INTRODUCTION

Evidentials are grammatical markers which indicate the warrant for a speaker’s statement: for example, whether a reported event was witnessed first-hand, or whether the speaker was told about it by someone else. For Algonquian, Murray (2016) demonstrates that Cheyenne exhibits a striking paradigm for expressing evidential notions. I show below that Meskwaki also encodes a similar set of evidential functions but the organization of the system is quite different from that of Cheyenne. Also discussed are other Meskwaki constructions which bear a resemblance to prototypical evidential constructions in expressing speaker uncertainty.

Definition of evidentiality

Brugman and Macaulay (2015), in a recent long survey article on evidentiality, posit the following definition:

\[(1) \text{ "...two properties are criterial: (i) marking source of evidence and (ii) membership in grammatical categories. Other properties vary cross-linguistically: presence of epistemic, illocutionary, or mirative meaning; speaker deixis; obligatoriness; complementarity of meaning with other items; and truth-conditionality." (Brugman and Macaulay 2015:201)}\]

Brugman and Macaulay take a fairly conservative position, viewing the issue of SOURCE OF EVIDENCE as criterial, along with stipulating that the evidentials must be expressed as a grammatical category and not, for example, with an optional adverb such as *reportedly* in English. Other properties that have been claimed to be part of evidentiality, such as the parameter of speaker certainty discussed below, are taken to be optional components which may vary cross-linguistically.

Cheyenne evidential paradigm

The most striking cases of an evidential opposition are those in which an evidential morpheme appears in a single inflectional slot, creating a paradigm of evidential possibilities. Cheyenne, as described by Murray (2016), is one such language. Consider the following set of examples from Murray (2016:493-4), citing forms from Leman (2011):

\[(2) \begin{align*}
\text{a.} & \quad E-hoo’koho-∅. \\
& 3-rain-WTN \\
& \text{"It’s raining, I witnessed."} \\
\text{b.} & \quad E-hoo’kohó-nése. \\
& 3-rain-RPT.SG.INAN \\
& \text{"It’s raining, they say’ or ‘It’s raining, I hear.’} \\
\text{c.} & \quad E-hoo’kohó-neho. \\
& 3-rain-NAR.SG.INAN \\
& \text{"It rained, it’s told.’} \\
\end{align*}\]
d. **Mó–hoo’kóhó–hané–he.**
   Q+3–rain–NEG+RA=INF
   ‘It’s raining, I gather’ or ‘It must be raining.’

In (2a) a verb with no overt morpheme in the evidential slot must be interpreted as the speaker having directly witnessed the described event. In (2b) the suffix -nése indicates that the speaker is reporting what they were told. (2c) exhibits a different suffix -neho, which marks the assertion as being part of a traditional narrative. (2d) contains an affix complex which marks the assertion as an inference on the part of the speaker.

**MESKWAKI EVIDENTIALS**

With the Cheyenne paradigm in (2) as background, let us now examine how Meskwaki indicates a speaker’s warrant for making a statement. Meskwaki expresses the same range of evidential functions as the Cheyenne system—hearsay/inference/traditional narrative—but Meskwaki exhibits what Brugman and Macaulay (2015:224) term the scattered type of system. That is, the evidential markers are not in a single morphological slot forming a paradigmatic opposition. Instead, the strategies employed in Meskwaki include a second position enclitic particle, an inflectional paradigm specialized for one of the evidential functions, and appearance of a subordinate clause verbal paradigm in main clause contexts to mark another function. Each of these strategies is explicated below.

*Second position enclitic =ipi: hearsay*

Meskwaki exhibits a number of second position enclitic particles which attach to the first phonological word of the clause, most with pragmatic functions such as emphasis or contrastive focus (Goddard 2015). A particularly frequent second position enclitic is the hearsay evidential =ipi. (Note that the first vowel of this enclitic is frequently deleted by clitic sandhi (cf. Goddard 1991).)

(3) \( =ipi < i-pi \) ‘one says (thus), people say (thus)’
   \( i- \) ‘say thus’ + \( -pi \) ‘X’ (unspecified subject, independent indicative)

\( =ipi \) is a grammaticalized form of the Animate Intransitive verb stem \( i- \) ‘say thus’ inflected with the suffix \( -pi \), the independent indicative form of the unspecified subject suffix denoting people in general.

