Multidialectal orthography and the writing of vowels in Mixe

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Presentation

Mixe communities face some challenges:
• They want a unified writing system for all of the dialects.
• But, many people want to write their own dialect slightly different from other communities.
• No one wants to change the way they already write... — some else should do it.

This talk is an academic exercise showing how a multidialectal orthography could be achieved.
• The ideal solution becomes too deep.
• An alternative solution is presented.

Cultural unity  Self identification

Mixe Branch

Moxte

Moxte

Mixe Branch

Tapachultec (now extinct)

Olutec

Sayultec

Mixe-Zoque Family

Zoque Branch

Chimalapas Zoque

Chiapas Zoque

Main Mixe communities

Dialectal chain

More innovative

More conservative

Brief history of the Mixe orthography

• [Epi-Olme writing system. Not really Mixe, probaply proto-zoque.]

Jama’day

Justeson & Kaufman 1993
Brief history of the Mixe orthography

- [Epi-Olmec writing system. Not really Mixe, probably proto- zoque]
- Colonial Period: Quintana's *Instrucción Cristiana*, *Confesionario*, etc. (1729a, 1729b, 1733).
  - There are other documents in the communities, such as Coatlán, Juquila...
  - It is necessary to recover them before they get destroyed by the community or just due to bad conditions.
  - The writing system did not have continuity.

- Colonial Period: Quintana's *Instrucción Cristiana*, *Confesionario*, etc.

- Summer Institute of Linguistics
  - Not a unified orthography.
  - Correspondence between letters and allophones
  - Based on the Spanish orthography.

- Current Mixe orthography

Mixe orthography

- The Mixe orthography was created in the 1980's
- One explicit goal of that process was to create a single writing system for all Oaxaca mixe languages.
- It is a widespread orthography as it is used almost officially in some communities.
- It appears in recent publications (Díaz, 2008; Zavala, 2013a, b; Romero-Méndez, 2013; inter alia).
- It is taught to schoolteachers.
- It is taught in some high schools and in two colleges throughout the Mixe territory.
- Bible translation (at least Quetzaltepec Mixe).

Mixe Orthography

- It uses the latin alphabet.
- It is intended to have a high correspondence between phonemes and graphemes (Reyes, 2005; Romero, 2013).
- It works very well for writing consonants.
- Only phonemes are written.
  - Voicing, lenition, and palatalization are not represented.
- There are many issues that have to be resolved in order to have a complete orthographic system.
- But it works fairly well...
  - Except for vowels!
Vowels in the Mixe orthography

- When the Mixe orthography was developed, they did not know enough about mixe sound systems.
- Except for Totontepec Mixe, not a single phonology had been made. (although cf. Hoogshagen 1959)
- But they did not take into account Totontepec Mixe.
  - Those descriptions were written using phonotagmemics, and were in English (Crawford 1963).
- They only had access to the surface forms for a few mixe languages, but they wanted to have a unified orthography for all Mixe languages.
- The way they decided to do it was using the same set of symbols for all dialects... each community decided how to adapt it to their language.

How do Mixe language got all those vowels?

Due to the influence of the palatal glide as part of the coda

a) /n-kos-jp/ 'he finishes it'
   1s-punch-NEU/INDEF/TR [ngeʃ]

b) /n-mats-i/ 'I grab it'
   1s-grab-NEU/INDEF [ŋmaʃ]

Different effects of the palatalization

The palatalization has two different effects on the vowel systems:

- It does not allow vowels to lower.
- It causes fronting of back vowels

Romero-Méndez, forthcoming
Acoustic analysis of vowels in 26 Mixe dialects

Proto-Mixe-Zoque and Lowland Mixe

Proto-Mixe orthography

Lowland Mixe and Midland Mixe.
• Vowel lowering
• Vowel fronting
Fronting II: all the way

