Technology & collaboration in language documentation & revitalization: the case of a Zapotec Talking Dictionary

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Alex Mannix, Bryn Mawr College
Brook Danielle Lillehaugen, Haverford College
Janet Chávez Santiago, Biblioteca de Investigación Juan de Córdova
Roadmap

¡Zakxdilih sa’ yiubtu!

- **Background** information on the language and the Talking Dictionaries
- Presentation of the many layers of **interaction** that exist in regards to the Talking Dictionary, facilitated through the online interface
- Evaluation and **implications** of the collaborative nature of the project, with focus on collaboration as goal (Pérez Báez 2015)
Background

Teotitlán del Valle, Oaxaca

State of Oaxaca, Mexico
(map.google.com)
Background

Teotitlán del Valle, Oaxaca

The three Valleys of Oaxaca
(maps.google.com)
Teotitlán del Valle, Oaxaca

The Tlacolula Valley
(García García, et al. n.d.)
Teotitlán del Valle

- population of 5,638 people (INEGI 2010)
- 3,658 speak Zapotec (INEGI 2010)
Background

Zapotec

- Over 18 language families spoken in Oaxaca
- Zapotec (Otomanguean)

Language families in Oaxaca
(Munro et al. 2007: 4)
Background

Zapotec

Zapotec is a complex language family
More detailed proposed structure in Smith Stark 2003
Four main branches of Core Zapotec
Teotitlán del Valle Zapotec is a Valley Zapotec language, part of the Central branch

Zapotec language family
(Galant & Foreman 2010, Figure 1)
Background

Teotitlán del Valle Zapotec (Dixza)

- ISO code zab (Lewis et al. 2014)
- variety of Tlacolula Valley Zapotec (aka “San Juan Guelavia Zapotec”)
- no standardized orthography
- under documented
- most of the linguistic documentation done by Troi Carleton
- transnational community, with speakers in Oaxaca and the US, especially in California

Shop sign: “Handcrafts of Teotitlán”
Five school institutions in the village
Zapotec is acquired orally
There is no possibility to either learn or speak Zapotec in school
Discrimination against speakers of Zapotec
Decline in use of Zapotec with young children
Talking Dictionary Project

- Living Tongues Institute
- K. David Harrison
- National Geographic
- Swarthmore College
- Dictionaries on languages around the world, including the United States, Mexico, Guatemala, India, Micronesia, and Zimbabwe

Talking Dictionaries Webpage
talkingdictionaries.swarthmore.edu
Background

Zapotec Talking Dictionaries

- Emiliano Cruz’s TD for Miahuateco (not part of our project)
- Zapotec Talking Dictionaries
  - Tlacolula de Matamoros
  - San Lucas Quiaviní Zapotec
  - Tlacochahuaya Zapotec
  - Teotitlán del Valle Zapotec

Teotitlán del Valle Zapotec Talking Dictionary
http://talkingdictionary.swarthmore.edu/teotitlan
Background

Talking Dictionary Project

Four entries from the Teotitlán del Valle Zapotec Talking Dictionary
http://talkingdictionary.swarthmore.edu/teotitlan
Background

Talking Dictionary Project

- Comparative Zapotec dictionary interface
- Allows for comparison across different Valley varieties

‘Two’ in the Comparative Zapotec TD interface

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Interaction

Technology facilitates multiple types of interaction

Representation of interactions between type of people who interact with the Talking Dictionary

any interested person with internet

Zapotec language learners

other Zapotec community members

Zapotec language activists & teachers

linguistics students

linguists from Living Tongues Institute

technical support from Living Tongues Institute

funding agencies/institutional support

4th ICLDC; Mannix, Lillehaugen & Chávez Santiago - 15
Zapotec teacher

- Motivation for teaching Zapotec
- 2012- first Zapotec language course at La Biblioteca Juan de Córdova
- No pedagogical materials available
- Summer of 2013- started the Teotitlán del Valle Talking Dictionary

Poster advertising Zapotec Language Class
http://www.bibliotecajuandecordova.mx/lenguas

Interaction
Interaction

Zapotec language students

- TD used in conjunction with text by Chávez Santiago
- Prioritized recording of vocabulary words in class text, first envisioning the TD as a tool for the students in the course

Zapotec class at the Biblioteca de Investigación Juan de Córdova
Interaction

Linguistics students

- Lillehaugen’s students in US classrooms
- Structure of Colonial Valley Zapotec courses
- Phonetics & Phonology courses (tone and phonation phenomenon)
- Diverse usership made possible by online platform

Haverford & Bryn Mawr students in the Structure of Colonial Valley Zapotec class celebrating the Day of the Dead
Interaction

Collaborative training

- Work between language activists, linguistics, and linguistics students in the field
- Exchange of knowledge and ideas on multiple levels
  - linguistic knowledge
  - language, Theoretical knowledge
  - technical and analytical skills
  - collaborative skills
Interaction

Interdisciplinary collaboration

- Web designers, technical experts (especially Jeremy Fahringer, Swarthmore College)
- Computer science students at Haverford College (implementing Android App as part of classroom project, in consultation with Lillehaugen & Chávez Santiago and Computer Scientist Sorelle Friedler)

Chávez Santiago consulting with Fahringer and Babinski at Swarthmore College
Implications


Teaching and collaborating with Zapotec language activists, Biblioteca de Investigación Juan de Córdova, 2013
Implications

- Collaboration as a goal rather than condition (Pérez Báez 2015)

Working on the Talking Dictionary
Implications of The creation & fostering of an intentional collaborative project

- any interested person with internet
- Zapotec language learners
- other Zapotec community members
- Zapotec language activists & teachers
- linguists
- linguistics students
- technical support from Living Tongues Institute
- funding agencies/institutional support
¡Xtiuzeng & Mahalo!

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Bibiana Gutiérrez
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Haverford College Teaching with Technology Grant
Living Tongues Institute
Swarthmore College

Bryn Mawr College Deans Office
Jeremy Fahringer
Ambrocio Gutiérrez
K. David Harrison
Haverford College Provost’s Office
Nick Kalivoda
Teresa Martínez Chavez
Rachel Elizabeth Weissler
Works Cited

- Pérez Báez, Gabriela. 2015. ‘Slowly, slowly said the jaguar’: Giving collaborations time to develop. Presented at the 4th International Conference on Language Documentation and Conservation, Honolulu.
Contact information

Alex Mannix, Bryn Mawr College
amannix@brynmawr.edu

Brook Danielle Lillehaugen, Haverford College
blilleha@haverford.edu

Janet Chávez Santiago, Biblioteca de Investigación Juan de Córdova
janet.chavez@san-pablo.mx

Talking Dictionary main webpage: http://talkingdictionary.swarthmore.edu/
Zapotec Talking Dictionaries: http://talkingdictionary.swarthmore.edu/zapotecs/
Teotitlán del Valle Zapotec Talking Dictionary: http://talkingdictionary.swarthmore.edu/teotitlan/