The textual passage in (4), taken from a long text published in Dahlstrom (2003), illustrates the function of \( =ipi \). The context of this passage is that the Meskwakis have defeated the Sioux, their traditional enemies, in a battle, killing all but one. The one survivor is sent home to tell the story and given detailed instructions about what to say. The hero ends with, ‘As for you, right when you finish talking is when you will die.’ The Sioux man goes back home, recounts what happened in the battle and says, ‘As for me \(<\text{HEARSAY EVIDENTIAL}>\) I will die.’

\[\text{<HEARSAY EVIDENTIAL> I will die.}\]
“ki-nake-hwi-na ki-šetone-moyanemeko i-ni wi-hnepo-hiyani,” e-hineči,
“ki-na-ke-hi=wi-na  ki-šetone-mo-yan=me ko
you=moreover=CONTRAST   PERF.talk-2/SUBJUNCT=EMPH
i-ni wi-h-nepo-hi-yani,” e-h-in-eči,
then   FUT-die-2/AOR   AOR-say.thus.to-X>3/AOR
“‘But as for you, right when you finish talking
is when you will die,’ he was told,’
[ 9 clauses intervene]

e-ah-htawa-sa-čiće e-hnepo-čiće.
IC-ki-ša-čimo-či=me ko,
IC-PERF.tell.story-3/CH.CONJ=EMPH
I=moreover=CONTRAST=HRSY  1-FUT-die-1/IND   AOR-declare.thus-3/AOR
e-h-a-htawa-sa-čiće    e-h-nepo-čiće.
AOR-suddenly.fall.on.back.DIM-3/AOR   AOR-die-3/AOR
‘After he had finished the whole story,
“And as for me, they say I will die,” he declared.
The poor guy keeled over backward and died.’ (Dahlstrom 2003:43-44)

Since the source of the Meskwaki hearsay evidential is a verb of quoting, one
might ask if the form in (4) is merely an instance of a quoting verb. The answer to that
question is no: the enclitic seen in (4) and elsewhere has undergone grammaticalization to
become an evidential particle and is not functioning as a verb. Evidence against analyzing
=ipi in (4) as an ordinary verb of quoting comes from the shift of person between the two
parts of (4). In the represented speech containing the evidential, the subject of nepo-hi-
‘die’ is first person. But if =ipi were functioning as a quoting verb framing a direct
quotation, we would see a second person subject of ‘die’, matching the earlier utterance.
Alternatively, if the represented speech were presented as indirect quotation (possible
though infrequent in Meskwaki), the verb nepo-hi- ‘die’ would be inflected in the aorist
conjunct paradigm, used for subordinate clauses, instead of in the independent indicative
paradigm found in main clauses. Since the clause in question exhibits both a shift in
person and main clause independent indicative inflection, it is clear that =ipi here is not a
regular quoting verb but instead a grammaticalized evidential particle.

The passage in (5), taken from the text in Dahlstrom (1996), provides a further
evidence of the use of =ipi, here reporting what the subject was told in a vision or dream:

(5)  o-ni-na oškinawe-he-ha, “nahi, natawi-po-ni-mahkate-wi-no,”
e-hineči e-hina-hpawa-či.
o-ni=i-na oškinawe-he-ha    “nahi, natawi-po-ni-mahkate-wi-no,”
and.then=that young.man.DIM    okay, time.to-stop–fast-2/IMP
e-h-in-eči     e-h-ina-hpawa-či.    […]
AOR-say.thus.to-X>3/AOR   AOR-dream.thus-3/AOR
And then that young teenage boy, “Okay, it’s time for you to stop fasting,” he dreamed that he was told. […]
When his father came, he told him what he had dreamed.
“**They said** I should stop fasting,” …’ (Dahlstrom 1996:130)

In (5) we again see the hearsay evidential =ipi used to report a previous utterance. The original utterance is by the spirits whom the young man sees in a dream; they tell the young man to stop fasting, using an imperative form with second person singular inflection. The young man then reports this to his father, shifting the person of the subject of po·ni·mahkate·wi- ‘stop fasting’ to first person singular, and attaching the evidential enclitic to the right of the first phonological word, the preverb po·ni- ‘stop, cease’.

**Inference: plain interrogative inflection**

A very different strategy is employed in Meskwaki to indicate that an utterance is an inference: that is, that the speaker is deducing after the fact that something has occurred. Such utterances are marked by inflecting the verb in the **plain interrogative paradigm**. For example, the context for (6) is that the speaker has seen tracks in the snow and signs of a struggle. He infers that a bear has killed his son:

(6)  
nesekokwe·nima·hi·na mahkwani  
nes·ekokwe=ma·hi=i·na mahkw=ani  
kill·3’>3/plain.interr=after.all=that.anim bear·obv  
‘A bear must have killed that guy, after all.’ (Dahlstrom 1996:140)

The label of ‘plain interrogative’ for this inflectional paradigm deserves some comment. This verbal paradigm is one of five belonging to the interrogative order in the Meskwaki system, characterized formally as including a suffix -w within the complex of suffixes.² A different paradigm within the interrogative order, the **interrogative participle**, is used for embedded questions (Dahlstrom in press) and is presumably the motivation for labelling the entire order ‘interrogative’ (cf. Jones 1911:826). The other paradigms within the interrogative order do not function as questions, but rather exhibit various irrealis functions. For the paradigm of interest here, the plain interrogative, the label ‘plain’ indicates that the ablaut rule of Initial Change does not apply to the left edge of the verb stem.

