Inferential Evidentiality and Mirativity in Caquinte

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1 Introduction

- This presentation describes two ways of expressing mirativity in Caquinte (Arawak, Peru)[1]
  - An inferential evidential conversationally implicates mirativity
  - A different marker conventionally implicates (and possibly entails) mirativity
- DeLancey (1997:35): 'The operational definition of the category is that it marks both statements based on inference and statements based on direct experience for which the speaker has no psychological preparation, and in some languages hearsay data as well. What these apparently disparate data sources have in common [...] is that the proposition is one which is new to the speaker, not yet integrated into his overall picture of the world.'
- Peterson (2016:1328, emphasis in original): 'Broadly speaking, new information that is not easily assimilated into a speaker's current situational awareness is often coded differently linguistically than information that is more easily adapted into this awareness. This coding – often referred to as *mirativity* – is the linguistic reflex of what we commonly interpret as surprise.'
- Aikhenvald (2004) asks: 'How uniform is the semantic (and pragmatic) content of what is being referred to as "mirativity" across languages?' (cited in Aikhenvald (2012:437))
  - She distinguishes (ibid.) sudden discovery, surprise, unprepared mind, counterexpectation, and information new to speaker
  - 'The array of meanings subsumed under the notion of "mirativity" can be realized independently, through other categories, and also through lexical means. In a number of languages, different meanings within the mirative range are realized differently. This

*Abbreviations: ABL = ablative; ACT = active; ALIEN = alienable; ALL = allative; ALT = alternative; APPL = applicative; AUG = augmentative; C-EXPCT = counterexpectational; CL = classifier; CNGR = congruent; DEM = demonstrative; DIR = directional; DISTR = distributive; EP = epenthetic; EPIST = epistemic; EXST = existential; F = feminine; FE = female ego; FRUST = frustrative; IDEO = ideophone; INCNGR = incongruent; INFER = inferential; INSTR = instrumental; INTJ = interjection; IRR = irrealis; LOC = locative; M = masculine; MAL = malefactive; ME = male ego; MED = medial; MID = middle; MIR = mirative; NEG = negation; NOMZ = nominalizer; NREF = nonreferential; O = object; P = possessor; PFV = perfective; PL = plural; PLRACT = pluractional; POSS = possession; PRES = presentational; PRO = pronoun; PURP = purpose; REAL = realis; REG = regressive; REL = relativizer; S = subject; SC = scene change.

[1]I am indebted to Caquinte speakers Antonina Salazar Torres, Joy Salazar Torres, Emilia Sergio Salazar, and Miguel Sergio Salazar. The ideas presented here have benefited from discussions with Lev Michael and Amalia Skilton.

alerts us to the fact that "mirativity" is best applied as a category for which individual values have to be identified. When we describe linguistic categories – such as aspect, or tense, or gender, or evidentiality – we do not just say that a language has "tense": we specify that it has present, past, and remote past; or past versus non-past.' (ibid.)

- Aikhenvald (2012:462) describes numerous "'mirative strategies" – that is, extensions of essentially non-mirative categories which acquire mirative meanings within a given context.'
- Relatedly, Peterson (2016) is interested in understanding, in the context of schema theory, a crosslinguistically common pattern whereby some evidentials may implicate mirativity
  - 'A central feature of this theory are *schemata*, typically defined as non-linguistic formal objects that are organized knowledge structures representing concepts such as situations, objects, events, and actions at various levels of abstractness. Schemas can be thought of as categorical rules or scripts that we use to interpret the world [...] Information that does not fit into these schema may not be comprehended, or may not be comprehended correctly.' (ibid.:1330, emphasis in original)
- For Peterson, information relevant to the analysis of how inferentials implicate mirativity is subject to a special requirement:
  - New Environmental Information (NEI): '[...] has two features: first, the information that is gained through sensory inputs must be environmental in nature. In other words, **NEI excludes the kinds of information encoded through the linguistic signal,** meaning language itself. Secondly, NEI must be 'new'. What this means is that NEI must contribute to updating or revising the belief state of the agent.' (ibid.:1331, emphasis mine)
  - 'New events can involve a deviation to some degree from *activated cognitive schema*, which are schemata that are immediately relevant and currently activated in the mind of the speaker (akin to situational awareness). This deviation creates a *schema-discrepancy* [...]' (ibid.:1331, emphasis in original)
    - Formally: 'For an agent with prior knowledge k, two systems α and β are coupled in such a way that α's being of type or in a state, event, or action $F(\alpha)$ is correlated to β being of type or in a state, event, or action $G(\beta)$, thus carrying for the information agent the information that β is G if the agent can infer that β is G from α being F together with k (but could not from k alone).' (ibid.:1346)
    - Relatedly, '*Environmental Information* [...] is *New* relative to an information agent A in a context c iff (i.) It has not been previously observed or perceived by A in c, and (ii.) It is spatio-temporally bound to the context c as acquired by A.' (ibid.:1348, emphasis in original)[2]
- As for why certain evidentials may implicate mirativity:
  - 'Our perception and interpretation of sensory information helps us navigate and make sense of the world; it is a kind [sic] unmediated knowledge that is often new to us, revealed in an ongoing, dynamic way as a situation unfolds (NEI). On the other hand, knowledge based on conjecture or previous experience is typically not new. Furthermore, conjecture and surprise seem to be fundamentally incompatible notions (also noted in

