lines, degree of certainty intuitions and the use of *ka* in content questions argue against it. Instead, as I discuss below, they favor the treatment of *ka*, as already proposed, as a direct evidence marker of evidentiality.

3.2 Degree of certainty

Faller (2002:155ff.) and Davis et al. (2007:73) observe that while modals weaken a speaker's certainty about the truth of a proposition, evidentials strengthen them, noting that a speaker uttering (9a) is less certain of the truth of the proposition than the speaker of (9b).⁵

- (9) a. John must have left.
b. John has left. (Faller 2002:156 drawing on Karttunen 1972:13)

It is noteworthy, then, that speakers report that in sentences like (1), they are more certain of the truth of the proposition named by the sentence when *ka* is present in it than when it is absent (July08-1.139). (In response to question, "With which sentence are you more certain that the river is clear?")

3.3 Use in content questions

Similar to Quechua evidentials (Faller 2002:230) and Cheyenne evidentials (Murray 2009), *ka* commonly appears in content questions, as in (10).

- (10) a. *Ayang-ma ai ka?*
name-2SING.POSS what KA
'What is your name?' (dict)
- b. *Ampas asah-ka watah ka?*
how.many teeth-3SING.POSS have KA
'How many teeth does it have?' (speaking of a saw; mar06-13)
- c. *Ai tih-p-ai lau ka?*
what stink-PA-3SING sit KA
'What stinks?' (dict)

As with the Quechua direct evidence *-mi*, if *ka* marked e.g., high degree of certainty rather than direct evidence, it would be surprising to find it in question uses, and it would thus have to have separate assertion and question meanings (Faller 2002:154).⁶ By contrast, there are plausible analyses of what exactly a direct evidence evidential might be doing semantically in a question (e.g., Murray 2009).

Another initially attractive consequence of *ka* being an evidential, is that it makes sense in the larger context of Ulwa, where it has been believed (Koontz-Garboden 2007) that there is an uncontroversial marker of auditory evidence. This

⁵ Though see Matthewson et al.'s (To appear:51ff.) concerns about this as a diagnostic.

⁶ Elena Benedicto (p.c.) reports that Mayangna *ki* does not appear in question contexts, suggesting that it may well have a different function, e.g., the 100% certainty meaning that Benedicto (2007) attributes to it, while Ulwa *ka* has a direct evidence meaning. This issue and its implications for the nature of the proto-Sumu source of *ka/ki* merits investigation.

now looks less likely, as I show in the sections that follow.

4 Arguments against the evidential status of the “auditive”

The auditive is marked by verbal inflectional morphology in the form of the suffix *-î*, as illustrated by the data in (11).

- (11) a. *Was ya utuh-p-î ka.*
 water the drip-PA-AUD KA
 ‘The water is dripping.’ (speaker hears it; July08-1.39)
- b. *Baka ya ai-d-î ka.*
 child the cry-DA-AUD KA
 ‘The child is crying.’ (July08-1.49)
- c. *Kataramah wau-p-î ka, dah-yam?*
 chicken scream-PA-AUD KA hear-2SING
 ‘The chicken is screaming, do you hear it?’ (July08-1.173)

The intuitions of speakers, and indeed Green’s (1999:103) description is that sentences headed by an auditive verb form like those in (11) require that a speaker uttering them have auditory evidence for the proposition named by the sentence. The fact that the auditive so frequently appears with *ka*, however, raises questions about this description, at least if it’s true that *ka* is a direct evidence evidential. Indeed, it would be curious to find the auditive so frequently co-occurring with *ka* if the auditive really were an evidential, since *ka* encodes direct evidence, while the auditive would be encoding less direct evidence (i.e., auditory only). This, in addition to the facts that there are non-auditive uses of the auditive, that it can be embedded, and that negation can outscope it, all suggest that the auditive is not an evidential after all. I lay out facts illustrating these claims in turn.

4.1 Non-auditive uses of the auditive

A fact that went unnoticed in Green’s (1999) description of the auditive is that this form can actually be used with verbs that name events that may well give rise to auditory stimulus under normal circumstances, but in contexts where the speaker is too far away to hear (but not to e.g., see). The data in (12) illustrate one such case.

