Developing a Community Based Orthography through Data Analysis for the San Lucas Quiaviní Zapotec Communities

Presented by: Stephanie Morales Curiel

Introduction

- Despite the Ley General de Derechos Lingüisticos de los Pueblos Indígenas which recognizes the high linguistic diversity of Mexico, many of the Indigenous languages of Mexico are considered endangered.

- Domains of use for these Indigenous languages are limited to an oral capacity.

- Literacy is predominantly taught and learned in Spanish, which is introduced and learned upon a child's entry in school (Pérez Báez 2012, Pérez Báez 2017).

- This project presents the challenges in opening writing domains for the San Lucas Quiaviní Zapotec communities and argues that variation as well as community input must be considered to develop and sustain a culture of writing and literacy.

- Literacy practices in SLQZ must be promoted but should not be hampered by a prescriptive stance in the implementation of an orthographic system.

San Lucas Quiaviní Community

- Located in the Central Valley of Oaxaca about 15 mins away from Tlacolula De Matamoros.

- According to INEGI (2020) there are 1547 speakers of Zapotec in the community who are aged 5 and up.

- The community in diaspora is concentrated in Los Angeles, California, however there are no exact numbers for how many community members reside in diaspora.

- Chavez Peón (2010) estimates about 2000 community members residing in the U.S

- There is unfortunately very minimal transmission of the language to children born in diaspora (Pérez Báez, 2014).

San Lucas Quiaviní Zapotec (SLQZ)

- SLQZ falls under the Western Tlacolula Zapotec node and is part of the large Otomanguean stock (Campbell, 2017).

- There are numerous Zapotec languages neighboring SLQZ, however intelligibility varies from town to town.

- There are four tones in the language: high, low, falling, and rising.

- There are four phonation types in the language: modal, breathy, creaky, and laryngealized (interrupted).

Tonal and phonation combinations

|	High	Low	Falling	Rising
Modal	√	√	√	√
Breathy	X	√	√	X
Creaky	√	√	√	X
Interrupted	√	√	√	X

Chart from Chávez Peón (2010)

Phonation

- Modal: /beː/ → [beː] 'mesquite bean'
- Breathy: /be̤/ → [be̤ː] 'mold'
- Creaky: /bḛ/ → [bḛː] 'notch made in a sheep's ear'
- Interrupted: /beʔ/ → [beʔe] 'mushroom'

Near minimal pairs from Chávez Peón (2010), Recording of Carmela Morales Matias

Orthographies

Di'csyonaary X:tèe'n Dii'zh Sah Sann Lu'uc

SAN LUCAS QUIAVINI ZAPOTEC DICTIONARY
DICCIONARIO ZAPOTECO DE SAN LUCAS QUIAVINI

VOLUME I
ZAPOTEC · ENGLISH · SPANISH DICTIONARY

- One of the first orthographies proposed for SLQZ was in 1999 with the publication of a trilingual dictionary by Munro and Lopez.
- Unfortunately, the orthography was complicated and was not received well by the community.
- Tone was not marked and phonation was not marked either which made it hard to differentiate between words such as [tsè$^{\textipa{P}}$ɪɲ] 'thirteen' which was written in the dictionary as **tseiny** and [tsɛ̀ɪ̤ɲ] 'fifteen' which was written in the dictionary as **tseiny.**
- [tsè$^{\textipa{P}}$ɪɲ] 'thirteen'
- [tsɛ̀ɪ̤ɲ] 'fifteen'
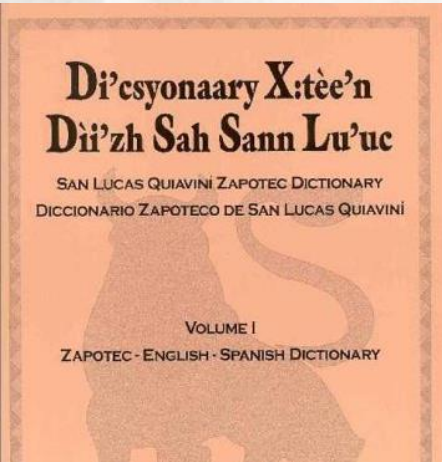
Orthographies

Cali Chiu: A Course in Valley Zapotec

Pamela Munro, Brook Danielle Lillehaugen, and Felipe H. Lopez

- In 2007 there was an updated orthography that was introduced via the publication of a textbook titled Cali Chiu.