[2]Compare Rett & Murray's similar (2013) 'recency restriction'.

Aikhenvald 2012: 451). Therefore, non- or less-sensory evidentials would seem to be ill-suited to expressing mirativity, while sensory evidentials are ideally specialized for it.' (ibid.:1342)

- 'Schemata not only provide structures for a speaker's existing network of assumptions and beliefs, but they also structure knowledge about oneself, grounded in both in [sic] the present and past experiences of similar situations, and general knowledge (i.e. *k*-knowledge). [...] It is now clearer that the term 'surprise' and the other characterizations of mirativity [...] are just a handle for what is essentially a single mental event (in a series of events) that occurs when a schema discrepancy is triggered. This single event corresponds to a variety of related emotions and psychological notions, including (but not limited to) surprise, unpreparedness, and unexpectedness (and Aikhenvald's ontology of mirative meanings [...] now forms a natural class).' (ibid.:1349)

1.1 Language Background

- Caquinte is spoken by some 300-400 individuals in the headwaters of the Mipaya (Cusco) and Pogeni (Junín) rivers in the tropical Andean foothills of southeastern Peru
  - The language belongs to the Kampan branch of the Arawak language family
- Caquintes first entered into sustained contact with non-indigenous outsiders in 1976, with the arrival of members of the Summer Institute of Linguistics
- Traditionally, Caquintes were in tense relations with neighboring Asháninkas and Yines
  - Through the mid-20th century, warriors from both groups conducted raids in that murdered Caquinte warriors, enslaved Caquinte women and children, and destroyed material goods and garden plots
- Confined to the Pogeni headwaters probably from the mid-19th century, Caquintes migrated into the Mipaya headwaters in the mid-1950s
  - These Caquintes began intermarrying with Matsigenkas (Arawak), and those remaining on the Pogeni began intermarrying with Asháninkas
  - Very few living Caquintes have no Matsigenka or Asháninka ancestor, resulting in intense social pressures on Caquinte speakers and linguistic pressures on Caquinte grammar
- I conduct fieldwork in Kitepámpani, a community of ∼100 individuals (∼35 adults)
- Data for this presentation comes from a corpus of more than 6,000 lines of segmented, glossed, and translated text organized in FieldWorks Language Explorer (FLEx)
- Previous published linguistic study of Caquinte is Swift's (1988) morphosyntactic sketch and Castillo Ramirez's (2017) undergraduate thesis on noun phrase syntax
- Caquinte is a polysynthetic, strongly headmarking, mainly agglutinative language
- Information-structurally unmarked ("out-of-the-blue") word order is VSO and a sentence need not exhibit overt DP arguments
- Verbal categories include:

- Obligatory: person (specifically subject agreement) and reality status (Michael 2014)
- Non-obligatory: causatives, applicatives, reciprocals, pluractionals, plurals, directionals, markers of associated motion, aspect, and "adverbial" categories (e.g., *-aman* 'early in the morning'

- Person is expressed on the verb via prefixes and suffixes (Table 1)
  - Intransitive verbs exhibit two paradigms of subject agreement (O'Hagan 2015)
  - Object agreement and suffixal intransitive subject agreement paradigms are similar