- (12) *Baka î-w-ai ya kasna kas-î baka.*
 child sick-WA-3SING.PRES the food eat-AUD little
 ‘The poor child that is sick is eating.’ (CONTEXT: spkr far away, and sees, doesn’t hear; July08-1.39)

This suggests that the auditive does not explicitly encode auditory evidential meaning. As might be expected, then, the auditive can be used with verbs naming events

that do not have any auditory stimulus at all, as shown in (13).

- (13) a. *Ai yam-t-i yâ tal-î man?*
 what do-TA-SS 1SING.ACC see-AUD 2SING
 ‘Why are you staring at me?’ (CONTEXT: interlocutor staring at speaker; July08-1.39)
- b. *Mâ pum-t-î at-ring.*
 2SING.ACC think-TA-AUD be-2SING.FUT
 ‘I will be thinking of you.’ (July08-1.39)

In such cases the use of the auditive gives rise to a more prolonged, deliberate, or emphatic view of the event named by the auditive marked verb. (The same is true for (12), for which it’s reported the child is eating slowly.)

So again, the conclusion is that the auditive does not encode auditory evidential meaning. What is its function, then? That remains unclear. On the basis of the available data, it looks potentially aspectual, though much work remains to clarify explicitly the details of its meaning. In any event, the data in this section show that its meaning is not that of an auditory evidential.

4.1.1 Embedded auditive

Another (albeit weak) argument against an evidential meaning for the auditive is that examples can be found, as in (14), where the auditive is embedded in a verb of saying, behavior not typically expected of an evidential (unless they contribute to propositional meaning, as in St’át’imcets, Matthewson et al. To appear:44).

- (14) a. *Ai-d-î at-am dak-ikdana*
 cry-DA-AUD be-2SING.DS hear-1SING.PL.PAST
 ‘We heard you crying.’ (Green 1999:103)
- b. *Dislah palka kau û-ki kau*
 morning early when house-1SING.POSS at
libin-d-i sâk yang dai kau pamkih as kal
 leaning.against-DA-SS stand 1SING PAST when horse one RECIP
bau-t-î at-ak tal-ikda.
 fight-TA-AUD be-3SING.DS saw-1SING.PAST
 ‘One morning, I was standing leaning up against my house when I saw a horse fight.’ (dict)

4.1.2 Scope of negation

A final argument against an evidential analysis of the auditive is that in at least some contexts, negation can take scope over it.⁷

⁷ Again, however, this is not inconsistent with auditive marking evidentiality that contributes propositional meaning, as in the analysis of Matthewson et al. (To appear).

- (15) a. *Baka ya ai-d-î ka?*
 child the cry-DA-AUD KA
 ‘Is the child crying?’
- b. *Ai-d-î sa. Ai-dai.*
 cry-DA-AUD NEG cry-3SING
 ‘The child is not crying (aud). The child is crying.’ (i.e., the child is not crying just a little bit, but rather full-on crying; July08-1.152)

These considerations taken together (but mostly those related to the varied meanings of the auditive) suggest that the auditive is not an evidential, thus leaving *ka* as, to the best of my knowledge, the lone marker of evidential meaning in Ulwa.

5 Direct evidence *ka*: Propositional or non-propositional?

Assuming it’s correct to say that *ka* is an evidential, I address the question whether the meaning it encodes is propositional (Matthewson et al. To appear) or non-propositional (Faller 2002). As I show, the question is not an altogether easy one to answer.

5.1 Arguments for non-propositional meaning

The fact that negation can outscope modals (16) but not *ka* (17) is one argument for *ka* encoding non-propositional meaning.⁸

- (16) a. **It ya-wa-sing.** *Î-wa-yang bahangh.*
 possible go-WA-1SING.NEG sick-WA-1SING.PRES because
Yam-pa-ring laih, ya-wa-ring.
 get.better-PA-1SING.IRR if go-WA-1SING.IRR
 ‘It is possible that I won’t go. Because I’m sick. If I get better, I’ll go.’ (=poss that will not go; may or may not; July08-1.105)
- b. *Dî as bik it bakan-ta-sing.* *Lihwan aîsau bahangh.*
 thing one also possible buy-TA-1SING.NEG money none because
 ‘It is not possible that I buy anything, because I have no money.’
 (=not possible; July08-1.106)
- (17) *Wassik ya sang-pa-sa ka.*
 river the clear-PA-3SING.NEG KA
 ‘The river is not clear.’
- a. Fine in context where speaker went and saw the river and observed that it is not clear.

