

Further dimensions of evidential variation: Evidence from Nl̓eʔkepmxcín *

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1. Introduction

In investigating the evidential system of Nl̓eʔkepmxcín (Thompson River Salish), we have found that one of the evidentials, the “non-visual sensory” evidential *nuk^w*, exhibits unexpected contextual restrictions. Unlike the other Nl̓eʔkepmxcín evidentials, and familiar evidentials in languages such as Cuzco Quechua (Faller 2002) or St’át’imcets (Lillooet Salish) (Matthewson et al. 2007), *nuk^w* is only felicitous when the evidence is actually present at the utterance time and available to the speaker. These findings shed new light on several fundamental questions regarding evidentiality: across languages, what evidential distinctions can languages distinguish, and within a language, what distinctions are encoded lexically and which are inferred from context or from other sentential elements?

Semantic investigations of evidentiality (e.g. Faller 2002, Matthewson et al. 2007, Peterson 2010, Murray 2010) have concentrated primarily on two dimensions of evidential variation:

- (A) *Evidence type*: What type of evidence is relevant to the prejacent: is it visual, non-visual, reportative, inferential, etc?
- (B) *Degree of support*: To what degree does the evidence support the prejacent? For example, is the prejacent merely compatible with the evidence, or is it entailed by it?

Matthewson et al. (2007) observed that languages can differ regarding which of these distinctions they lexically encode and which they leave to inference; English modal verbs lexically encode (B) but are ambiguous with respect to (A), while St’át’imcets evidentials lexically encode (A) but are ambiguous with respect to (B).¹

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¹To be precise, this is a narrowing of Matthewson et al.’s (2007) actual typology, which is intended to handle a wider range of elements than just evidential/epistemic ones.

Concentrating on (A) and (B) has proven fruitful, as human languages clearly do encode both distinctions. These distinctions alone, however, may not be sufficient for the full categorization of evidentials; various languages including Kwak’wala (Menzies 2011) and Straits Salish (Turner 2012) have a variety of apparent evidentials that do not obviously or reliably differ by (A) or (B).

A priori, there are a wide variety of evidential distinctions that languages *could* encode, such as:

- (C) Does the speaker believe the evidence to be total or partial? That is, might there be additional or conflicting evidence that the speaker lacks?
- (D) Does the speaker believe that the evidence holds in the actual world? Or could it be merely hypothetical or counterfactual evidence?
- (E) Whose evidence is it?
- (F) When and where did they obtain it? For example, is the evidence present at the time of speaking, or was it something learned in the past?

Our initial investigation of the Nl̓eʔkepmxcín evidentials suggested that they might be similar to the evidentials in Cuzco Quechua (Faller 2002) and St’át’imcets (Matthewson et al. 2007) in lexically encoding (A). And indeed, the Nl̓eʔkepmxcín reportative evidential *ekʷu* and inferential evidential *nke* do seem to be of this type: $P=ekʷu$ is restricted to contexts in which P is supported by verbal report or hearsay, and $P=nke$ is restricted to contexts in which P is supported by inference or conjecture. However, a detailed investigation of the “non-visual sensory” evidential *nukʷ* reveals instead that it leaves (A) ambiguous while putting restrictions on (D), (E), and (F). In fact, it is often used in ways that do not appear “evidential” at all – not to indicate how the speaker knows the proposition, but to express the speaker’s *attitude* towards the proposition.

We therefore propose a revised hypothesis: that $P=nukʷ$ is restricted to contexts in which the speaker is at that moment having a notable sensation or feeling relevant to P , regardless of how it supports P or even whether it supports P at all. Thus, we propose that *nukʷ* is actually an “expressive” (Kaplan 1999, Potts 2005, Schlenker 2007), in the sense of “an element that expresses a momentary state or attitude of the speaker”; while many of its uses are evidential, we suggest that these are listener inferences rather than any lexical specification of *nukʷ* itself.