Table 1: Caquinte Verbal Person-Markers

	A/S	P	S
1	*n(o)-*	*-na*	*-na*
1INCL	*a-*, *Ø-*	*-ahi*	*-ahi*
2	*p(i)-*	-N*pi*	-N*pi*
3M	*i-*, *y-*, *ir(i)-*	**-ri**	**-Ø**
3F	*o-*, *Ø-*	**-ro**	**-Ø**

2 Inferential =*sa*

- Caquinte exhibits an inferential evidential =*sa*,[3] syntactically a clausal second-position clitic
  - This is the only grammaticalized evidential extant in the language
- The inferential expresses that the proposition is inferred to be true based on sensory evidence, one of a few possible sorts (see below)
- In (1) and (2) evidence is visual in nature

(1) CONTEXT: The third wife of a vampire bat, having heard stories about how two of her sisters, the vampire's first two wives, were killed at the site of a mysterious lake, goes to inspect the contents of a clay pot that the vampire bat had told her was off limits. (In reality the vampire bat murdered his first two wives and drank their blood.)

a. ...ameniro chooka kenashivirori chooka kamachonkaharentsi.

Ø- *amen -i* *-ro* *chooka -Ø* *kenashivirori chooka -Ø*
3F.S- see -REAL:ACT -3F.O EXST -3S stone EXST -3S
*kamacho*N*kaha -re* -N*tsi*
bleed -NOMZ -ALIEN

...she saw that there was a stone and that there was blood.

b. Ovetsatanaka, okanti: "Irosa tee irinintantenpahi antsikeri ichoomote."

[3]For Swift (1988), this is a marker of 'sudden realization' (cf. Peterson's spatio-temporal restriction).

Ø- ovetsa -t -an -a -k -a o- kaN -t -i iro
3F.S- speak -EP -ABL -EP -PFV -REAL:MID 3F.S- say -EP -REAL:ACT 3F.PRO
=sa *tee iri- niN -t -aN -t -e -Npa -hi*
=INFER NEG:REAL 3M.S:IRR- want -EP -APPL:INSTR -EP -IRR -MID -NEG:REAL
Ø- aN -(i)tsi -k -e -ri i- choomo -te
3F.S- touch -APPL:MAL -PFV -IRR -3M.O 3M.P- clay.pot -POSS

She spoke, saying: "That's why he didn't want her to touch his clay pot!" (pik280-281)

(2) CONTEXT: In the middle of a skirmish with Asháninkas, a Caquinte warrior Kiavenkiri is shot in the armpit with an arrow. Then...

a. Ishiapoha iritinerihaniki, yaapohiri, yanpigirikakotsitari ovoaki tsovironaki.

i- shig -a -poh -a iri- tinerihaniki i- ag -a -poh
3M.S- run -EP -ALL -REAL:MID 3M.P- son-in-law 3M.S- grab -EP -ALL
-i -ri i- aNpigirik -ako -(i)tsi -t -a -ri
-REAL:ACT -3M.O 3M.S- wrap(.in) -APPL:INDR -APPL:MAL -EP -REAL:MED -3M.O
o- poa =ki tsovironaki
3F.P- trunk =LOC house

His son-in-law ran up, grabbed him, and wrapped him around the post of the house [i.e., in his own cushma].

b. Irira Kiavenkiri ipitsokanaka, ikantiri: "Avirosa amanpivenkena notinerihaniki."

iri- ra KiaveNkiri i- pitsok -an -a -k -a i-
3M- DEM:MED Kiavenkiri 3M.S- turn.around -ABL -EP -PFV -REAL:MED 3M.S-
kaN -t -i -ri aviro **=sa** *amaNpiveN -k -i -na no-*
say -EP -REAL:ACT -3M.O 2.PRO =INFER betray -PFV -REAL:ACT -1O 1P-
tinerihaniki
son-in-law

"You've betrayed me, son-in-law!" (ttk586-587)

- In both (1) and (2), the result of some event is observed visually, then the speaker reasons about what event must have led to that result
  - Note that (2) does not constitute an instance of direct evidence, since the inferred event is the prior moment at which Kiavenkiri's son-in-law decided to betray him
- In (3), however, evidence is in the form of a report
  - This is not a reportative use of =*sa* because the sentence in which it appears is not itself a report of some proposition, but rather an inference based on it
  - This would appear to contradict Peterson's definition that NEI not be encoded linguistically (perhaps too strong a requirement)

(3) CONTEXT: A young woman wonders why she has stopped menstruating and recounts to her mother her recent bathing activities at the river.

