A feature-based analysis of the Ch’ol (Mayan) person paradigm

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1 INTRODUCTION

• This paper investigates first person plurals in Ch’ol, a Mayan language of southern Mexico
• Ch’ol has developed a special system to derive clusivity differences in Table 1

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>1 INCL</th>
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<tr>
<td>-oň</td>
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<td>-oň=la</td>
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• At first glance it seems as the =la shows up in inclusive plural and second person plural
  – However a closer look at the paradigm reveals that the exclusive plural form oň=loj-oň is derived by adding -oň, the first person form, to the inclusive form oň=la with vowel assimilation of a to o
  – Effectively, the exclusive plural is derived by adding the first person marker to inclusive form, as if repeating the speaker derives speaker and not hearer

• Based on empirical generalizations from the usage of the two first person plural forms, I recategorize the inclusive as a general first person plural and the exclusive as a specified exclusive form that explicitly excludes the hearer

• I formalize the person paradigm in Ch’ol, concentrating on the first person plural forms
  – I argue a binary feature system can better capture the Ch’ol data, whereas privative feature systems cannot
  – This largely is due to the fact that binary feature systems with [=hearer] can explicitly exclude the hearer from the representation whereas a privative feature system cannot

I thank the patience of the Ch’ol speakers I have had the opportunity to work with: Nicolás Arcos López, Celia Alvaro, Paty Arcos Montejo, Norilia Vázquez Martínez, and Virginia Martínez Vázquez. I also thank Miloré Despić, Jessica Coon, Sarah Murray and the Cornell Semantics Group for comments and discussion.

All data comes from my fieldwork in Chiapas, Mexico. Any errors are my own.

2 CHARACTERIZING THE CH’OL DATA

• Ch’ol has been described as having an inclusive and exclusive distinction (Law (2009); Kaufman & Justeson (2003); Vázquez Alvarez (2011); Coon (2010) i.a.)
  – For Ch’ol, the exclusive form is morphologically more complex than the inclusive and is formed by adding the first person marker -oň to the inclusive (Mora-Marín, 2009: 108)
• Person markers and pronouns in Ch’ol are given in Table 2

Table 2: Person markers and pronouns in Ch’ol

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- =la pluralizer undergoes vowel assimilation: so laj+oň → loj-oň.
  – The inclusive form is used on contexts where speaker and hearer are referenced as in (1)

(1) Typical way for people to end a conversation with each other:
  
  ‘We’ll talk later!’

(2) However, the inclusive plural has some extended usages like the possessor when listing inalienable body-part terms (2)

(a) la=k-pxix = knee
(b) la=k-ok = leg
(c) la=k-jol = head
  – In this context lakpix is not really ‘our inclusive knee’, nor is lakok ‘our inclusive leg’, the first person inclusive is the general term used in this listing context
  – Ch’ol speakers also use the first person inclusive in generic contexts as in (3), much like English speakers use the second person

Excerpt from instructions on how to build a house:

‘First we put in the posts…’

The inclusive is used with many other nouns that do not literally mean that there is some relationship between speaker and hearer, examples are given in Table 3

Table 3:

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3 DERIVING CH‘OL FIRST-PERSON PLURALS WITH BINARY FEATURES

3.1 Binary feature analysis for Ch‘ol


- Maximally attested person features are given in a binary feature system with the features [+speaker] and [±hearer] from Bobaljik (2008).

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<tr>
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</tr>
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- Based on the wider distribution of the first person inclusive, I posit that the inclusive form is actually a general first person plural that doesn’t necessarily make reference to a hearer.

- The exclusive, however, is only used in contexts explicitly excluding the hearer as in (4-5).

(4) Context: As one group of people are leaving they say to another group (or person):

a. Sam-i-yo=ix=loj-oña.
   - leave-IV-B1=already=SNAP.PL.B1
   - ‘Goodbye!’ (Lit. We are leaving) ‘Goodbye!’

b. # Sam-i-yo=ix=la.
   - leave-IV-B1=already=SNAP.PL.
   - ‘Goodbye!’

   - ch‘ol=B1-PART.PL.B1 and NEG ch‘ol=B2-NEG
   - ‘We are Ch‘ol and you are not Ch‘ol.’

b. # Ch‘ol-oña-la yik‘oty mach ch‘ol-ety-ik.
   - ch‘ol=B1-PART.PL and NEG ch‘ol=B2-NEG
   - Intended: ‘We are Ch‘ol and you are not Ch‘ol.’

- The exclusive plural is morphologically and semantically more complex.
  - The exclusive form is a more specified exclusive that excludes the hearer.

- According to the actual usage of the inclusive form in Ch‘ol, I recategorize it as a general first person plural for the purposes of this talk.
  - Thus the inclusive in Ch‘ol does not necessarily include hearer (it can, but in some contexts the hearer is not included).

- Recall again the generalization that =la occurs in all the participant plural forms.

- Based on the system in Table 5 alone, an additional feature is needed to capture =la: [±participant] (as in Nevins (2007); Harbour (2007)) given in Table 6.

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- The updated feature system in (6) is advantageous for formalizing person as [+participant] represents a natural class of speech act participants and can capture the distribution of the participant pluralizer =la.

- Table 7 shows what first person general would look like:

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- Analysis for Ch‘ol ends up being more featureally complex than in Table 7.
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Concentrating on participants, I posit the following morphological spellouts of features, with the addition of \([\pm\text{singular}]\) for number.

(6) Ch'ol Vocabulary Items

a. \(-o\tilde{n}: [+\text{participant},+\text{speaker}]\)
b. \(-\text{ety}: [+\text{participant},-\text{speaker},+\text{hearer}]\)
c. \(=la: [+\text{participant},-\text{singular}]\)

3

The general first person plural has the features \([+\text{participant},+\text{speaker},-\text{singular}]\), which is why \(-o\tilde{n}=la\) appears.