2. Nl̓eʔkepmxcín

Nl̓eʔkepmxcín (Thompson River Salish), a Northern Interior Salishan language of British Columbia, has been described as encoding a three-way evidential contrast between NON-VISUAL SENSORY *nukʷ*, REPORTATIVE *ekʷu*, and INFERENTIAL *nke* (Thompson and Thompson 1992, 1996). Visual evidence is usually unmarked. These are 2nd position enclitics², sharing the same slot in the 2nd position enclitic string, in complementary distribution with each other and an apparently circumstantial modal *ske*.

²Although phonologically enclitic, they are written as separate words in most orthographic representations of Nl̓eʔkepmxcín.

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- (1) a. ɕalt-wiy **nuk^w** xeʔ e sqeytn
 salty-very SENSE DEM DET salmon
 ‘That fish tastes very/too salty.’
- b. tem **ek^wu** teʔ k s=ʔwoy̓t=s e Patrick ɫ sitist
 NEG REPORT NEG IRR NOM=sleep=3POSS DET Patrick REMOTE night
 ‘Patrick didn’t sleep last night [he says].’
- c. xzum neʔ tek sqeytn ʔes-k^wn-nweñ-s-t-s e ʔuʔsqayx^w, ne:m **nke**
 big PROX OBL salmon STAT-catch-NC-TR-3ERG DET man very INFER
 k s=y̓e=s tek sx^wox^w=s
 IRR NOM=good=3POSS OBL heart=3POSS
 ‘The man caught the great big fish; he must be very happy.’

In (1a) the speaker knows the prejacent proposition through direct sensory experience; in (1b) the speaker knows it by a verbal report from someone else, and in (1c) the speaker knows it by inferring it from other facts.

3. A projective, not-at-issue contribution

Based on semantic accounts of evidential paradigms in other languages (Izvorski 1997, Faller 2002, Matthewson et al. 2007, Murray 2010), we expected to find that these particles would be felicitous only in contexts in which there exists evidence of the appropriate type. Although the various proposals for evidentials differ in terms of their mechanisms, one commonality is that in each, evidentials introduce some manner of projective, not-at-issue meaning (Roberts et al. 2009) – such as a presupposition or not-at-issue assertion – that serves to restrict the felicitous contexts to those in which there exists evidence of the appropriate type.

Something along these lines seems to work for *ek^wu* and *nke* – they are felicitous when there is evidence of the appropriate type, and infelicitous otherwise – but does not capture very well the instances in which *nuk^w* is used, as will be seen in Section 4.

We can establish, however, that whatever the exact contribution of *nuk^w*, it does indeed contribute this meaning in a projective, not-at-issue manner. For one, its evidential contribution is unaffected by negation (Faller 2002, Matthewson et al. 2007, Waldie et al. 2009, Matthewson 2010). If we negate a sentence $P=nuk^w$, the negation serves to deny the prejacent P , not the evidential contribution of *nuk^w*:

- (2) a. ʔəxt **nuk^w** xeʔ e sɫaʔxans
 sweet SENSE DEM DET food
 ‘[I have sensory evidence that] the food is sweet.’
- b. teteʔ k s=ʔəxt=s **nuk^w** xeʔ e sɫaʔxans
 NEG IRR NOM=sweet=3POSS SENSE DEM DET food
 = ‘[I have sensory evidence that] the food is not sweet’
 ≠ ‘[I don’t have sensory evidence that] the food is sweet.’

Furthermore, the evidential contribution is *not-at-issue*: it cannot be used to answer the question under discussion. If the question under discussion is “How do you know that *P*?”, “*P=nuk^w*” does not suffice for an answer.³

- (3) a. məsten-te xeʔ, ʔe xeʔ
try-IMPER DEM, good DEM
‘Try it, it’s good.’
- b. then meʔiy e s=xek-s-t-ex^w k s=ʔe=s xeʔ
how FOC DET NOM=know-CAUSE-TRANS-2S.3O IRR NOM=good=3POSS DEM
‘How do you know it’s good?’
- c. #ʔe nuk^w xeʔ
good SENSE DEM
‘It tastes good.’

Finally, the evidential contribution of *nuk^w* is not targeted by “That’s not true!” denial (Faller 2002, Murray 2010, Matthewson 2011).

