

Event structure in Mazahua

Virgilio Partida Peñalva

Introduction

- There are two ways in which we can detect event types interacting with morphology:
 - **Semantic change** triggered by derivational morphology (i.e. some derivational processes introduce new event types).
 - **Selection** (i.e. some affixes select for a base with a specific event type).
- In this lecture we will look at data from Mazahua that shows derivational and inflectional morphology highly interacting with event structure:
 1. Differences between simple and complex predicates can be seen in Mazahua morphology.
 2. Both derivational and *inflectional* affixes select for bases with a specific event type.
- We will see how the **differences between event types** (including the distinction between simple and complex predicates) **can be represented in the syntax** and how the selectional requirements of affixes follow from these structures.

1 How are events introduced?

- Predicates are formed by combining a verb and a **little-*v*** ([Marantz, 1997](#)) → a morpheme that **introduces events**. It can be non-overt (i.e. zero-morpheme) or have an overt exponent.
- The little-*v* can be of different “flavors” depending on the event it introduces ([Harley, 1995](#); [Pylkkänen, 2002, 2008](#); [Cuervo, 2003](#); [Ramchand, 2008](#)). [Cuervo \(2003, 2015\)](#), for instance, proposes there are three types of *v*-heads that introduce simple events (1).

(1) Event introducers

- | | | |
|----|--|---|
| a. | v_{DO} Activities: | $SING + [v_{DO}, -\emptyset] \leftrightarrow sing.ITR/TR$ |
| b. | v_{GO} Verbs of change/happening/motion: | $FALL + [v_{GO}, -\emptyset] \leftrightarrow fall$ |
| c. | v_{BE} States/existentials: | $BROKEN + [v_{BE}, -\emptyset] \leftrightarrow broken$ |

- Two vs can be combined to form complex events (2).

(2) Complex event structures

- | | | |
|----|-------------------------------|---|
| a. | $v_{DO} + v_{BE}$ Causatives | $BREAK + [v_{BE}, -\emptyset] + [v_{DO}, -\emptyset] \leftrightarrow break.TR$ |
| b. | $v_{GO} + v_{BE}$ Inchoatives | $BREAK + [v_{BE}, -\emptyset] + [v_{GO}, -\emptyset] \leftrightarrow break.ITR$ |

- ★ Inner events (closer to the verb) \rightarrow culmination (e.g. v_{BE} in (2))
- ★ Outer events (farther from the verb) \rightarrow causation/agency (e.g. v_{DO}/v_{GO} in (2))

2 Background on Mazahua

- Mazahua is a language belonging to the Oto-Pamean group of the Oto-Manguean family. It is mainly spoken in central Mexico (Edo. de México and Michoacán states) by around 130, 000 speakers.
- The data that is shown here was collected in fieldwork that I conducted in the last years. Elicitation sessions involved asking for translations of simple and complex constructions, grammaticality judgments and recording of short narratives.
- It is a synthetic fusional language (e.g. morphemes encode more than one grammatical feature).
- It is a head-marking language: information about the arguments (e.g. person and number) is encoded in the verb through *agreement* morphology (3).
 - Agreement is a type of *inflectional* morphology since it encodes grammatical information (i.e. person and number features).
- All examples are shown in phonetic transcription. Diacritics in vowels indicate tone (´ - high, ` - low).

- (3) a. **nùzyɔ rí=ɲôni**
 I 1.PR.S = eat.ITR
 'I eat'

- b. **nùts'k'e í** = ɲôni
 You.SG 2.PRS = eat. ITR
 'You.SG eat'

3 Event structure and derivational morphology

- Look at the two groups of verbs in Table 1 and answer the questions below.

Group 1		Group 2	
mbàha	'to be red'	mbàyi	'to become red'
hóʔo	'to be good/ healthy'	hóyi	'to get better'
k'aʔa	'to be wet'	k'ayi	'to get wet'
t'óʃi	'to be white'	t'óʃki	'to become white'
pòt ^h i	'to be black'	pòki	'to become black'
pòʃi	'to be dirty'	pòʃki	'to become dirty'
?iʃi	'to be sour'	?iʃki	'to become sour'
mỗs'i	'to be skinny'	mỗsk'i	'to become skinny'
nóho	'to be big'	nóki	'to become big'

Table 1:

- What is the difference in meaning between verbs in Group 1 from those in Group 2? What are their event types? Are they simple or complex predicates?
 - Could we say the forms in one group are derived from the other group? **Yes:** which group is the derived one, what kind of affix attaches to the base, and what is the meaning the derivational morpheme is adding? **No:** can you think of a way of accounting for the similar meanings that the verbs in both groups have?
- HINT:** Mazahua words are usually disyllabic and have the structure CV.CV (sometimes CVC.CV). When derivational and inflectional affixes attach to roots/bases one of the syllables of the base is usually omitted to preserve the disyllabic word requirement.

