One of the more interesting facts about human language is that we can use different forms to refer to the same thing, and the same form can be used to refer to many different things. Yet people somehow manage to understand one another...The question then is: what do speakers/writers know that enables them to choose an appropriate form to refer to a particular object and what do hearers/readers know that enables them to identify correctly the intended referent of a particular form?

...basic facts concerning the distribution and understanding of different forms of referring expression in natural language discourse still remain unexplained.

(Gundel et al. 1993:274)

1 Introduction

- Caquinte is a highly polysynthetic head-marking language
  - Person and reality status are obligatorily marked verbal categories
  - Transitive and most intransitive subjects are encoded via verbal prefixes
  - Objects are encoded via verbal enclitics (Table 1)

*Caquinte is a Kampan Arawak language spoken by ~300-400 individuals in the headwaters of the Mipaya and Pogeni river basins in the Andean foothills of southeast Peru. I thank speakers Antonina Zalazar Torres, Joy Zalazar Torres, Emilia Sérgio Zalazar, and Miguel Sérgio Zalazar for collaborating with me, and Stephanie Farmer and Lev Michael for discussion of the ideas presented here. Data comes from a corpus of ~2,600 lines of text parsed in FLEX, collected by me in July and August 2014. See also Swift (1988).

†ABL = ablative; AI = at issue; ALL = allative; ANTIP = antipassive; APPL = applicative; AUG = augmentative; CAUS = causative; CL = classifier; CNGR = congruent; CNTF = counterfactual; DEM = demonstrative; DIR = directional; DISTR = distributive; EPC = epenthetic consonant; EPV = epenthetic vowel; ERR = erroneous; F = feminine; FG = foregrounded; INCL = inclusive; INCNCR = incongruent; IRR = irreals; LOC = locative; M = masculine; MED = medial; NEG = negation; NONREF = nonreferential; O = object; P = possessor; PERF = perfective; PL = plural; POSS = possession; PRO = pronom; REAL = realis; REALZ = realization; REG = regressive; REL = relativizer; SEQ = sequential; S = subject; SC = scene change; SS = same stance; SUB = subordinator; VERID = veridical; VOC = vocative.
Depictive intransitive (and some other) clauses encode subjects via enclitics\(^1\)

Table 1: Caquinte Person Markers

<table>
<thead>
<tr>
<th></th>
<th>A, S</th>
<th>P</th>
<th>S(_p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(n(o))-</td>
<td>=na</td>
<td>=na</td>
</tr>
<tr>
<td>1INCL</td>
<td>a-</td>
<td>=ahi</td>
<td>?</td>
</tr>
<tr>
<td>2</td>
<td>p(i)-</td>
<td>=npi</td>
<td>=npi</td>
</tr>
<tr>
<td>3M</td>
<td>o- (\sim) (\alpha)-</td>
<td>=ro</td>
<td>=Ø</td>
</tr>
<tr>
<td>3F</td>
<td>(i)- (\sim) (y)-</td>
<td>=ri</td>
<td>=Ø</td>
</tr>
</tbody>
</table>

• Caquinte referring expressions (REs) include nouns, pronouns, demonstratives, and bound person markers

• I typologize REs based on at-issueness, presupposition, and discourse prominence\(^2\)
  – The identity of a referent (RI) may be either at issue or not
  – The identity of a referent may be either presupposed or not
  – A referent may locally be either foregrounded or backgrounded

• I home in on three sets of pronouns and an inflectable demonstrative \(ra\) (Figure 1)\(^3\)
  – Pronouns may occur with or without a coreferential NP as subjects or objects
  – Demonstrative \(ra\) always occurs with a coreferential NP as a subject or object
  – RI-at-issue pronouns suppress coreferential verbal person markers
    * Interaction of RI-not-at-issue REs and verbal person marking complex

• Other frameworks:
  – RI-at-issueness is similar to Kiss’ (1998) ‘identificational focus’ (see §2)
  – RI-at-issueness and non-presupposed RI can both be “new” information
  – Presupposed reference can be “old” information

• Goals:
  – Contribute description of information structure in an Amazonian language
  – Unite insights into ‘at-issueness’ with information-structural properties

\(^1\)See Payne and Payne (2005) for this phenomenon in related Ashéninka.