a. "Arikea namenagevetanaka kaharagiteni, teekatsi."

ari =kea no- amen -a -ge -ve -t -an -a -k -a kahara
PRO =SC 1S- look -EP -DISTR -FRUST -EP -ABL -EP -PFV -REAL:MID empty
-gite =ni teekatsi -Ø
-CL:ENV =AUG EXST:NEG -3S

"Then I looked around but things were empty, there was nothing."

b. "Arikea nameni katonko, shirontaka tai."

ari =kea no- amen -i katoNko shiroN -t -ak -a tai
PRO =SC 1S- look -REAL:ACT upriver laugh -EP -PFV -REAL:MID moon

"Then I looked upriver, the moon was laughing."

c. Okantirokea: "Irosa, arika chookatake pichaahanikirite."

o- kaN -t -i -ro =kea iro **=sa** *ari =ka chooka -t*
3S- say -EP -REAL:ACT -3F.O =SC 3F.PRO =INFER PRO =EPIST exist -EP
-ak -i -Ø pi- chaahanikiri -te
-PFV -REAL:ACT -3S 2P- child -POSS

And she [i.e., her mother] said to her: "Ah, that's it, you're probably with child." (kat124-126)

- In (4), evidence is also in the form of a report

(4) CONTEXT: A turkey vulture desperately searches for his apparently lost wife, whom his in-laws have actually conspired to marry off to a more respectable eagle.

a. Ikantikea: "Hero onta shomankigare."

i- kaN -t -i =kea he -ro o- Nta shomankigare
3M.S- say -EP -REAL:ACT =SC PRES -F 3F- DEM:DIST my.wife.VULTURE

And he said: "There is my wife."

b. Okantsitarikea ivagirote: "Tee, arisanpa onkantenpa oroatinpatari ontihavena-havaekatarite omae [...]"

o- kaN -itsi -t -a -ri =kea i- pagiro -te tee
3F.S- say -APPL:MAL -EP -REAL:MID -3M.O =SC 3M.P- mother-in-law -POSS no
ari **=sa** *=Npa o- N- kaN -t -e -Npa oroatiNpa =tari Ø-*
PRO =INFER =INCNGR 3F.S- IRR- LIGHT -EP -IRR -MID 3F.PRO =CNGR 3F.S-
ontih -a -venaha -vae -k -a =tari =te o- mae
braid -EP -CL:long.hair -DISTR -PFV -REAL:MID =CNGR =C-EXPCT 3F.P- hair

And his mother-in-law said to him: "No, I infer you say that because her hair is long and braided [...]" (pam216-217)

- In the preceding examples, where evidence is indirect, interpretations of inference and surprise are both available

- In (5), however, where evidence is direct, only an interpretation of surprise is available

  – There is also a sense in which the speaker does not want to be associated with the proposition (n.b., 'Sure...') – see also (7)

(5) CONTEXT: A collared peccary has come to visit a human, and after being served manioc beer...

a. Irira imoroiroki ikantiri kakinte: "Nonpeakenpi anianishi."

iri- ra imoroiroki i- kaN -t -i -ri kakiNte no-
3M- DEM:MED collared.peccary 3M.S- say -EP -REAL:ACT -3M.O person 1S-
N- *peg -a -k -e -Npi anianishi*
IRR- treat.as -EP -PFV -IRR -2O brother-in-law.ME

The collared peccary said to the man: "I'm going to treat you as my brother-in-law."

b. Iriatinpa ikanti: "Kameetsa, avirosa anianishi."

iriatiNpa i- kaN -t -i kameetsa aviro **=sa** *anianishi*
3M.PRO 3MS- say -EP -REAL:ACT good 2.PRO =INFER brother-in-law.ME

He said: "Sure...you're my brother-in-law then." (imo11-12)

- Interestingly, =*sa* does not project out of an embedded clause (6)

(6) Irihikotashikerigeti, inkankite mogek inpitsokanakenpa irineheri katiaka, intsake iriosa sariakari.

iri- ohiko -t -ashi -k -e -ri =geti i- N- kaN -ki -t
3M.S- point.at -EP -APPL:PURP -PFV -IRR -3M.O =if 3M.S- IRR- LIGHT -AM -EP
-e mogek i- N- pitsok -an -a -k -e -Npa iri- neh
-IRR IDEO:flinch 3M.S- IRR- turn.around -ABL -EP -PFV -IRR -MID 3M.S:IRR- see
-e -ri katig -a -k -a -Ø i- N- tsa -k -e irio
-IRR -3M.O stand -EP -PFV -REAL:MID -3S 3M.S- IRR- know -PFV -IRR 3M.PRO
=sa *sarig -a -k -a -ri*
=INFER plot.to.kill -EP -PFV -REAL:MID -3M.O