- Now look at the transitivity alternations in Table 2. Assume that the transitive stems in the right are derived from the intransitives in the left.

Intransitives	Transitives
hóʔo→hóyi ‘to get better’	hóki ‘to cure’
k’aʔa→k’ayi ‘to get wet’	k’aki ‘to wet.TR’
ʃoyi ‘to open.ITR’	ʃoki ‘to open.TR’
w’ayi ‘to break.ITR’	w’aki ‘to break.TR’
tōhō ‘to sing.ITR’	tōti ‘to sing.TR’
ʃàha ‘to shower.ITR’	ʃàti ‘to bath.TR’
w’ézi ‘to embroider.ITR’	w’éʔfi ‘to embroider.TR’
nem’e ‘to dance.ITR’	neʔm’e ‘to (make someone) dance’

Table 2:

1. What kind of predicates are transitivized by inserting [-k] (or alternatively devoicing /y/→[k])?
2. What kind of predicates are transitivized by a fortition process?
3. What makes ‘to make dance’ different from the other groups of verbs in this table?

4 Event structure and inflectional morphology

- Mazahua has two series of agreement morphemes: proclitics that attach to the left of verbs like (4) and suffixes that attach to the right of verbs like (5).
- Can you think of a generalization that describes which types of verbs are selected by proclitic agreement and which by suffix agreement? (NOTE: Disregard differences in Tense and Aspect between (4) and (5))

(4) Verbs A

- a. **nùzyɔ rí** = ʃàha
I 1.PRS = shower
‘I shower’
- b. **nùzyɔ rí** = nem’e
I 1.PRS = dance
‘I dance’

- c. **nùzyɔ** rí = tōhō
 I 1.PRS = sing
 'I sing'

(5) Verbs B

- a. **nùzyɔ** ná = nó-**zi**
 I PRS.CONT = tall-1
 'I am tall'
- b. **nùzyɔ** ná = hó-**zi**
 I PRS.CONT = good/healthy-1
 'I am good/healthy'
- c. **nùzyɔ** ná = mǒ-**zi**
 I PRS.CONT = skinny-1
 'I am skinny'

(6) **Generalization:**

- Now consider the data in (7). Does the generalization in (6) have to be changed? If yes, can you think of a generalization that includes the data in (7)?

(7) Verbs C

- a. **nùzyɔ** ò = nóyi-**zi**
 I PST = become.tall-1
 'I became tall'
- b. **nùzyɔ** ò = hóyi-**zi**
 I PST = get.better-1
 'I got better'
- c. **nùzyɔ** ò = mǒski-**zi**
 I PST = become.skinny-1
 'I became skinny'

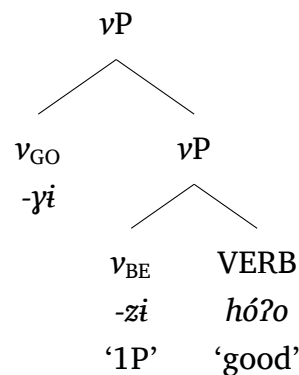
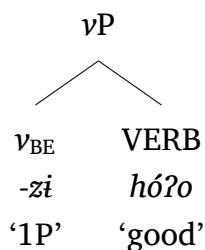
(8) **Revised Generalization:**

5 Event structure in the syntax

- Simple predicates can be represented as in (9), with a verb combining with a v . Complex predicates, on the other hand, have been proposed to be formed of two vP each headed by a different v (10).
- If we believe syntactic nodes are morphemes, each morpheme in Mazahua predicate has a correlate in the syntactic structure (i.e. each syntactic node in the vP is phonologically realized as an overt morpheme in Mazahua verbs).

(10) Inchoative (Complex predicate)

(9) Stative (Simple predicate)



Thank you!

References

- Cuervo, M. C. (2003). *Datives at Large*. PhD Thesis, MIT, Cambridge, MA.
- Cuervo, M. C. (2015). Causation without a cause. *Syntax*, 18(4):388–424.
- Harley, H. B. (1995). *Subjects, Events and Licensing*. PhD Thesis, MIT, Cambridge, MA.
- Marantz, A. (1997). No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon. In Dimitriadis, A., Siegel, L., Surek-Clark, C., and Williams, A., editors, *Proceedings of the 21st Annual Penn Linguistics Colloquium*, pages 201–225, Pennsylvania. University of Pennsylvania Working Papers in Linguistics.
- Pylkkänen, L. (2002). *Introducing Arguments*. PhD Thesis, MIT, Cambridge, MA.
- Pylkkänen, L. (2008). *Introducing Arguments*. MIT Press, Cambridge, UNITED STATES.

Ramchand, G. C. (2008). *Verb Meaning and the Lexicon: A First-Phase Syntax*. Cambridge University Press, Cambridge.