- (4) *Context: A guest is invited to a dinner, and the host forgets that he is vegetarian and serves him meat. He does not want to cause a fuss, so he secretly feeds it to the dog when no one is looking. When the guest is asked how he thinks the meat is, he says:*
- a. nex^wm nuk^w k s=ʔe=s
true SENSE IRR NOM=good=3POSS
‘It’s really good!’
- b. #teteʔ xeʔ k s=nex^wm=s
NEG DEM IRR NOM=true=3POSS
‘That’s not true!’
- b’: kezeʔ k^w meʔiy wʔex, teteʔ k s=ʔupi-n-x^w † smic
deceive 2SUB FOC be, NEG IRR NOM=eat-DIR-2SUB REMOTE meat
‘You’re lying; you didn’t eat the meat!’

The host could felicitously accuse the guest of lying or deceit (4b), but the objection “that’s not true” (4b) does not serve to deny the evidential contribution of *nuk^w*. Whether this is reducible to projection through negation, or is in an independent pragmatic property (such as an inability to refer to projected content metalinguistically with demonstratives like “that”), there appears to be something strange about rejecting projected or not-at-issue content with “That’s not true!”

So it appears that whatever *nuk^w* means, exactly, it contributes that meaning in a projective, not-at-issue manner, like other more familiar evidentials. Determining what

³Our consultants noted that you *can* respond as in (3c), but you would not actually be answering the question in (3b).

precisely it contributes, however, requires a detailed examination of the situations in which *nuk^w* is and is not used.

4. In what contexts is *nuk^w* used?

4.1 Non-visual evidence

As previously reported (Thompson and Thompson 1992, 1996), *nuk^w* is used in situations where the speaker is witnessing the event or state in question, but not is not visually witnessing it – they feel it, or hear it, or taste it, or smell it.

(5) ɕalt-wiy **nuk^w** xeʔ e sqeytn
salty-very SENSE DEM DET fish
'That fish tastes very/too salty.'

(6) ʕelt **nuk^w** xeʔ
sticky SENSE DEM
'It's sticky.'

It is worth noting that *nuk^w* appears both in sentences simply describing the state or event (7), and in sentences where the speaker says "I hear/feel/smell/etc. <the state or event>" (8).

(7) snkʔəp **nuk^w** xeʔ
coyote SENSE DEM
'It's a coyote [that I hear].'

(8) qeʔnim-ne **nuk^w** xeʔ e Mr. Strang
hear-1S.3O SENSE DEM DET Mr. Strang
'I hear Mr. Strang.'

nuk^w is not in general used to mark knowledge known by direct witness (9). Below, we will see that there are exceptions to this, but nonetheless, plain statements of visual fact are rarely marked with *nuk^w*, and attempts at inserting it are rejected.

(9) ʔes-kweliʔ (***nuk^w**) xeʔ tek n=ʕpiçeʔ
STAT-green (SENSE) DEM OBL 1POSS=shirt
'My shirt is green.'

4.2 Internal states

nuk^w contexts are not, however, limited to "senses" narrowly construed; a wide range of feelings and experiences can be marked with *nuk^w*. For example, *nuk^w* is frequently used when the speaker reports his or her internal states:

(10) teyt kn **nuk^w**
hungry 1SUB SENSE
'I'm hungry.'

- (11) n[˙]kex-cin kn **nuk^w**
dry-mouth 1SUB SENSE
'I'm thirsty.'

Many of these are expressions of various sorts of discomfort:

- (12) q^wno^xw kn **nuk^w**
sick 1SUB SENSE
'I'm feeling sick.'

- (13) x^añih kn **nuk^w**
hurt 1SUB SENSE
'I hurt.'

4.3 Emotional states

nuk^w likewise appears when the speaker is reporting their own emotional states:

- (14) ze[˙]wt kn **nuk^w**
annoy 1SUB SENSE
'I'm annoyed [with someone].'

- (15) paq^wu? kn **nuk^w**
afraid 1SUB SENSE
'I'm afraid.'

In parallel to the internal states, these emotional usages tend mostly to occur with negative feelings.