The exclusive form, \(la\) \(+\) \(-o\tilde{n}\), is derived from the general first person plural form by adding \(-o\tilde{n}\), the first person marker.

- However, adding \(o\tilde{n}\) (with features \([+\text{participant},+\text{speaker}]\)) does not capture the semantic distribution of \(=loj-o\tilde{n}\) as there needs to be a way to explicitly exclude hearer.

- I posit that to derive the exclusive, you need to add the set of features \([+\text{participant},+\text{speaker},-\text{hearer}]\) to \(=la\).

No item in the vocabulary matches this exactly, via to the Subset Principle (e.g., Halle (1997)), the phonological exponent that matches a subset of the features is inserted.

- The item matching a subset of the features is \(-o\tilde{n}\) in (6a).

- \(-\text{ety} = \text{la}\) in (6b) and (6c) cannot be inserted as they have conflicting features.

To summarize, Ch'ol does not derive clusivity in the way we would normally expect.

In other contexts that do not explicitly exclude the hearer, like in generic instructions, forms of respect and other terms, speakers use the general first person plural form (i.e., the traditional inclusive).

Important to include \([-\text{hearer}]\) in the representation of the exclusive in order to capture in what contexts it is used.

3.3 First person plurals in Tojol-ab'al

The same mechanism for deriving first person plurals in Ch'ol is found in Tojol-ab'al (Mayan) in Table 8.

Table 8: Absolutive markers in Tojol-ab'al (Adapted from Law (2009: 232) with my hyphens)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>1 INCL</th>
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<th>2 PL</th>
<th>3 PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abs.</td>
<td>-on</td>
<td>-a</td>
<td>Ø</td>
<td>-(-\text{tik})</td>
<td>-(-\text{tik})-on</td>
<td>-ex</td>
<td>-(\text{e'})</td>
</tr>
</tbody>
</table>

- The exclusive form in Tojol-ab'al is derived from the inclusive from with the addition of the first person marker \(-on\).

- In Tojol-ab'al the difference lies in the more specific form for first person plural.

- Rather than having a participant pluralizer, it has a form for \([+\text{participant},+\text{speaker},-\text{singular}]\), which is spelled out as \(-\text{tik}\).

4 A Privative Feature Approach

Furthermore, with strictly privative feature approaches like in feature geometries (Harley & Ritter, 2002; Cowper & Hall, 2005), it is unclear how to explicitly exclude hearer.

Given the privative features \([\text{speaker}], \text{[addresssee], [participant] for person, and [group] for plural from Harley & Ritter (2002), we can propose the following vocabulary list in (7).

(7) Ch'ol in a purely privative system

a. \(-o\tilde{n}: [\text{speaker}]\)
b. \(-\text{ety}: \text{[addresssee]}\)
c. \(=\text{la}: [\text{participant}, \text{group}]\)

(8) Deriving the first person plurals

a. \(-o\tilde{n}=\text{la}: [\text{participant}, \text{group}, \text{speaker}]\)
b. \(-o\tilde{n}=loj-o\tilde{n}: [\text{participant}, \text{group}, \text{speaker}]\)

- To derive the exclusive \(-o\tilde{n}=loj-o\tilde{n}\) with two speaker features, the formalism in (8b) must have two speaker feature activated.

- It is unclear how repeating two speaker features excludes the hearer: the absence of a feature does not mean it is necessarily excluded.

- The Ch'ol data necessitates an explicit exclusion of hearer in the specific exclusive form.
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5 IMPLICATIONS & CONCLUSION

- In this paper, I recategorized the Ch’ol inclusive/exclusive distinction as a general first person plural and a specific first person exclusive.
  - I have provided an analysis for Ch’ol person features that works in a binary feature system but not a privative feature system
    - Exclusive is derived from the general first person plural by adding [+participant,+speaker,–hearer]
    - No item in the Vocabulary matches these features exactly so via the Subset Principle one is inserted
  - Speakers choose form that is most informative for the situation
  - This can be accounted for by using Heim (1991)’s Maximize Presupposition, as Bobaljik & Zocca (2011) has similarly proposed for gender systems

- This has implications for theories of person. The binary feature [hearer] departs from recent work on binary features that posit a privative hearer feature4 (Nevins, 2007; Harbour, 2007)
  - I argue that in order to account for the data in Ch’ol, the hearer feature must be binary
- Despić & Murray (To Appear) and Watanabe (2013) give evidence for [–hearer]
- For example, Watanabe (2013) shows that in Fula the split behavior of morphemes with [+speaker] and [–hearer] values interacts with the placement of person markers
  - Specifically, when the [–hearer] feature is necessary, like in first person plural exclusive and third person, the person marker is placed before the verb if there is no hearer as shown in Table 9

Table 9: Fula relative future active ‘will wash’ (person markers underlined) (Arnott, 1970: 192)

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exclusive</td>
<td>min-lootata</td>
</tr>
<tr>
<td></td>
<td>Inclusive</td>
<td>lootet-en</td>
</tr>
<tr>
<td>2</td>
<td>lootat-aa</td>
<td>lootot-on</td>
</tr>
<tr>
<td>3</td>
<td>‘o-lootata</td>
<td>fe-lootata</td>
</tr>
</tbody>
</table>

- Though there is not a morpheme in Fula that spells out [–hearer], its presence is necessary in order to account for distribution of morphemes
- The binary feature analysis argued for here with a [±hearer] feature seems to better capture the variety we see across the world’s languages

4This privative hearer feature is called [addressee].

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