If he points something at him, he will flinch *mogek*, turn around, and see him standing [there], and he will know that he was plotting to kill him. (kch2.90)

- Other instances of =*sa* are more difficult to analyze (7)

(7) CONTEXT: A man comes upon his brother-in-law in the forest, who, despite being notoriously lazy, has managed to clear a massive garden. The man begins questioning him about how this could be possible. (In reality the brother-in-law has been assisted by a skilled woodpecker, but does not want to admit this to the man.)

a. ...yamenakovetapohakari apaniro chakitake toon toon toon, yaseavake hooi hooi, ikahemakotsitari: "Anianishi, taashia yamenahitake?"

i- amen -ako -ve -t -apoh -a -k -a -ri apaniro
3M.S- see -APPL:INDR -FRUST -EP -ALL -EP -PFV -REAL:MID -3M.O alone
chaki -t -ak -i -Ø toon toon toon i- aseg -av -a
fell -EP -PFV -REAL:ACT -3S IDEO:fell IDEO:fell IDEO:fell 3M.S- exhale -DIR -EP
-k -i hooi hooi i- kahem -ako -(i)tsi -t -a
-PFV -REAL:ACT INTJ INTJ 3M.S- shout -APPL:INDR -APPL:MAL -EP -REAL:MID
-ri anianishi taa =shia i- amen -a -hi -t -ak -i
-3M.O brother-in-law.ME WH =APPR 3M.S- see -EP -NREF -EP -PFV -REAL:ACT

...upon arriving he saw him from afar felling trees *toon*, *toon*, *toon*, he exhaled *hooi hooi*, and he called to him: "Brother-in-law, what have you seen?"

b. "Heronpa otopekirihavatigetanaka inchatopae."

he -ro =Npa o- topekirih -a -vati -ge -t -an -a
PRES -3F =INCNGR 3F.S- cut.cleanly(.wood)[4] -EP -CL:stem -DISTR -EP -ABL -EP
-k -a inchato =pae
-PFV -REAL:MID tree =PL

"The trees are all as clean as plant stems and have been cut cleanly through."

c. Ikantikea iranianishite:"Teekatsisa anianishi iramenahiteka mana nochakitakero intati."

i- kaN -t -i =kea iri- anianishi -te teekatsi -Ø
3M.S- say -EP -REAL:ACT =SC 3M.P- brother-in-law.ME -POSS EXST:NEG -3S
=sa *anianishi iri- amen -a -hi -t -e =ka mana no-*
=INFER brother-in-law.ME 3M.S:IRR- see -EP -NREF -EP -IRR =REL ALT 1S-
chaki -t -ak -i -ro iNtati
fell -EP -PFV -REAL:ACT -3F.O only

And his brother-in-law said: "I haven't seen anything, brother-in-law, I only felled it." (kon130-132)

- Inferential =*sa* is attested co-occurring only with incongruent =N*pa*

3 Mirative =*sakanika*

- Caquinte exhibits a mirative =*sakanika*, syntactically a clausal second-position clitic[5]
- I suggest this is a grammaticalized mirative, compatible with several mirative notions
  - In no case is inference based on (indirect) sensory evidence apparent, as it is with =*sa*
- In (8) the speaker learns of a new method of which he was previously unaware

(8) CONTEXT: A jaguar comes across an unknown deer and her children in the forest.

a. ..."Ooo, kameetsavaeke pichaahanikirite."

ooo kameetsa -vae -k -i pi- chaahanikiri -te
ooo be.beautiful -DISTR -PFV -REAL:ACT 2P- child -POSS

"Ooo, your children are very beautiful."

b. "Keroshia pikokerini ikameetsatantakaka?"

ke -ro =shia pi- ko -k -i -ri -ni i- kameetsa -t
WH -F =APPR 2S- do -PFV -REAL:ACT -3M.O -? 3M.S- be.beautiful -EP
-aN -t -ak -a =ka
-APPL:INSTR -EP -PFV -REAL:MID =REL

"What have you done to them that they're so beautiful?"