- (16) q^wno^xw **nuk^w** k n=sx^wox^w
sick SENSE IRR 1POSS=heart
'I'm sad.'

- (17) ma[˙]t **nuk^w** k n=sx^wox^w
broken SENSE IRR 1POSS=heart
'I'm heartbroken.'

4.4 Suspicions, hunches, and premonitions

The “sensory” aspect of *nuk^w* is not restricted to the five ordinary senses, or physical senses in general; it also applies to other means of knowing such as extrasensory perception, having hunches or premonitions, and intuition.

- (18) puys-t-x^w **nuk^w** səx^wsux^ws
kill-TRANS-2S.3O SENSE grizzly
'[premonition tells me] you've killed a grizzly.' (Thompson and Thompson 1996)

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- (19) tix^wçiy k^w **nuk^w**
murder 2SUB SENSE
'I guess you've murdered somebody [said by a blind old woman who sensed crime].'
(Thompson and Thompson 1996)

It does not seem necessary for the speaker to even *know* how they know; the sensation of "just knowing" seems to be enough:

Context: The speaker is at the dentist, and has a feeling that something just isn't right about their business.

- (20) te **nuk^w** teʔ çiy k s=yə=s
NEG SENSE NEG be.like IRR NOM=good=3POSS
'It just didn't seem right.'

4.5 Realization and surprise

Similarly, the experience of coming-to-know appears to be sufficient to license *nuk^w*: it is frequently used in cases where the speaker has just realized something or has been surprised.

- (21) k^wi-s-t-ene **nuk^w**
fall-CAUSE-TRANS-1S.3O SENSE
'Oops, I dropped it.'

Context: The speaker turns and sees that Patrick has fallen asleep during the elicitation.

- (22) ʕwoy̯t **nuk^w** xeʔ e Patrick
sleep SENSE DEM DET Patrick
'Patrick's fallen asleep.'

This may explain why *nuk^w*, despite its apparent non-visual restriction, can and does appear with visual evidence when the speaker has just realized or been surprised by the prejacet.

- (23) ʔex k^w **nuk^w**
arrive 2SUB SENSE
'Hello.' (Lit: 'Oh, so you've arrived.') (Thompson and Thompson 1996)

Context: The speaker looks out the window and notices that a sunny day has given way to dark clouds.

- (24) q^wuy̯iʔ **nuk^w**
cloudy SENSE
'Look, it got cloudy.'

4.6 Regret, dismay, or embarrassment

nuk^w is also used, on occasion, in contexts where the speaker is expressing regret or dismay:

Context: The speaker had been hoping that it was Thursday.

- (25) *çiy* *wʔex nuk^w* *ʕuʔ* *keʔles-çt*
 be.like be SENSE JUST three-time
 ‘Alas, it’s only Wednesday!’

nuk^w can also carry with it feelings of embarrassment or even apology (Mandy Jimmie, p.c.). In (26), the speaker is apologizing for cutting off a conversation that had been going well.

- (26) *lep-e-ne* *nuk^w* *ʕum* *q^wincut-m-t-m*
 forget-TR-1S.3O SENSE TEMP speak-MID?-TR-2PL.SUB
 ‘I forget what we were talking about.’

4.7 Attitudes and opinions

nuk^w also is used, on occasion, to mark attitudes and opinions towards people or things.

- (27) *nex^wm nuk^w* *k* *s=ye-min-cn*
 true SENSE IRR good-REL-TR.1S.2OB
 ‘I love you.’
- (28) *te nuk^w* *teʔ* *k* *s=ye-cin-mn-ne* *e* *ti*
 NEG SENSE NEG IRR NOM=good-mouth-REL-1S.3O DET tea
 ‘I don’t like that tea.’
- (29) *sqaqxa nuk^w*
 dog SENSE
 ‘What a dog⁴ he is!’

Some of these may be able to be put in a different category as well – (27) could be classified as an emotional report, and (28) could be a taste report, but (29) is rather unlike the emotion or taste reports above, in that the prejacent *P* is not describing the event of feeling, but adding emotive content to a description of someone else.