- The textbook was designed with college level learners in mind, as it has been used at UCSD, UCLA, and is now being used at the Universidad del Pueblo in Tlacolula (Lillehaugen et al., 2023).

- There is a pronunciation guide in the textbook, however in the main entries tone is not marked as well as phonation.

- Entry Example:
  beu [be'euh] turtle
  beu [be'èu'] coyote
  [béṳ] 'turtle'
  [béṵ̀] 'coyote'

Literacy

- While not everyone in the community can read in write in Zapotec using one of the previously mentioned orthographies, there are some individuals who can.

- In 2011 The Colectivo Literario Quiaviní which was composed of young poets from the Telesecundaria in San Lucas published a collection of poems in Zapotec.

- A former member of the collective opened up about his journey of learning to read and write in SLQZ and stated that "it was hard to hear that you don't know your language and that you have to relearn something you think you already know" (personal communication with a thirty-three-year-old male speaker).

- The difficulties faced in the learning process may result in discouragement and often corrections can lead speakers and learners to believe that "mainstream teachers, alphabetically literate" are the only "processors of knowledge" when that is far from the case (López-Gopar, 2007 pg. 169).

Literacy

- Currently there is no recognized orthography being used among community members.

- Most community members who do communicate in Zapotec tend to use voice messages.

- If there are written forms being produced most community members use a Spanish based orthography.

- However, most online communication is done in Spanish.

Variation

- Since 1999 there has been a mention of variation in SLQZ that has been under described.

- Variation → interspeaker variation at the phonetic level.

- This phonetic variation does not affect the meaning of a word.

- What you find are difference in the vowel used in a word, differences in duration of a phonation, or the duration of word final consonants.

Variation

Methods

50 total consultants

4 monolingual Zapotec speakers, 5 speakers were recorded in Los Angeles

Used a list of near minimal pairs

Words only differed by either tone or phonation.

All participants answered a language survey

Survey tried to collect as much language history as possible.

Variation

- While tone or phonation may aid in giving some indication of which lexeme is being used not everyone makes this distinction clear.

- For example: [bèː] 'mesquite bean' and [bè̤ː] 'mold,' breathiness is important in distinguishing these two lexemes.

- While the duration of breathy, creaky, or interrupted phonation may not pose an issue for L1 Zapotec speakers, lack of phonation distinction or prominence may pose a critical issue that can lead to lexical ambiguity in for learners of Zapotec in diaspora.