An additional example of plain interrogative verbal inflection marking an utterance as an inference may be seen in (7):

(7)  
an iwisa·hikwe·ni  
an iwisa·hi·kwe·ni  
run.fast.dim·3/plain.interr  
‘He must have run fast.’ (Kiyana 1913:1005)
(7) is from a long text about the culture hero Wisahkeha; the speakers are young women who failed to keep up with a no longer visible Wisahkeha and infer that Wisahkeha must have run so fast that he is out of sight.

The following example illustrates the use of plain interrogative verb inflection with a first person subject:

(8) \(ki̲sha̲\cdot kotekwa\cdot mo̲-hi\cdot wa̲-ne̲ni\)

ki̲sha̲·kotekwa·mo·hi·wa·ne·ni
sleep.soundly.DIM-1/PLAIN.INTErr
‘I must have been sound asleep.’ (Kiyana 1913:496)

(8) shows that the inferential evidential can be used about one’s own previous experiences if one is not conscious at the time.

**Traditional narratives: aorist conjunct inflection on verbs in main clauses**

Like Cheyenne, Meskwaki has a way of indicating that a narrative is a traditional one, rather than a personal story. AORIST CONJUNCT verb inflection has as its primary function encoding subject and object agreement in subordinate clauses, both complement clauses subcategorized for by the matrix verb and adjunct clauses expressing adverbial notions. In traditional Meskwaki narratives, however, we find aorist conjunct inflection appearing also in the main clauses of the sentences of the story. (9) is one of countless examples that could be provided of this use, here as the very first sentence of a story.

(9) \(na̲šawaye nekoti neniwa okwisani e̲-hmahkate\cdot wi̲-na̲-či\)

našawaye nekoti neniwa o-kwis-ani e·hmahkate·wi·n-a·či
long.ago one man 3-son-OBV AOR-make.O.3>3’/AOR
‘Long ago a certain man made his son fast.’ (Dahlstrom 1996:129)

Other examples of main clause aorist conjunct verbs may be seen in the non-quoted segments of (4) and (5) above.

Personal narratives, on the other hand, such as *The Autobiography of a Meskwaki Woman* (Goddard 2006a), use independent indicative inflection in many of the main clauses:

(10) \(ke̲·htenameko ke̲·keya̲·h nenahiha·wa\)

ke·htena=meko ke·keya·hi ne-nahih-a·wa
truly=EMPH eventually 1-know.how.to.make-1>3/IND
‘I really did learn how to make it [a yarn belt] eventually.’ (Goddard 2006a:32)

Here the narrator is telling about her own life, rather than relating a traditional story, so the regular inflection for main clauses is used.

**Hearsay enclitics in narratives**

The Cheyenne system makes a clear distinction between the reportative evidential and the narrative evidential: only one can be chosen for the inflectional slot. Since Meskwaki
evidentiality is of the scattered sort, there is no paradigmatic blocking preventing a hearsay enclitic being used in narratives.

**Shifts to independent indicative (etc.) within the narrative**

A fairly common phenomenon in Meskwaki narrative texts is that the narrator will sometimes step out of the narrative mode, adding a remark in one of the inflectional paradigms typical of face-to-face conversation. Such asides are often accompanied by the hearsay evidential:

(11) *aniwe-we·kesiniwanipi pe·hki i·nini ahkohko·ni,*
    *aniwe·we·keši·niwani=ipi pe·hki i·nini ahkohkw·ani,*
    have.loud.sound-3'/IND=HRSY really that.ANIM.OBV drum-OBV
    That drum really had a loud sound, it's said, … (Dahlstrom 2015:191)

The verb in (11) is not negated, so the inflectional paradigm selected for this aside is the independent indicative.