5. A new hypothesis

As we encountered more situations in which *nuk^w* is used, our initial hypothesis became strained.⁵ Many spontaneous uses of *nuk^w* were not restricted to contexts of non-visual evidence. In fact, many uses did not seem to be intended to specify the speaker’s *evidence* that

⁴Calling someone a dog is a serious insult.

⁵In particular, when we spent more time with our consultants outside of a work context, we encountered many spontaneous uses of *nuk^w* that we had not encountered during elicitation.

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P, but rather their *reaction* to or *attitude* regarding *P* (surprise, dismay, suspicion, apology, disgust, etc.).

We therefore propose a different account: that *nuk^w* is fundamentally “expressive”, in the sense that it expresses a momentary state or attitude of the speaker (Kaplan 1999, Potts 2005).

- (30)
- a. *ouch*: the speaker is experiencing pain
 - b. *oops*: the speaking is witnessing a minor mishap
 - c. *alas*: the speaker is experiencing melancholy or regret
 - d. *wow*: the speaker is experiencing amazement
 - e. *damn*: the speaker is experiencing negative feelings
 - f. *ew*: the speaker is experiencing disgust
 - g. *oh*: the speaker has just realized or remembered something (among other uses)

One point in favor of an expressive analysis of Ntɛʔkepmxcín *nuk^w* is that pretty much all of the above contexts are expressed with *nuk^w*.

This account is also plausible given the likely etymology of *nuk^w*: as a root, it means something like “upset or negatively affected by something” (First Voices 2009, Thompson and Thompson 1996).⁶

ʔes-nuk^w	1. wrong, incorrect, not right, inappropriate, immoral
	2. affected, upset by some event, frightened, startled
nuk^w-uk^w	1. fall ill, sick [as result of black magic], enchanted, in trance, possessed
	2. distracted [by some experience], have ill effects from natural incident, be frightened, startled by strange event
nuk^w-uk^w-s-c	1. (manage to) affect someone adversely
nuk^w-e-s	1. [of shaman] make someone ill, sick, cast spell on someone, bewitch...
	2. [of event] startle someone

Our best characterization of *nuk^w* is that it is used whenever the speaker is experiencing a notable sensation or feeling. This is admittedly a very broad set of contexts, but so are the contexts in which *nuk^w* is used.

It does, however, make some predictions about the distribution of *nuk^w*: it should only occur when the relevant experience is being had by the speaker, when the relevant experience is being had in the present, and when the relevant experience actually occurred.

⁶The use of *nuk^w* as a second-position enclitic does not, as we have seen above, express exclusively negative reactions, but it is worth noting that sentences containing *nuk^w* rather more often express negative feelings and reactions than positive ones.

6. Restrictions on *nuk^w*

6.1 The first-person requirement

The first and most obvious restriction that *nuk^w* appears to put on the context is that it requires the relevant experience to be had by the speaker, as in (31a). In (31b), the relevant experience is being had by Scott; even though there is the appropriate sort of evidence in the context, *nuk^w* is infelicitous unless the experience is being had by the speaker.

- (31) a. *teyt kn nuk^w*
 hungry 1SUB SENSE
 ‘I’m hungry.’
- b. *#teyt nuk^w e Scott*
 hungry SENSE DET Scott
 ‘Scott is hungry.’

In this it is unlike other, more familiar evidentials, which, although usually speaker-oriented, may instead have an addressee, or third-person orientation depending on the sentence. For example, evidentials, modals, and other elements with judge parameters (like “seems”) tend to shift from first-person judges to second-person judges in questions (Faller 2002, Speas and Tenny 2003, Littell et al. 2009).

- (32) a. *çelt ek^{wu} e q^wo?*
 cold REPORT DET water
 ‘The water is cold [according to what I’ve heard].’
- b. *ke? ek^{wu} k s=çelt=s e q^wo?*
 whether REPORT IRR NOM=cold=3POSS DET water
 ‘Is the water cold [according to what you’ve heard]?’