- In the case of orthography if tone is not marked, then phonation needs to be marked if that is the distinguishing feature.
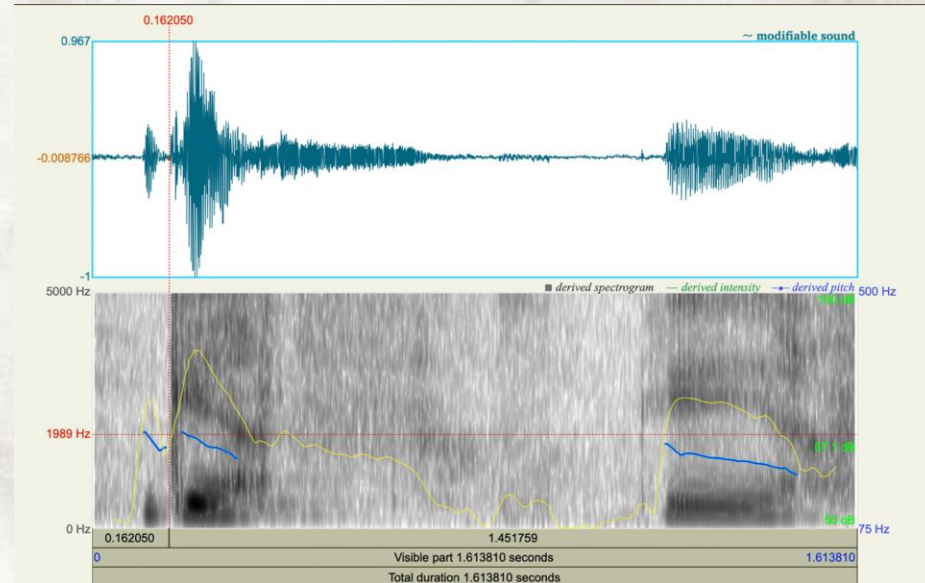
Variation
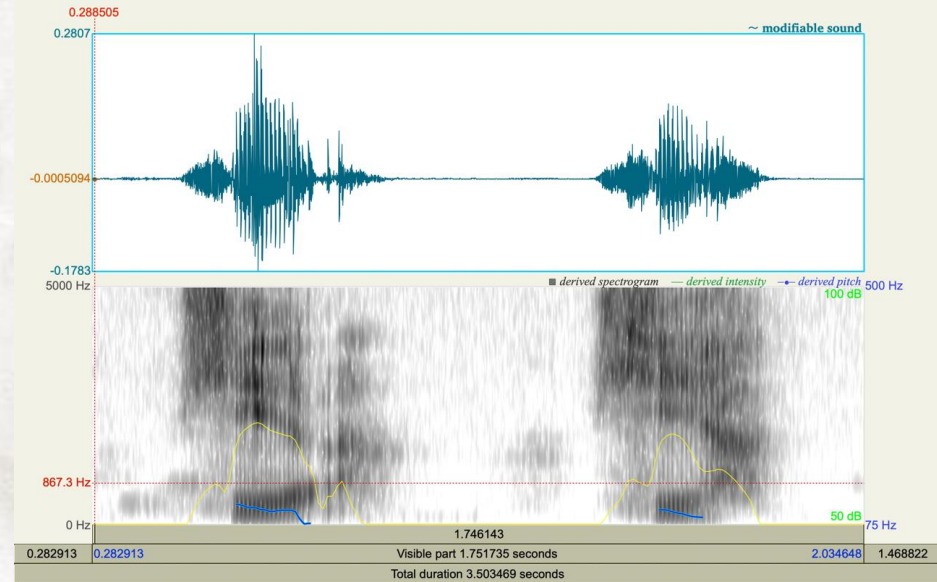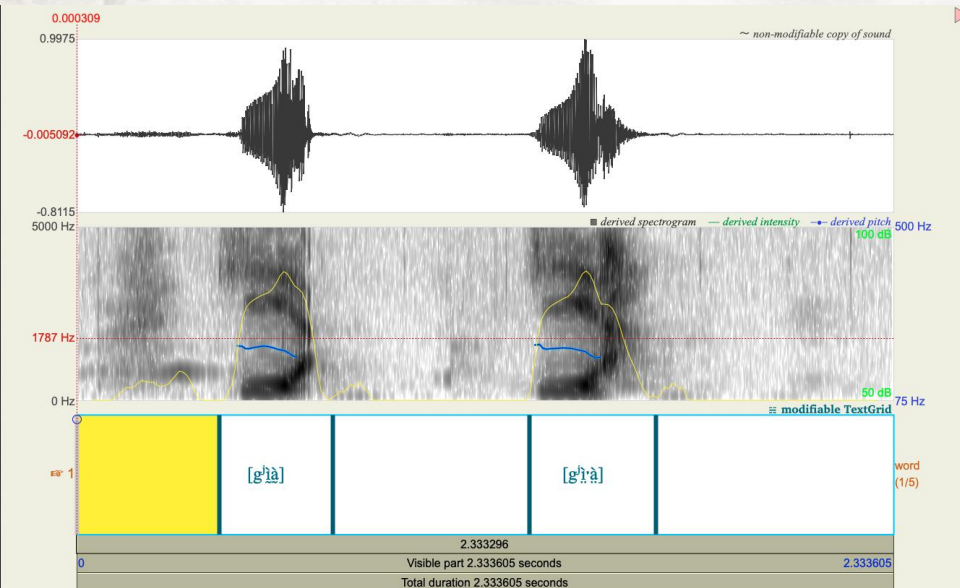
- creaky phonation [gʲ̀ìà̰] 'flower'
- breathy phonation [gʲ̀ì̤à̤] 'rock'