Negated main clauses express negation with the negative particle *a·kwí* ‘not’ plus negative inflection on the verb. This pattern is also seen in asides by a narrator, and may be accompanied by a hearsay evidential:

(12) *na·hka a·kwipi nahi-mi·hkemehkwe·we·čini,*
    *na·hka a·kwí=ipi nahi–mi·hkemehkwe·we·čini,*
    also not=HRSY be.given.to–court.women-3/NEG
    Also, it's said, he never chased women, … (Dahlstrom 2015:188)

In contrast to (12), (13) illustrates how narrative clauses marked with the evidential strategy of employing aorist conjunct inflection on main clauses express negation: a negative preverb *pwa·wi*– ‘not’ is added to the verb complex, allowing the aorist conjunct inflection to surround the preverb-verb compound:

(13) *e·hpwa·wi–ki·šihto·či na·tawino·ni*
    *e·h-pwa·wi–ki·šiht-o·či na·tawino·ni*
    AOR-not–fix-3>0/AOR medicine
    ‘He hadn’t prepared any medicine’ (Dahlstrom 2003:36)

Another syntactic construction typical of main clauses in face-to-face conversation is an equational sentence with a zero copula. Such equational sentences are also found as asides by a narrator and are likely to include a hearsay evidential:

(14) *oškinawe·he·hanipi ke·hekwičini.*
    *oškinawe·he·h·ani=ipi IC·kehekwi-čini.*
    young.man.DIM-OBV=HRSY IC·lose.O2.as captive 3/PART/3’
    ‘It was a young teenage boy, it's said, who gave him the slip.’
    (Dahlstrom 2015:146)
The second word in (14) is a conjunct participle, ‘the one who gave him the slip’, equated with the clause-initial noun.

Evidential particles at episode boundaries
Besides the use of the hearsay evidential in asides by the narrator, the enclitic =ipi may sometimes occur at the start of a new episode of the story (cf. Dahlstrom 1996 for discussion of episode structure):

(15)  kaho·ni=ipi e·howi·wiči.
  kaho·ni=ipi e·h·owi·wi·či.
  so.then=HRSY AOR-have.wife-3/AOR
So then, it's said, he got married. (Dahlstrom 2015:187)

The following sentences in the episode typically do not occur with the hearsay evidential, but rather simply use the main clause aorist conjunct inflection to indicate that this is part of a traditional narrative.3

Speaker certainty
Some descriptions of evidential systems include forms marking the extent of speaker certainty (cf. Brugman & Macaulay 2015:205ff). If this parameter is taken to be part of evidentiality, then Meskwaki exhibits even more evidential distinctions, all expressed by the choice of verbal inflectional paradigm, as illustrated below:4

Dubitative
The DUBITATIVE mode of the independent order is used for speculations, and is often glossed ‘probably’ or ‘must’. Cognate forms of this inflectional paradigm are reported to have evidential functions in Cree dialects (cf. Déchaine et al. 2017).

(16)  owiye·ha kekaka·čihekowa·toke
  owiye·ha  ke-kaka·čih-ekowa·toke
  someone 2-joke.with-3>2p/DUB
  ‘Probably someone was playing a joke on you two.’ (Kiyana 1913:103)

(17)  i·nina·hwe·na na·hkači ki·hka·nena·naki šawesi·-toke·hiki
  i·nina·hi=we·na na·hkači ki·hka·nena·naki šawesi--toke·hiki
  then=rather again our.friends be.hungry-3p/DUB
  ‘By this time our friends must be hungry again.’ (Kiyana 1913:298)

Utterances expressed with dubitative inflection are based upon the speaker’s general knowledge of what is likely, rather than a specific deduction about a past event based upon present evidence, which characterizes the use of the plain interrogative.

Remote past
Some paradigms within the conjunct order form a remote past by filling the final suffix slot with the suffix -ehe. The resulting forms may be used for events in the past and/or to
express speaker uncertainty (cf. Thomason 2003:71). (18) illustrates the PAST AORIST CONJUNCT on a complement clause:

    “šewe-na ayo-hi=meko IC-ki-h-pya-ya-ni, but here=EMPH IC-PERF-come-1/CH.CONJ
    e-h-kehke-net-ama-ni eh-kemo-tem-iwa-tehe aša-h-aki.”
    AOR-know-1>0/AOR AOR-steal.O2.from-3P>1/PAST.AOR Sioux-PL
    ‘But after I came back here, I realized that the Sioux had stolen it [a canoe] from me.’ (Dahlstrom 2015:162)

(19) illustrates the use of the suffix –ehe with negative inflection, producing a PAST NEGATIVE:

(19) a·kwıča·hye·toke nana·ši mešotehe i·niya nemešo·ha
    a’kwı=ča=hi=ye·toke nana’ši meš-w-etehe
    not=so=it.seems ever hit.with.shot-X>3/PAST.NEG
    i·niya nemešo·ha that.ABSENT my.grandfather
    ‘My late grandfather was never hit in battle, it seems.’ (Michelson 1927:70)

Both (18) and (19) describe past events that were not witnessed directly by the speaker, illustrating the close connection between past tense and speaker uncertainty. Relatedly, Murray (2016:496) observes that the Cheyenne remote past cooccurs with the narrative evidential.