Another strategy for shifting a judge parameter away from the first person is to embed it under a verb of saying. In (33), the first *ek^{wu}* invokes a report that the speaker received, while the second *ek^{wu}* invokes a report that Cameron received.⁷

*Context: The speaker is on the phone with Cameron, who is at the beach.
 Cameron is reporting that other people at the beach say the water is cold.*

- (33) *cut xe? ɪ Cameron k s=cut=s ek^{wu} e seytknmx k*
 say DEM REMOTE Cameron IRR NOM=say=3POSS REPORT DET people IRR
s=nçelt=s ek^{wu}
 NOM=cold=3POSS REPORT
 ‘Cameron says that people say the water’s cold.’

⁷If these two instances of *ek^{wu}* did not refer to different reports, only one would have appeared; double-*ek^{wu}* sentences do not otherwise seem to occur, and attempts at inserting superfluous instances of *ek^{wu}* are rejected.

nuk^w is exceptional in that it does not allow its interpretation to be shifted in these ways:

- (34) *cut e Cameron k s=qəmqəmt=s **nuk^w**
say DET Cameron IRR NOM=warm=3POSS SENSE
Intended: ‘Cameron says it [the water] feels warm.’

Context: Patrick ate some “miracle fruit” (Synsepalum dulcificum) that temporarily turns sour foods to sweet ones.

- (35) *λəxt **nuk^w** xe? e leməns cut xe? e Patrick
sweet SENSE DEM DET lemons say DEM DET Patrick
Intended: ‘Lemons taste sweet according to Patrick.’

Nor will putting *nuk^w* in a question shift its interpretation:

- (36) ke? (***nuk^w**) k e?=s=teyt
whether SENSE IRR 2POSS=NOM=hungry
‘Do you feel hungry?’
- (37) ke? (***nuk^w**) xe? k s=çlox^w=s
whether SENSE DEM IRR NOM=hot=3POSS
‘Does it [the tea] feel hot?’

Our consultants always reject such questions and sometimes remark on just how strange they sound. After several attempts at trying to translate just how awkward sentences like these are (along the lines of “I know that are you hungry?” and “You’re very fine to yourself that you are, that somebody else is thirsty.”), one consultant offered “It’s like you’re asking a question with an answer, or answering with a question.”

Given the account of *nuk^w* offered here, in which *nuk^w* lexically encodes person rather than leaving it up to context, the problem with questions such as (36) and (37) is that they simultaneously express that the speaker is having a sensation and ask the addressee about it: it would be tantamount to asking something like “According to my sensory experience, are you hungry?”⁸

6.2 The present requirement

nuk^w is also limited to present feelings and sensations.

- (38) çlox^w k^w **nuk^w**
hot 2SUB SENSE
‘You feel hot [I just took hold of you].’ (Thompson and Thompson 1996)

Sensory evidence gained in the distant past, even if had by the speaker, does not appear to be enough to license *nuk^w*; a consultant noted in response to (39) that “It means you’re there.”

⁸It is possible that *nuk^w* could occur in some questions – questions towards which the speaker is expressing surprise or dismay, for example – but we have not yet encountered or managed to construct any.

- (39) #čelcin **nuk^w** xeʔe n ɫ rusya
 cold.weather SENSE DEM LOC REMOTE Russia
 ‘It’s cold in Russia.’

Some fuzziness regarding “present” is, however, allowed; sometimes *nuk^w* was used or judged acceptable in sentences describing the recent past. Its acceptability, however, seems to depend in part on what kind of sensation is being described.

- (40) a. q^wnoχ^w kn **nuk^w** xeʔe ɫ s=ʕap
 sick 1SUB SENSE DEM REMOTE NOM=dark
 ‘I was sick last night.’
- b. #teyt kn **nuk^w** xeʔe ɫ s=ʕap
 hungry 1SUB SENSE DEM REMOTE NOM=dark
 Intended: ‘I was hungry last night.’

The few past-experience *nuk^w* sentences we have encountered (or had judged acceptable by consultants) all described sensations that linger or have some continued effect on the present. We see in (41) another instance of *nuk^w* being used to describe a sensation that occurred roughly an hour in the past, but one that notably lingers.