\(^2\)Close study of the status of referring expressions is uncommon in the Amazonian descriptive linguistic tradition, although there are notable exceptions (e.g., Payne (1985, 1987, 1988, 1992) on Yagua).

\(^3\)I illustrate the different referring expressions in Figure 1 with third-person masculine forms.
Orient around at-issueness, presupposition, and discourse prominence to provide a precise vocabulary for the description of information structure.

- It avoids loaded terms such as ‘topic’, ‘focus’, ‘old’, and ‘new’
- Expand beyond the useful ‘givenness hierarchy’ of Gundel et al. (1993)
- Highlight texts as important launching pad for analysis of information structure
  - Especially important when no one morphosyntactic construction is isomorphic on ‘information focus’ (the answers to questions), standard fare for elicitation on information structure

1.1 At-issueness

- Non-truth-conditional meaning (e.g., implicature) is not at issue
- Different sorts of truth-conditional meaning are either at issue or not

Some characterizations:

4See Koev (2014) and references therein.
The notion of at-issueness which we will characterize draws on Roberts’ (1996) concept of a Question Under Discussion (QUD). The QUD is a semantic question (i.e. a set of alternative propositions) which corresponds to the current discourse topic. The QUD may be the value of an actual question that has been asked; more typically, it is implicit in the discourse. Once a question is under discussion, it remains so until it has been answered or determined to be practically unanswerable. We will say that such a question is resolved. Felicitous conversational moves must constitute attempts to resolve the current QUD. (Simons et al. 2010:316, emphasis mine)

An utterance by a cooperative speaker can be assumed to address the QUD, which means that (at least) one of the propositions conveyed by the utterance contextually entails a partial answer to the QUD. A cooperative speaker can furthermore be assumed to structure his/her utterance such that a competent addressee can recognize which proposition conveyed by the speaker’s utterance the speaker intends to address the QUD. This proposition is the at-issue content of the utterance. (Tonhauser 2012:241, emphasis mine)

**DIRECT RESPONSE TEST**

Only at-issue content can be directly targeted in subsequent discourse.

...Direct targeting occurs when the addressee responds to what has been said without disrupting the natural flow of conversation. Direct responses signal straightforward agreement or disagreement and are typically expressed in English by ‘I agree’, ‘That’s not true’, etc. (Koev 2013:15, emphasis mine)

- I will characterize at-issueness in terms of ‘challengeability’ (Faller 2002:110-116)
- We will first home in on different sorts of implicit QUDs that do not arise from explicit questions, but rather from declarative utterances

### 2 RI-at-issue REs (or, QUD = referent identity)

- Referring expressions for which referent identity is at issue are achieved via intonation in English, as can be seen via the in (1) & (2)

(1) a. He left. RI N-A-I  
   b. No, he’s still here.

(2) a. HEi left. RI A-I  
   b. No, HEj did.

- I suggest that ‘identificational focus’ occurs in natural language because referent identity can be at issue

An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds. (Kiss 1998:245)

- That is, RI at-issueness invokes a set of cardinality n > 1 (e.g., a set of contextually salient referents \{A, B, C, D\})
– If RI is not at issue, then \( n = 1 \) and identification in Kiss’ sense is not possible, or is trivial

– I will, contra Kiss, refer to the selection of a member of a set as ‘set selection’ in order to avoid confusion with a notions of ‘identity’ that appear elsewhere here

• Set selection often yields an interpretation of contrast – as in (2) above – but I argue that this is not entailed by set selection per se

• It instead arises via implicature because set selection involves sets of cardinality \( n > 1 \), i.e., those in which any one set element co-exists with at least one other

• I argue that Caquinte exhibits a set of pronouns, the use of which expresses that referent identity is at issue, or is felicitously challengeable in interaction