Fronting III: rounding

Central vowel

Non-stressed vowels

Non-front vowels

<table>
<thead>
<tr>
<th>Ayutla Mixe</th>
<th>Coatlán Mixe</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i]</td>
<td>followed by palatal</td>
</tr>
<tr>
<td></td>
<td>i</td>
</tr>
<tr>
<td></td>
<td>followed by palatal</td>
</tr>
<tr>
<td></td>
<td>u</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ayutla Mixe</th>
<th>Coatlán Mixe</th>
</tr>
</thead>
<tbody>
<tr>
<td>[e]</td>
<td>not followed by palatal</td>
</tr>
<tr>
<td></td>
<td>i</td>
</tr>
<tr>
<td></td>
<td>followed by palatal</td>
</tr>
<tr>
<td></td>
<td>o</td>
</tr>
</tbody>
</table>
Problems with the current orthography

Representation based on similarities with /a/ «a» in Spanish:

<table>
<thead>
<tr>
<th>Dialect A</th>
<th>Dialect B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Followed</td>
<td>Not followed</td>
</tr>
<tr>
<td>«e»</td>
<td>«á»</td>
</tr>
<tr>
<td>«a»</td>
<td>«a»</td>
</tr>
</tbody>
</table>

Problems with current orthography

<table>
<thead>
<tr>
<th>Dialect A</th>
<th>Dialect B</th>
</tr>
</thead>
<tbody>
<tr>
<td>?aʰkʂ &lt; *a</td>
<td>?aʰkʂ &lt; *e</td>
</tr>
<tr>
<td>‘fish’</td>
<td>‘chayote’ (vegetable)</td>
</tr>
</tbody>
</table>

Problems with the current orthography

Representation based on similarities with /a/ in Spanish:

<table>
<thead>
<tr>
<th>Dialect C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Followed by a palatal</td>
</tr>
<tr>
<td>«e»</td>
</tr>
<tr>
<td>«a»</td>
</tr>
</tbody>
</table>

Recap

- All Mixe vowel systems can be understood as having a basic six-vowel system.
- Then two things might happen:
  - Lowering when not followed by a palatal.
  - Fronting when followed by a palatal.
Solution I

• All Mixe vowel systems can be understood as having a basic six-vowel system.
  Let us write with a single letter these six vowels.
• Then two things might happen:
  – Lowering when not followed by a palatal.
  – Fronted when followed by a palatal.
  Let us write the changes with a diacritic.

A letter for the six basic vowels

<table>
<thead>
<tr>
<th>Front</th>
<th>Non-front</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>i</td>
</tr>
<tr>
<td>ê</td>
<td>ü</td>
</tr>
<tr>
<td>e</td>
<td>o</td>
</tr>
<tr>
<td>a</td>
<td>ä</td>
</tr>
</tbody>
</table>

Add a diaeresis to the alternate form.

For Ayutla Mixe:

<table>
<thead>
<tr>
<th>Phonetically</th>
<th>Phonologically</th>
</tr>
</thead>
<tbody>
<tr>
<td>[i] followed by palatal</td>
<td>[i] [i]</td>
</tr>
<tr>
<td></td>
<td>[i] [ã]</td>
</tr>
</tbody>
</table>

Problems

• The problem with this solution is that it becomes too deep.
• It is phonologically consistent,
• but phonetically there is no relation between sounds and graphemes.

• The other problem is that «ê» is already used for representing /i/.
• Even though this is actually problematic, there is already a 30 years old tradition.
Concluding remarks

- In order to have a multidialect orthography, it is necessary to have phonetic and phonological descriptions of many dialects.
- That is not enough,
  - It is also necessary to understand the phonological processes that caused the historical change.
- However, often times part of the speakers want a unified orthography,
  - while other want to write their dialect in a slightly differently,
  - this gives them identity (cf. Suslak 2003).
- I want is to write Mixe in a way that is useful to widest possible audience.

References

References

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• SEP. 1986. N’ayuuk nekZ. México: UNAM.
• SEP. 1986. N’a n’ïyük. México: UNAM.