⁸ It is, however, a very weak one, since there are propositional theories in which negation can’t easily outscope the evidential either. See, Matthewson et al. (To appear) and Waldie et al. (2009) for discussion.

- b. #in context where speaker has not gone to look at the river and in which it may be clear and it may not, but speaker has no evidence either way. (July08-1.153, July08-1.163)

Pointing (weakly; Faller 2006) in the same direction is the inability of *ka* to be embedded in conditionals, as shown in (18).

- (18) * *Damaska ya sang-ka ka laih suk-pa-yam kau*
 grass the green-3SING.POSS KA if light-PA-2SING.PRES when
buru-p-ai.
 burn.incompletely-PA-3SING.PRES
 ‘If the grass is green, then when you light it, it burns incompletely.’
 (July08-1.58)

These two diagnostics, then, point in the direction of *ka* encoding non-propositional meaning. If true, then *ka* should fail the assent/dissent test (aka “challengeability”; Faller 2002, Matthewson et al. in press). Unfortunately, the evidence here is mixed, as I show in the next section.

5.2 Challengeability

When a sentence appearing with *ka* is denied and there is little context provided, then a challenge is generally infelicitous, as the data in (19) and (20) show.

- (19) CONTEXT: A speaking to B says with *ka* that the water is clear. B knows that the water is indeed clear, but doubts that A actually went to river and saw the water’s current state.
- a. *A: Was ya sang-ka ka.*
 water the clear-3SING.POSS KA
 ‘The water is clear.’
- b. #*B: Yapa laih pum-ta-sing.*
 that TOP believe-TA-1SING.NEG
 ‘I do not believe it.’ (notes, July08-2.30)
- (20) CONTEXT: A has never physically experienced snow before. B has and believes it to be cold. B knows that A has never experienced snow.
- a. *A: Snow ya rip-ka ka.*
 snow the cold-3SING.POSS KA
 ‘Snow is cold.’
- b. #*B: Rauka sa.*
 true NEG
 ‘That’s not true.’ (only acceptable if B believes snow not to be cold;
 notes, July08-2.27)

The situation becomes more complicated, however, when the denial is less mechanical. This is shown by the data in (21) and (22c) versus (22d).

- (21) CONTEXT: A does not leave her house and so can't have been to the river to see its current state. B knows this.
- a. A: *Wassik ya tuh-ka ka.*
 river the deep-3SING.POSS ka
 'The river is deep.' (→ speaker has direct knowledge)
- b. B: *Rauka sa. Man laih ya-w-i tal-sa man. Rauka*
 true not 2SING TOP go-WA-SS see-NEG 2SING true
tuh-ka katka man laih tal-sa man.
 deep-3SING.POSS but 2SING TOP see-NEG 2SING
 'That's not true. You didn't go see. It is deep, but you didn't go see it.' (notes, July08-1.47)
- (22) CONTEXT: A has never physically experienced snow before. B has and believes it to be cold. B knows that A has never experienced snow.
- a. A: *Snow ya di rip-ka ka.*
 snow the thing cold-3SING.POSS ka
 'Snow is cold.' (→ direct evidence)
- b. B: *Rauka sa.*
 true NEG
 'That's not true.' (→ denial of assertion that snow is cold)
- c. #B: *Rauka sa. Rauka snow ya rip-ka ka, katka man*
 true NEG true snow the cold-3SING.POSS ka, but 2SING
lah yapa sip yul-ta-sa man, wat as bik
 TOP that.way possible talk-TA-3SING.NEG 2SING time one also
tal-sa man bahangh.
 see-NEG 2SING because
 'That's not true. It's true that snow is cold, but you can't talk that way, since you've not even one time seen snow.' (said with little emotion)
- d. B: *Rauka sa. Ya-wa-sa man katka yapa*
 true NEG go-WA-NEG 2SING but that.way
yul-ta-yam.
 talk-TA-2SING.PRES
 'That's not true. You haven't even been (to see it) yet you speak that way.' (said with a good deal of emotion, in context where believes that snow is indeed cold. This judgement given some time after (22c).) (notes, July08-1.50)