• In (3), aviro appears, with no interpretation of contrast

\[
\text{(3) “Avirosa amanpivenkena notinerihaniki.”}^{5}
\]

\[
\text{aviro} = sa \quad \text{amanpivent -ak} \quad \text{-i} \quad = na \quad \text{no-} \quad \text{tinerihaniki}\]
\[
2.\text{PRO} = \text{REALZ} \quad \text{betray} \quad \text{-PERF -REAL.I} = 1O \quad 1P- \quad \text{nephew}
\]

“You betrayed me, nephew!” (ttk587)

• In (4), irio occurs, again with no interpretation of contrast

\[
\text{(4)} \quad \text{a. Arikea, okameetsagitetanahigeti, yanaakeritari Taataki katonkoniri, teekatsi kehetenparine.}\]

\[
\text{ari} = \text{kea o-} \quad \text{kameetsa -gite}\]
\[
\quad \text{-t} \quad \text{-an} \quad \text{-ah} \quad \text{-i} \quad = \text{getti i-ss} = \text{SC 3F.S- be.good -CL:ENV -EPC -ABL -REG -REAL.I} = \text{SUB 3M.S- anag -ak -i} = \text{tari = tari Taataki katonkoniri teekatsi kehe surpass -PERF -REAL.I} = 3M.O = \text{CNGR Taataki Ash´aninka no.one equal -t -enpa =ri} = \text{ne -EPC -IRR.A} = 3M.O = \text{IRR}
\]

Then when there was peace again, Taataki suprassed the Ash´aninkas, no one equaled him. (ttk1122)

\[
\text{b. Maasano ikemakohiakeri.}\]

\[
\text{maasano i-} \quad \text{kem -ako -hig -ak -i} = \text{ri}
\]

\[
\text{all 3M.S-} \text{heard -APPL -PL -PERF -REAL.I} = 3M.O
\]

Everyone heard of him.

\[
\text{c. Irio santikogitetakaantahiros}\]

\[
\text{irio} \quad \text{santiko -gite} \quad \text{-t} \quad \text{-akag -ant} \quad \text{-ah} \quad \text{-i} = \text{ro}
\]

\[
\text{3M.PRO be.silent -CL:ENV -EPC -CAUS -ANTIP -REG -REAL.I} = 3F.O
\]

\[^{5}\text{Context: a man suddenly realizes that his nephew, who was kidnapped by Ash´aninkas as a boy and raised among them, has betrayed him by bringing Ash´aninkas to his house that shoot him full of arrows.}\]
He brought peace to everything as it had been before.

• In (5) referent identity is at issue, as can be seen by the fact that the interpretation of contrast in (5b) is construable as a felicitous challenge to (5a)
  – Note that it is not the making of manioc beer that is at issue

(5)  a. “Naatinpa ashintahatakaro.”

   naatinpa     ashint -a -ha -t -ak -a =ro
   1.PRO        own  -EPV-CL:fluid -EPC-PERF-REAL.A =3F.O

   “But I made it.” (ttk1039)

   b. “Aviromekea ash ink enparome nomirakeme.”

   aviro =me =kea ashint -ak -enpa =ro =me no- mir -ak
   2.PRO =CNTF =SC own -PERF-IRR.A =3F.O =CNTF 1S- drink -PERF
   -e =me
   -IRR.1 =CNTF

   “If you had made it, I would drink.” (ttk1040)

• In (6a) the identity of the referent of irio is explicitly at issue, as indicated by the polar question in which it appears
  – Importantly, irio, unlike all other pronouns, occurs inside the negator tee (6c)
  – I tentatively take this as evidence that negation scopes over the pronoun

(6)  a. “Inani, iriokea noraapanitemahaka?”

   iinani       irio =kea nor- aapani -te -maha =ka
   mother.VOC 3M.PRO =SC 1P- father -POSS -VERID =REL

   “Mother, is he my real father?” (ttk382)

   b. Okantsitanakarikea:

   o- kant -itsi -t -an -ak -a =ri =kea
   3F.S- say  -SEQ -EPC -ABL -PERF-REAL.A =3M.O =SC

   And she responds to him: (ttk383)

   c. “Tee irio piraapanite.”

   tee irio pira- aapani -te
   NEG 3M.PRO 2P- father -POSS

   “He’s not your father.” (ttk384)

   d. “Iriratari piraapanite imetohakeri.”