[4]This verb refers to the clean cutting of wood on the part of woodpeckers, and, more recently, chainsaws.

[5]The clitic †=*kanika* is not attested and so =*sakanika* is analyzed as monomorphemic. Impressionistically it consists of inferential =*sa*, epistemic =*ka*, and the negative congruent stance marker =*nika*, although a compositional analysis in this fashion is not tenable given the present-day meanings of these markers. That there would be an apparent diachronic relationship between inferential and mirative markers is attested crosslinguistically, e.g., in Navajo (Eisman 2015).

c. Iroatinpa okantiri: "Chooka tomirishipana nahakantakarika nochaahanikirite, irotari ikameetsatantakaka."

iroatiNpa o- kaN -t -i -ri chooka -Ø tomirishi -pana no-
3F.PRO 3F.S- say -EP -REAL:ACT -3M.O exist -3S forest -broad.leaf 1S-
ahak -aN -t -ak -a -ri =ka no- chaahanikiri -te
wash -APPL:INSTR -EP -PFV -REAL:MID -3M.O =REL 1P- child -POSS
iro =tari i- kameetsa -t -aN -t -ak -a =ka
3F.PRO =CNGR 3M.S- be.beautiful -EP -APPL:INSTR -EP -PFV -REAL:MID =REL

She said: "There is a broad-leafed plant in the forest that I wash with my children with, that's why they are beautiful."

d. Ikantiro ahitsi: "Arisakanika."

i- kaN -t -i -ro ahitsi ari **=sakanika**
3M.S- say -EP -REAL:ACT -3F.O jaguar PRO =MIR

The jaguar said: "Oh, I see." (caa9-12)

- Similarly, in (9), the speaker is exposed to a style of singing for the first time

(9) CONTEXT: Several different ant species have come to celebrate the completion of the leaf-cutter ants' house.

a. Arikea oteokipohirigeti, amatavihapohirigeti, ishirontahianakakea kihí kihí kihí kihí.

ari =kea o- teoki -poh -i -ri =geti Ø-
PRO =SC 3F.S- intoxicate.slightly -ALL -REAL:ACT -3M.O =when 3F.S-
amatavih -a -poh -i -ri =geti i- shiroN -t -a
intoxicate.to.dizziness -EP -ALL -REAL:ACT -3M.O =when 3M.S- laught -EP -EP
-hig -an -a -k -a =kea kihí kihí kihí kihí
-PL -ABL -EP -PFV -REAL:MID =SC IDEO:laughter

When it [i.e., manioc beer] had intoxicated them slightly, when it had intoxicated them to the point of dizziness, they began to laugh *hehe hehe hehe hehe*.

b. Ikantikea ichichimenki: "Imaika namashaike naatinpa."

i- kaN -t -i =kea ichichimeNki imaika no- amashai -k -e
3M.S- say -EP -REAL:ACT =SC ant.sp. now 1S- sing -PFV -IRR
naatiNpa
1.PRO

The *ichichimenki* ant said: "Now I'm going go sing."

c. Yamashaitsitanaka: "Kitamenkia nameni voro voro voro vá."

i- amashai -(i)tsi -t -an -a -k -a kitamenkia no- amen
3M.S- sing -APPL:MAL -EP -ABL -EP -PFV -REAL:MID cock-eyed 1S- watch
-i voro voro voro vá
-REAL:ACT IDEO:leaf.rustle hey!

Immediately he began to sing: "I watch cock-eyed *voro voro voro vá*!"

d. Yakanakekea chaanchokana: "Chaatekirek chaatekirek, heehe, arisakanika pikantiro aviatinpa pamashaitigeti."

i- ak -an -a -k -i =kea chaaNchokana chaatekirek
3M.S- respond -ABL -EP -PFV -REAL:ACT =SC ant.sp. IDEO:crunch
chaatekirek heehe ari **=sakanika** *pi- kaN -t -i -ro aviatiNpa pi-*
IDEO:crunch yes PRO =MIR 2S- say -EP -REAL:ACT -3F.O 2.PRO 2S-
amashai -t -i =geti
sing -EP -REAL:ACT =when

The *chaanchokana* ant responded: "*Chaatekirek*, *chaatekirek*, yes, that's what you are like when you sing." (yan51-54)

- In (10), the speaker finds a visitor who arrives without prior knowledge or warning