When more context is added in the elicitation scenarios, as shown by the previous data, speakers seem to accept a challenge to the direct evidence inferences provided by *ka*, suggesting, contrary to the (albeit very preliminary) conclusion reached in the previous section that *ka* must encode propositional meaning. It seems to me, however, that such a conclusion is not entirely warranted. Instead, in these cases it seems possible, perhaps even likely, that the negation encoded in the denial is not propositional negation, but rather metalinguistic negation (Horn 1985), given that the objection seems to be entirely about the way the speaker framed the proposition. Unfortunately, at the present time, I am unsure how to flesh out this intuition and provide empirical arguments for it. Given the weight generally given to the assent/dissent diagnostic in the literature, though, and the fact that metalinguistic negation is non-propositional rather than propositional (and thus any denials involving metalinguistic negation are not support for a propositional analysis of evidentiality), this seems an area in need of further study in the evidential literature quite generally. In regard to Ulwa *ka*, given the current landscape (and pending clarification of this issue), I'm inclined to think that *ka* contributes non-propositional meaning (as e.g., a speech act operator; Faller 2002), and that these mixed results are a consequence of metalinguistic negation. But as mentioned above, this all is in need of much further study.

6 Concluding remarks

To conclude, in this paper two candidates for evidential marking in Ulwa have been considered. While the data seem consistent with *ka* being a marker of direct evidence, encoding non-propositional meaning, the auditive, previously thought to be an evidential, seems not to be. This picture, however, is not without problems. First, the *ka* particle, like e.g., Quechua direct evidence marking, is non-obligatory. Although for many, this is perfectly consistent with being an evidential (Matthewson et al. To appear; Faller 2002), for others it is not (Aikhenvald 2004). Additionally, the non-propositional status of *ka* is far from certain, given (a) the fact that the tests used to diagnose it as such are at best very weak ones (for reasons well-discussed in Faller 2006, Matthewson et al. To appear, and Waldie et al. 2009) and (b) concerns raised about the potentially metalinguistic nature of denials of evidential inferences.

Additional complications come in the form of certain contexts that are still poorly understood where *ka* seems to be required, e.g., 3rd person singular present tense contexts with: posture/existential constructions (23a), the verb meaning “have” (23b), the non-verbal possibility modal (23c), and in fact, the auditive (23d).

- (23) a. *Amak ba-ka dapi amak sik-ka bik*
 bee small-3SING.POSS and bee big-3SING.POSS also
*damaska kau lau *(ka)*.
 bush in sit KA
 ‘There are (there sit) both small and big bees in the bush.’ (dict.)

- b. *Ākatka as ya 60 suwinka watah *(ka).*
hour one the 60 minute have KA
‘An hour has 60 minutes.’ (dict.)
- c. *Sulduih ya dî isau pû-naka it *(ka).*
raft the thing many put-3SING.INF possible KA
‘It is possible to put many things on a raft.’ (dict.)
- d. *Was ya utuh-p-î *(ka).*
water the drip-PA-AUD KA
‘The water is dripping.’ (speaker hears it; July08-1.39)

Superficially, what unifies these examples is that they are all (present tense) sentences headed by non-verbal predicates (the auditive being participial in nature). Why such predicates should require *ka* in these contexts, though, is far from clear.

Yet another complication is that, as with the Mayangna counterpart (Benedicto 2007), *ka* is implicated in deontic modality, as shown by (24a). Nevertheless, as (24b) shows, deontic readings are possible in its absence as well.

- (24) a. *Tûruh ya tam-ka bângh-ka bahangh waya*
cow the horn-3SING.POSS sharp-3SING.POSS so little
dak-naka ka.
cut-3SING.INF KA
‘Because the cow’s horns are sharp, they must be cut.’ (dict.)
- b. *Sukutwat ting-ka â-naka.*
padlock hand-3SING.POSS give-3SING.INF
‘We must latch the lock.’ (dict.)