6Context: this text recounts the deeds of a Taataki, a famed Caquinte warrior whose abilities are unique among all Caquintes. This passage comes from the end of the text.
7Context: a woman attempts to poison her captors with manioc beer, and so relies on the custom of not drinking one’s own manioc beer in order to avoid having to drink the poisoned beverage.
In (7) it is not obvious that the identity of the referent of irio is at issue based on challengeability, but we see that a very contextually salient set of flying entities is invoked in the question in (7a)

(7)  a. “Taashia nonpeanakenpa?”

   taa =shia no- n- peg -an -ak -enpa

   wh =?  1s- IRR- transform -ABL -PERF -IRR.A

   “What will I transform into?” (okp78)

b. “Irio nonpeanakenpa ashiivanti.”

   irio, no- n- peg -an -ak -enpa ashiivanti

   3M.PRO 1s - IRR- transform -ABL -PERF -IRR.A angel

   “I will transform into an angel.” (okp79)

3 RI-not-at-issue REs (or, QUD = event)

• REs for which a referent’s identity is not at issue can further be subdivided by whether their identity is presupposed

• We will see that that presupposition can be calibrated to various participants, including interlocutors, third parties, etc.

3.1 RI-presupposed REs

• REs for which a referent’s identity is presupposed can further be subdivided by whether they are foregrounded or backgrounded

  – This distinction is largely parallel to one between continuation and switch topics

---

8Context: a man returns home to speak with the man he now has reason to doubt is his biological father, and is told that he has gone off to war.

9Context: a man acquires the ability to transform into various flying entities by swooping low over a magical river. Every time he returns to his perch, he asks himself what he will transform into next.
3.1.1 Foregrounded REs

- Referents can be foregrounded for short intervals, which has the function of contrasting already given referents

  (8) a. Kenpehi yamenakotahiroirimankigare, iroatinpa tee onkenkehaherihi.  
    kenpehi i- amen -ako -t -ah -i =ro iri- mankigare
    near 3M.S. watch -APPL -EPC -REG -REAL.1 =3F.O 3M.P- spouse
    iroatinpa tee o- n- kenkeh -ah -e =ri =hi
    3F.PRO NEG 3F.S-IRR- think.about -REG -IRR.1 =3M.O =NEG
    He watched her from afar, but she didn’t think about him... (okp6)
  b. Tee kapichahi onkatsimaterihi, iriatinpa osheki ipintsatakaro.
    tee neg kapichahi small.amount o- 3f.s n- irr -katsima -t -e =ri =hi
    NEG small.amount 3F.S-IRR- hate -EPC -IRR.1 =3M.O =NEG
    iriatinpa osheki i- pintsa -t -ak -a =ro
    3M.PRO much 3M.S- love -EPC -PERF -REAL.A =3F.O
    She couldn’t stand him[11] but he on the other hand loved her very much.

- Referent foregrounding can also serve to disambiguate given third-person referents that are not otherwise disambiguated by gender

  (9) a. “Imaikanpani nometohakenpi.”[12]
    imaika =npa =ni no- metoh -ak -e =npi
    now =INCNGR =AUG 1S- kill -PERF -IRR.1 =2O
    “Now I’m going to kill you.” (ttk350)
  b. Ikantirikea iriatinpa:
    i- kant -i =ri =kea iriatinpa
    3M.S- say -REAL.1 =3M.O =SC 3M.PRO
    And he responds to him [i.e., Chaanta]: (ttk351)
  c. “Pimetohavakena, irimetohahitahenpi aviatinpa aisa.”
    pi- metoh -av -ak -e =na iri- metoh -a -hi -t
    2S- kill -DIR -PERF -IRR.1 =1O 3M.S.IRR- kill -EPV -NONREF -EPC
    -ah -e =npi aviatinpa aisa
    -REG -IRR.1 =2O 2.PRO also
    “Kill me, but they’ll kill you as well!” (ttk352)