Variation

- When looking at word final consonants often what you find are differences in duration of these consonants.

- With some consonants, however you not only find duration differences but also productions differences. i.e a long s production versus a short one that sounds more like a z.

- For new learners of the language again these differences will pose some level of ambiguity that can be transferred to writing.

- Additionally, this ambiguity can extend to L1 Zapotec speakers at the writing level as well.

Variation
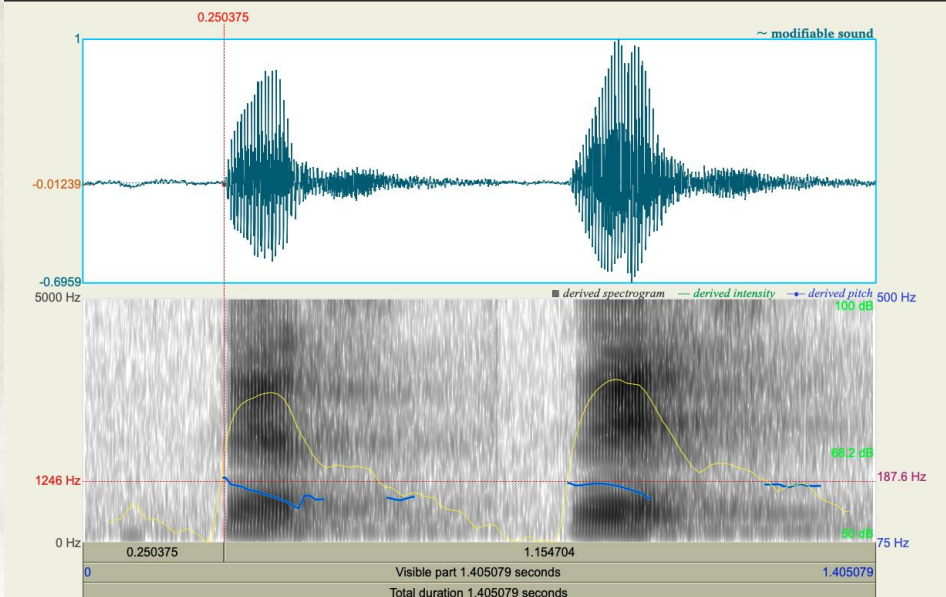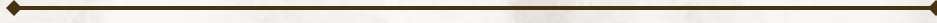
[gè̤ːs] 'claypot'

[gê̤z] 'cigar'

Conclusion

- Variation exists at all ages in the community.

- No two individuals will sound the same, and no one individual will always sound the same.

- SLQZ needs an adequate accessible orthographic system so that the language can be used in written domains.

- One of the ways in which we can allow for this accessibility is by considering the variation present in the community.

- Additionally, an orthography needs to allow flexibility in spelling and push away from a prescriptive approach.

- "Simply creating an orthography and dictionary does not result in a culture of literature and writing in the language," even if grammar books and dictionaries are published and made readily available, time needs to be invested in teaching and developing orthographies with communities. (King, 2019, pg. 277).

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