(10) CONTEXT: A powerful shaman has been away for a long time living among Matsigenkas, and is seen by his sister on an unplanned return.

a. Ari yoanahi ochookakegeti iriinanite.

ari i- og -an -ah -i o- chooka -k -i =geti
PRO 3M.S- go -ABL -REG -REAL:ACT 3F.S- reside -PFV -REAL:ACT =where
iri- iinani -te
3M.P- mother -POSS

He went back to where his mother lived.

b. Ari isotoapohahi ameniri itsiohite, isotoapohigeti okanti: "Herisakanika haai, koraketahi."

ari i- sotog -a -poh -ah -i Ø- amen -i -ri i-
PRO 3M.S- emerge -EP -ALL -REG -REAL:ACT 3F.S- see -REAL:ACT -3M.O 3P-
tsiohi -te i- sotog -a -poh -i =geti o- kaN -t
sister.ME -POSS 3M.S- emerge -EP -ALL -REAL:ACT =when 3F.S- say -EP
-i he -ri **=sakanika** *haai korake -t -ah -i -Ø*
-REAL:ACT PRES -M =MIR brother.FE come -EP -REG -REAL:ACT -3S

He emerged [i.e., from the forest] and his sister saw him, and when he had emerged she said: "There is my brother, he's come back." (ama104-105)

- In (11), the speaker is a human who goes to visit the areas inhabited by semi-mythical *shamaquis* for the first time, and comes across a large garden

(11) Ikantikea: "Ooo, irigentisakanika katsikeri."

i- kaN -t -i =kea ooo irigeNti **=sakanika** *katsike -ri*
3M.S- say -EP -REAL:ACT =SC ooo 3M.PRO =MIR clear.land -NOMZ

And he said: "Ooo, he's a [skilled] clearer of land." (shm293)

- In (12), the speaker held a contrary belief, explicitly expressed with *hi* 'believe erroneously'

(12) CONTEXT: A young man, seeing that a warrior Kamotsontopari has neglected being present during his visits, asks his mother on one such visit the following question.

a. ..."Iinani, iriokea noraapanitemahaka?"

iinani irio =kea nor- aapani -te -mahaka
mother 3M.PRO =SC 1P- father -POSS -real

"Mother, is he my real father?"

b. Okantsitanakarikea: "Tee irio piraapanite."

o- kaN -(i)tsi -t -an -a -k -a -ri =kea tee
3F.S- say -APPL:MAL -EP -ABL -EP -PFV -REAL:MID -3M.O =SC NEG:REAL
irio pir- aapani -te
3M.PRO 2P- father -POSS

Then she said to him: "He's not your father."

c. "Iriratari piraapanite imetohakeri."

iri- ra =tari pir- aapani -te i- metoh -a -k -i
3M- DEM:MED =CNGR 2P- father -POSS 3M.S- kill -EP -PFV -REAL:ACT
-ri
-3M.O

"He killed your father."

d. "Imaika avia mana yaakotanahinpi intati."

imaika avia mana i- ag -ako -t -an -ah -i -Npi
now 2.PRO ALT 3M.S- take -APPL:INDR -EP -ABL -REG -REAL:ACT -2O
iNtati
only

"He only adopted you."

e. [...]

f. Ikantikea: "Nohikerisakanika irio aapanimahaka."

i- kaN -t -i =kea no- hi -k -i -ri
3M.S- say -EP -REAL:ACT =SC 1S- believe.erroneously -PFV -REAL:ACT -3M.O
=sakanika *irio aapani -mahaka*
=MIR 3M.PRO father -real

Then he said: "I thought he was my real father."

g. "Teesakanika irio aapani."

tee **=sakanika** *irio aapani*
NEG:REAL =MIR 3M.PRO father

"He's not my father." (ttk314-320)

- In (13), however, =*sakanika* seems to associate with the addressee, an infrequent pattern
  - However, it may be that the speaker wishes to construe this proposition as not part of her current worldview, since it involves beliefs that many outsiders consider backward

(13) CONTEXT: The narrator explains the mystery surrounding a mountain Shitekitsini.

a. Koramani chooka kakinteniro.

koramani chooka -Ø kakiNte -niro
long.ago exist -3S person -DEMON

Long ago there were demonic people [i.e., in a particular mountain cave].

b. Irosakanika ipeantapinikaka maasano amahatakotankitsika kihakotanankitsika omorogantakageti.