[10]Context: Okitsipokani’s wife has run off with her own brother.
[12]Context: Kamotsontopari, after numerous setbacks, has finally come face to face with Chaanta and has the opportunity to kill him, saying the following.
3.1.2 Backgrounded REs

- First, let’s re-examine (6c-d), in which ra co-occurs with a backgrounded NP
- Observe the pervasiveness of demonstrative ra when all referents are given (10)

(10) a. Yoanake chaahanikiri, yamenagunakero omoroki

b. Ikahemakogekero oratika teento, tee aneherohi.

c. Iriratika shiishi inehapohakeri iriratika earoto, ishinevenkari.

d. Koahikani, yamenakerogeti omoro, isotoapohake iriratika meiri.

e. Yameniro tee ironkenpetenparohi teento, irigenti meiri.

f. Irira shiishi, iriatinpa yamenakeri iriratika earoto.
The dog, he is watching the bees. (tnt24)

- Backgrounding is perhaps a mischaracterization; perhaps non-foregrounding is better
- I suspect that verbal person markers are sufficient in these contexts when reference does not need to be disambiguated

3.2 RI-not-pressuposed REs

- Let’s contemplate the existence and identity of the referents in (11) & (12)

  (11) Yameniro imankigare isavihi okahemakotiri ovakoki
  \[ i- \text{amen} -i =ro i- \text{mankigare isavihi o- kahem} -ako -t \]
  \[ 3M.S- \text{see} \ -\text{REAL.I} =3F.O 3M.P- \text{spouse below} 3F.S- \text{call.to} -\text{APPL} -\text{EPC} \]
  \[ -i =ri o- \text{vako} =ki \]
  \[ -\text{REAL.I} =3M.O 3F.P- \text{hand} =\text{LOC} \]

  He saw his wife below calling to him with her hand. (okp249)

  (12) Yamenapohiro irogenti irorihanite
  \[ i- \text{amen} -\text{apoh} -i =ro \text{irogenti} i- \text{orihani} -te \]
  \[ 3M.S- \text{see} \ -\text{ALL} -\text{REAL.I} =3F.O 3F.PRO 3M.P- \text{daughter} -\text{POSS} \]

  He saw that it was his daughter. (ttk1074)

- The use of a simple object enclitic presupposes both existence and identification, while the use of an object enclitic and a pronoun presupposes only existence
- English distinguishes these by complementation, Caquinte by a pronoun
- This extends to instances in which English would not use complementation

  (13) Ari notsarakitanake ivoanahi irigenti shiranpari.
  \[ \text{ari no- tsaraki} -t -an -ak -i \text{i- vog} -an -ah \]
  \[ SS 1S- \text{be.pregnant} -\text{EPC} -\text{ABL} -\text{PERF} -\text{REAL.I} 3M.S- \text{be.born} -\text{ABL} -\text{REG} \]
  \[ -i \text{irigenti shiranpari} \]
  \[ -\text{REAL.I} 3M.PRO \text{young.male} \]

  Then I got pregnant, and a boy was born. (tsh153)

---

13 Context: a telling of the Frog Story, in which the narrator is looking through a book and describing pictures of various scenes; both she and I can see the pictures, and the boy, the dog, and the frog are already established referents.

14 Context: a man is up in a tree and his wife comes to him urgently with news that her brother has turned out to be a cannibal that has recently been terrorizing the area, but she can only motion to him.

15 Context: a man whose daughter was kidnapped by Asháninkas sees a woman in the distance on the beach, but can’t make her out, and upon drawing nearer realizes that it is his daughter.
• We thus expect the “genti pronouns” to occur as subjects of predicational copular clauses (14b).
  
  – The primary function of such clauses is arguably to provide a referent with some additional specification of identity.
  – Indeed only genti pronouns are found in this position.

• We also expect them to occur in response to questions of identity (14e), since it is exactly in this context that referent identity cannot be presupposed.