- (41) splənd **nuk^w** xeʔ
 skunk SENSE DEM
 ‘It was a skunk.’

nuk^w fails to appear when describing dispositions to feel, rather than momentary feelings. For example, it appears when describing a current experience of fear (42a), but not when describing one’s phobias (42b).

- (42) a. paq^wuʔ kn **nuk^w**
 afraid 1SUB SENSE
 ‘I’m afraid.’
- b. paq^wuʔ-sm-ne (#**nuk^w**) xeʔ e sneyiʔ
 afraid-1OBJ-1S.3O (SENSE) DEM DET ghost
 ‘I’m afraid of ghosts.’

Likewise, *nuk^w* is used for a report of the speaker’s current hunger (43a), but not for a description of when the speaker tends to be hungry (43b).

- (43) a. nex^wm **nuk^w** k n=s=teyt cʔeyɫ
 true SENSE IRR 1POSS=NOM=HUNGRY now
 ‘I’m very hungry right now.’
- b. nex^wm ʔex k n=s=teyt, ʔe qilt wn
 true be IRR 1POSS=NOM=hungry, when wake 1CONJ
 ‘I’m very hungry when I wake up.’

Our consultants did allow *nuk^w* in some “when”-type sentences, but in each case it was when current circumstances satisfied the conditions:

Context: We’ve been eating bannock all afternoon.

- (44) nex^wm ?ex kn **nuk^w** k’?ez-wiy, ?e ?upi-ne ws e seplil
 true be 1SUB SENSE tired-very, when eat-1S.3O SBJN DET bread
 ‘I get very tired when I eat bread.’

These sorts of “explanation” sentences, which invoke a tendency to describe the speaker’s momentary state, are felicitous with *nuk^w*.

6.3 The actuality requirement

In addition to the requirement that the experience be had by the speaker, and at the utterance time, the event must actually be occurring; it cannot just be an experience had by [a counterpart of] the speaker in a different possible world. In such contexts, *nuk^w* does not appear:

- (45) a. e λəxt ws e ti, ?e-cin-mn-ne ske xe?
 when sweet SBJN DET tea, like-mouth-REL-1S.3O CIRC DEM
 ‘If the tea were sweet, I would’ve liked it.’

When the circumstantial *ske* is replaced with *nuk^w* in such sentences⁹, the result seems to be the same type of “explanation” sentence that we encountered before:

- (45) b. e λəxt ws e ti, ?e-cin-mn-ne **nuk^w** xe?
 when sweet SBJN DET tea, like-mouth-REL-1S.3O SENSE DEM
 ‘I like it when the tea is sweet.’

We see the same shift when *nuk^w* is added to the sentence in (46a); the resulting sentence (46b) has a similar “explanatory” flavor.

- (46) a. nex^wm ske k s=?e-min-cn, ?e ws ?e
 true CIRC IRR NOM=good-REL-1S.2O, when SBJN good
 e?=s=qwin-cem wxw.
 2POSS=NOM=speak=2S.1O 2CONJ
 ‘If you spoke well to me I would like you better.’
- b. nex^wm **nuk^w** k s=?e-min-cn, ?e ws ?e
 true SENSE IRR NOM=good-REL-1S.2O, when SBJN good
 e?=s=qwin-cem wxw.
 2POSS=NOM=speak=2S.1O 2CONJ
 ‘I love you when you talk to me in a good way.’

⁹As noted above, the evidentials *nuk^w*, *ek^wu*, and *nke* and the circumstantial modal *ske* are in complementary distribution.

7. Discussion

Although we had originally hypothesized that the use of a sentence containing *nuk^w* required non-visual sensory evidence, this could not be maintained in light of the wide variety of contexts *nuk^w* is found. Although *nuk^w* does seem to introduce a projective, not-at-issue meaning, this meaning could not be “There exists non-visual sensory evidence that *P*.”