iro **=sakanika** *i-* *peg* *-a*N *-t* *-apini* *-k*
3F.PRO =MIR 3M.S- go.out.of.view -APPL:INSTR -EP -PLRACT -PFV
-a *=ka* *maasano* *amaha* *-t* *-ako* *-t* *-a*N*kitsi* *=ka*
-REAL:MID =REL all do.in.water -EP -CL:vessel -EP -INTR.SE:PFV =REL
kih *-ako* *-t* *-an* *-a*N*kitsi* *=ka* *o-* *moro* *-ga*N *-t* *-ak*
enter -CL:vessel -EP -ABL -INTR.SE:PFV =REL 3F.S- hole -CL:hole -EP -PFV
-a *=geti*
-REAL:MID =where

That is why everyone who went by river and entered the cave in a canoe would disappear. (shi45-46)

- Mirative =*sakanika* is attested co-occuring only with counterexpectational =*te* (14)

(14) a. Ikantiro: "Aviatinpa, inkoraketake tsovironakiki mavite hagitya aisa mavite koyokoyo."
i- *ka*N *-t* *-i* *-ro* *aviati*N*pa* *i-* N- *korake* *-t* *-ak* *-e*
3M.S- say -EP -REAL:ACT -3F.O 2.PRO 3M.S- IRR- come -EP -PFV -IRR
tsovironaki *=ki* *mavite* *hagitya* *aisa* *mavite* *koyokoyo*
house =LOC two guan.sp. also two guan.sp.

He said to her: "As for you, to the house will come two *hagitya* and two *koyokoyo* guans."

b. "Arikea inkenpetapohenpari chaapa."
ari *=kea* *i-* N- *ke*N*pe* *-t* *-apoh* *-e* -N*pa* *-ri* *chaapa*
PRO =SC 3M.S- IRR- be.same.as -EP -ALL -IRR -MID -3M.O chicken

"And they will be the same as the chickens."

c. "Aviatinpa paakeri, pintovirorehakeri, pintiakeri pishekahiakenpa tsovironakiki."
*aviati*N*pa* *pi-* *ag* *-a* *-k* *-e* *-ri* *pi-* N- *toviroreh* *-a* *-k* *-e*
2.PRO 2S- grab -EP -PFV -IRR -3M.O 2S- IRR- break.neck.of -EP -PFV -IRR
-ri *pi-* N- *tig* *-a* *-k* *-e* *-ri* *pi-* *sheka* *-hig* *-a* *-k* *-e* -N*pa*
-3M.O 2S- IRR- cook -EP -PFV -IRR -3M.O 2S- eat -PL -EP -PFV -IRR -MID
tsovironaki *=ki*
house =LOC

"You will grab them, break their necks, cook them, and eat them at the house."

d. Arikea okemisankeri, okanti: "Arisakanikate."
ari *=kea* *o-* *kemisa*N *-k* *-i* *-ri* *o-* *ka*N *-t* *-i* *ari*
PRO =SC 3F.S- listen.to -PFV -REAL:ACT -3M.O 3F.S- say -EP -REAL:ACT PRO
=sakanika **=te**
=MIR =C-EXPCT

She listened to him, and said: "Oooh, I see." (kap)

4 Conclusion

- Caquinte exhibits at least two ways to express mirativity:
  - The inferential evidential =*sa* may conversationally implicate mirativity, even in contexts of indirect evidence

  - A dedicated marker =*sakanika* conventionally implicates mirativity

- How are these two sorts of mirativity different in Caquinte?

- In contexts of direct evidence, Caquinte =*sa* receives a mirative interpretation, and often a sense of dissociation is present

- Inferential =*sa* may not project out of an embedded clause

  - It is not clear whether =*sa* can project in such instances
  - It is not clear whether =*sakanika* may similarly not project

- Both =*sa* and =*sakanika* challenge Peterson's requirement on NEI (specifically its environmental nature) – cf. e.g., (3) & (8)

- However, both conform to his requirement that information be new, i.e., that it not previously be perceived and that it be spatio-temporally bound

- In comparative terms, Caquinte =*sakanika* appears to be innovative within Kampan Arawak, whereas inferential =*sa* has cognates in at least Asháninka (Kindberg 1980:466)

  - How did =*sakanika* develop from =*sa*?

- Future research includes context-based elicitation (Matthewson 2004) and greater exploration of speaker intuition, among other things

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