(14) a. “Taate aviatinpa?”
   
   \[
   \text{taa} = \text{te aviatinpa} \]
   \[
   \text{wh} = ? \quad 2\text{.PRO}
   \]
   
   “Who are you?” (hoo11)

b. “Naagenti hooti.”
   
   \[
   \text{naagenti} \quad \text{hooti}
   \]
   \[
   1\text{.PRO} \quad \text{toad.sp.}
   \]
   
   “I am the toad.” (hoo13)

c. “Taate pikahemi?”
   
   \[
   \text{taa} = \text{te pi- kahem -i} \]
   \[
   \text{wh} = ? \quad 2\text{S- call.to -REAL.I}
   \]
   
   “Who are you calling to?” (hoo14)

d. Ikantikea:
   
   \[
   i- \quad \text{kant -i} = \text{kea}
   \]
   \[
   3\text{M.S- say -REAL.I} = \text{SC}
   \]
   
   He says: (hoo15)

e. “Irogenti nokahemiro norihanite...”
   
   \[
   \text{irogenti}, \quad \text{no- kahem -i} = \text{ro} \quad n- \text{orihani, -te}
   \]
   \[
   3\text{F.PRO} \quad 1\text{S- call.to -REAL.I} = \text{3F.O 1P- daughter -POSS}
   \]
   
   “I’m calling to my daughter...” (hoo16)

• Importantly, I claim that the identity of the referent denoted by irogenti in (14e) is not felicitously challengeable, in contrast to the irio set in (6c).

• Weak evidence for this claim comes from the fact that genti pronouns appear in clauses that correct for an identity (15), (16b).

(15) “Tee irio noraanapite, irigenti katsimakenaka.”
   
   \[
   \text{tee} \quad \text{irio} \quad \text{nor- aapani -te} \quad \text{irigenti}\quad \text{katsima -ak -i} = \text{na} = \text{ka}
   \]
   \[
   \text{NEG 3M.PRO} \quad 1\text{P- father -POSS 3M.PRO} \quad \text{hate} \quad \text{-PERF -REAL.I} = \text{1O} = \text{REL}
   \]
   
   “He isn’t my father, he’s my enemy.” (ttk401)
(16) a. Ihikerihi irio imetohake.
   \[ ihi \text{-}ak \text{-}i =ri =hi \text{ irio } i- \text{metoh}\text{-}ak \]
   \[ 3M.S\text{-} assume \text{-PERF } \text{-REAL.I } =3M.O \text{-ERR } 3M.PRO \text{ 3s- kill } \text{-PERF } \text{-i} \]
   \[ -\text{REAL.I} \]
   They thought they killed him. (ttk932)

b. Kotankitsi tee irio irimetohehi, irigenti imetohake irigentihegite.
   \[ kotankitsi \text{ tee } \text{ irio } ihi \text{-} metoh \text{-}e =hi \text{ irigenti } i\text{-} \]
   \[ \text{but } \text{ 3M.PRO } \text{ 3M.IRR- } \text{ kill } -\text{IRR.I } =\text{NEG } 3M.PRO \text{ 3M.S-} \]
   \[ \text{metoh } -\text{ak } -\text{i } \text{ ir- } \text{igentihegi } -\text{te} \]
   \[ \text{kill } -\text{PERF } -\text{REAL.I } 3M.P- \text{ brother.ME } -\text{POSS} \]
   But they didn’t kill him, they killed his brother. (ttk933)

4 Open Questions

- How exactly do pronouns and demonstratives interact with verbal person marking?
- What are the most appropriate diagnostics for at-issueness and how do they behave in Caquinte interaction?
- Are pronouns with speech act participant referents fully compatible with this proposal?

(17) “Avigenti noshekatakakenkenpa shetyaonkani.”
   \[ avigenti \text{ no- sheka } -t \text{-akag } -\text{ant } -\text{ak } -\text{enpa } \text{shetyaonkani} \]
   \[ 2.PRO \text{ 1s- eat } -\text{EPC } -\text{CAUS } -\text{ANTIP } -\text{PERF } -\text{IRR.A vulture} \]
   “I’m going to make you eat the vultures!” (ttk770)

- Is discourse prominence ultimately better characterized by an interaction-based parameter, as is the case for at-issueness and presupposition?
References