Changed unreal: mirative/surprise
The CHANGED UNREAL occurs with the particle keye·hapa ‘it turned out that…’ and displays the same suffix –ehe that occurs in the remote past. Mirative marking (i.e. marking of unexpected or surprising information) is closely connected to evidentiality in a number of languages (cf. Brugman and Macaulay 2015:209ff).

(20) keye·hapake·hwi·na išemeko e·šimikehe …
    keye·hapa=ke·hi=wi·na iše=meko IC-išim-ikehe
    it.turned.out=moreover=but just=EMPH IC-speak.thus.to-X>1/CH.UNR
    ‘Actually, though, I was just being told that…’ (Goddard 2006a:18)

(21) keye·hapake·hipi i·nini mahkwani a·wahki·kwe·sahekotehe
    keye·hapa=ke·hi=ipi i·nini mahkw-ani IC-a·wahki·kwe·sahe-ekotehe
    it.turned.out=moreover=HRSY that.OBV bear-OBV IC-scratch.O.face-3’>3/CH.UNR
    ‘But it turned out, they say, that the bear had scratched her face.’ (Kiyana 1913:122)

Note that the hearsay evidential =ipi also appears in (21). (21) is hearsay from the point of view of the narrator speaking to the audience. The surprise is in the world of the story.
CONCLUSION

Using the conservative definition of evidentiality proposed by Brugman and Macaulay 2015, we may say that Meskwaki distinguishes three types of indirect evidence: hearsay, inference, and traditional narratives. These are the same distinctions made in the Cheyenne system and ones frequently found crosslinguistically in languages with evidential marking. A significant difference between the Cheyenne system and that of Meskwaki is that the Cheyenne morphemes indicating evidentiality occur in a single slot of the inflectional template, forming a neat paradigm, while evidential morphology in Meskwaki is realized in a ‘scattered’ fashion. The scattered nature of Meskwaki evidentials permits an overlap in the distribution of the hearsay enclitic and the inflectional marking of a story as a traditional narrative. We may further conjecture that Meskwaki clauses with no overt evidential morphology are simply unmarked for source of evidence, rather than being explicitly marked as ‘witnessed’ as in the Cheyenne system (cf. Brugman and Macaulay 2015:226ff on obligatoriness and complementarity).

Meskwaki also exhibits a number of inflectional verb paradigms specialized for indicating the extent of speaker certainty, a semantic parameter often included in discussions of evidentiality, including strategies for indicating speculation, uncertainty due to an event occurring in the remote past, and a mirative inflection indicating surprise.

REFERENCES


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1 Abbreviations in the Meskwaki examples: 3’ = obviative, 0 = inanimate, ABSENT = absentative demonstrative, ANIM = animate, AOR = aorist prefix; aorist conjunct inflection, CH.CONJ = changed conjunct, CH.UNR = changed unreal, CONTRAST = contrastive, DIM = diminutive, DUB= dubitative, EMPH = emphatic, FUT = future, HRSY= hearsay evidential, IC = Initial Change (ablaut rule), IMP = imperative, IND = independent indicative, NEG= negative inflection, O = (first) object, O2 = second object, OBL = oblique head of relative clause, OBV = obviative, PART = conjunct participle, PAST.AOR = past aorist conjunct, PAST.NEG = past negative inflection, PERF = perfective, PLAIN.INTERR = plain interrogative inflection, SUBJUNCT = subjunctive, X = unspecified subject. Subject and object features in verb inflection are separated by > and are followed by
identification of the verbal paradigm. The head of a relative clause is identified following the label PART (participle). Vowel length is marked by a raised dot.


3 But see Thomason (2015:329) for a writer who uses the hearsay evidential throughout.

4 Two more inflectional paradigms may be mentioned here, both archaic and rare. The CONCLUSIVE (e.g. -hapa 3rd singular) is used for definite conclusions, often in exclamations, and the ASSERTIVE is used for strong assertions (e.g. -pani 3rd singular). See Goddard 1995 for discussion and examples; cognate forms are used as evidentials in Mi’gmaq (Inglis 2003) and in the Cree-Innu dialect continuum (James et al. 2001, Déchaine et al. 2017).