A full understanding of this particle will have to account not just for the core evidential uses, but for the ones discussed in this section as well.

References

- Aikhenvald, Alexandra. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Benedicto, Elena. 2007. Modality without modals. Paper presented as the annual meeting of the Linguistic Society of America, January 4–7, 2007, Anaheim, CA.
- Benedicto, Elena, and Ken Hale. 2000. Mayangna, a Sumu language: Its variants and its status within Misumalpan. In *Indigenous languages*, ed. Elena Benedicto, volume 20. Amherst, MA: University of Massachusetts Occasional Papers in Linguistics.
- Bittner, Maria. 1999. Concealed causatives. *Natural Language Semantics* 1–78.
- Campbell, Lyle. 1997. *American Indian languages: The historical linguistics of*

Native America. Oxford: Oxford University Press.

- Davis, Christopher, Christopher Potts, and Margaret Speas. 2007. The pragmatic values of evidential sentences. In *SALT XVII*, ed. T. Friedman and M. Gibson, 71–88. Ithaca, NY: Cornell University.
- Faller, Martina. 2002. Semantics and pragmatics of evidentials in Cuzco Quechua. Doctoral Dissertation, Stanford University, Stanford, CA.
- Faller, Martina. 2006. Evidentiality below and above speech acts. The University of Manchester, ms.
- Green, Thomas. 1999. A lexicographic study of Ulwa. Doctoral Dissertation, MIT, Cambridge, MA.
- Hale, Kenneth L. 1991. Misumalpan verb sequencing constructions. In *Serial verbs: Grammatical, comparative, and cognitive approaches*, ed. Claire Lefebvre, 1–35. Amsterdam: John Benjamins.
- Hale, Kenneth L. 1997. The Misumalpan causative construction. In *Essays on language function and language type*, ed. Joan Bybee, John Haiman, and Sandra A. Thompson, 199–216. Amsterdam: John Benjamins.
- Hale, Kenneth L., and Samuel Jay Keyser. 2002. *Prolegomenon to a theory of argument structure*. Cambridge, MA: MIT Press.
- Hale, Kenneth L., and Danilo Salamanca. 2002. Theoretical and universal implications of certain verbal entries in dictionaries of the Misumalpan languages. In *Making dictionaries*, ed. William Frawley et al., 25–59. Berkeley, CA: University of California Press.
- Horn, Laurence. 1985. Metalinguistic negation and pragmatic ambiguity. *Language* 61:121–174.
- Karttunen, Lauri. 1972. Possible and must. In *Syntax and semantics, vol. 1*, ed. J.P. Kimball, 1–21. New York, NY: Academic Press.
- Koontz-Garboden, Andrew. 2007. Evidentiality and the Ulwa sentential *ka*. In *The Ulwa people: Identity and environment in a multiethnic context*, ed. Arja Koskinen. Bluefields: URACCAN Press.
- Koontz-Garboden, Andrew. 2009. Ulwa verb class morphology. *International Journal of American Linguistics* 75:453–512.
- Koontz-Garboden, Andrew, and Itamar Francez. In press. Possessed properties in Ulwa. *Natural Language Semantics*.
- Matthewson, Lisa, Hotze Rullmann, and Henry Davis. To appear. Evidentials as epistemic modals: Evidence from St’at’imcets. *Linguistic Variation Yearbook* 7.
- Murray, Sarah E. 2009. Evidentials and questions in Cheyenne. Paper presented at SULA, May 16, 2009, MIT/Havard, Cambridge, MA.
- Waldie, Ryan, Tyler Peterson, Hotze Rullmann, and Scott Mackie. 2009. Evidentials as epistemic modals or speech act operators: Testing the tests. Paper presented at WSCLA, April 3, 2009, Purdue, West Lafayette, IN.
- Young, Philip, and Talmy Givón. 1990. The puzzle of Ngäbére auxiliaries: Grammatical reconstruction in Chibchan and Misumalpan. In *Studies in typology and diachrony: For Joseph H. Greenberg*, ed. William Croft, Keith Denning, and Suzanne Kemmer, 207–243. Amsterdam: John Benjamins.