We have concluded instead that *nuk^w* does not require non-visual evidence that *P* and, indeed, does not require any particular sort of evidence regarding *P*. Instead, *nuk^w* merely requires a sensation or feeling *relevant* to *P*. This sensation can be (and often is) interpreted as the speaker’s evidence that *P*, but it could also be interpreted as their reaction to *P*, or their attitude towards *P*.

An inevitable terminological question arises from this account: is *nuk^w* still an evidential at all? If we wish to restrict the term “evidential” only to lexical items that introduce restrictions on evidence type, or lexical items that communicate nothing but evidential information, then the answer must be “no”. However, we think that there are nonetheless good reasons to allow a broader definition of “evidential”.

First and perhaps most importantly, communicating a speaker’s source of evidence is still one of the most common functions of *nuk^w*, and contrariwise, adding *nuk^w* to a sentence is one of the most common ways speakers have to indicate how they know something. If we were to limit the study of “evidentiality” only to words that contributed evidential meaning in one particular way, we would be capable of only a partial answer to the question “By what means to humans communicate the evidence sources for their utterances?”

Secondly, when investigating evidentiality we often do not investigate just a single evidential, but instead investigate evidential systems. Even if *nuk^w* is not a prototypical evidential, it forms part of the Nle?kepmxcín evidential paradigm: it occurs in the same morphosyntactic “slot” in the sentence as other evidentials and is in complementary distribution with them, and evidential uses of *nuk^w* allow listeners to deduce what kinds of evidence are not available to the speaker.¹⁰ Although the elements in this system are not, as we have shown, semantically or pragmatically uniform, the resulting system is otherwise a reasonably ordinary evidential system.¹¹ In the course of everyday evidential communication, the *nuk^w ~ ek^wu ~ nke* paradigm acts just as a more semantically uniform paradigm would; it is only in special contexts, and when examining the broader uses of *nuk^w*, that their semantic disuniformity is apparent.

Whether or not we accept *nuk^w* as fundamentally evidential or not, its variance from its paradigmatic peers has consequences for other investigations of evidential systems. Investigations of evidential systems will sweep up lexical items like *nuk^w* along with the “true” evidentials, and therefore from a practical point of view it is worthwhile to consider investigating the person, time, and actuality dimensions of evidentials along with evidence type and degree of support.

nuk^w exhibits a complex of restrictions that we suspect other evidentials (like Gitksan

¹⁰For example, one consultant responded to (7) with “It means you can’t see it.”

¹¹Specifically, it is the type of system classed as a “B4” in Aikhenvald’s (2004) typology of evidential systems.

Further dimensions of evidential variation: Evidence from Nłeʔkepmxcín

n'akw (Peterson 2010) or Cuzco Quechua =*chusina* (Faller 2011)) may share as well. It may not be that these share all the properties of *nuk^w*, but there may be other evidentials that show exactly this “expressive” bundle of restrictions. Could such “inference-from-senses” evidentials just be inferential evidentials with the here-and-now restrictions of *nuk^w*?

This provides stimulus a further research question about how evidentials can vary. What restrictions can an evidential lexically encode regarding the person, temporality, and actuality of an evidential event? At minimum, we have to allow for evidentials like *nuk^w* with the “expressive bundle” of restrictions, and ones with no such lexical restrictions.

The strongest and most restrictive hypothesis would be that, with respect to person, time, and actuality restrictions, these are the *only* two kinds of evidentials. Either evidentials have an expressive component, and so are limited to momentary, actual speaker evidence, or they lack an expressive component, and are not restricted along any of these axes.

This would predict that whenever we find a present time restriction, we would also find the other two restrictions, and vice-versa. It would also rule out a variety of possible (but not yet attested) evidentials, such as evidentials limited to 2nd person experiences, evidentials limited to past evidence, evidentials limited to hypothetical, irrealis, or false evidence, etc. Some of these are unlikely, but others seem quite plausible. For example, it would seem reasonable for an evidential to require that the evidence in question actually exists, but not restrict who obtained it or when.

Human languages may or may not have such evidentials, but our investigation of *nuk^w* does at least suggest that human languages can be sensitive to evidential distinctions beyond evidence type and degree of support, and that person, time, and actuality may be fruitful directions for future research on evidential systems.

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