

# “Open Description” Impacts Documentation:

## A Case Study featuring San Juan Quiahije Chatino

**kyaq14:** Denoting ‘uphill’ or ‘on the mountain,’ this term is used to refer to the upward direction of the uphill-downhill axis. When the slope is abstracted from the incline of the mountainside along which the San Juan town was built, the ‘uphill’ direction is approximately 177° SSE as located on a compass. When the slope is abstracted from the gentle valley incline underlying the village of Cieneguilla, the ‘uphill’ direction is approximately 302° WNW as located on a compass.

**gya4:** Denoting ‘downhill,’ this term is used to refer to the downward direction of the uphill-downhill axis. When the slope is abstracted from San Juan’s overall topography, the ‘downhill’ direction is approximately 357° NNW as located on a compass. When the term is abstracted from overall incline of Cieneguilla, the ‘downhill’ direction is approximately 122° ESE as located on a compass.

**tsuq32:** Denoting ‘along the side’ or ‘across,’ this term is used to label either end of an axis transecting the slope-derived ‘uphill-downhill’ axis. While there is another term used to refer to the two directions of the transverse axis, *tsuq32* is the unmarked lexical item.

**qne1:** Denoting ‘ahead’ the transecting axis, the speaker is far used to describe report that *qne1* is used to refer to report that the t and is used to refer to proximal referents on the transecting axis.

 Texas Data Repository  
**Metalinguistic interview data**





kwiq qa sa **qne** kwa

And it's all-the-way **along-the-side**, there

# Road Map

## Background:

- Open Science
- Slope-based Quadrant Terms

## Case Study Featuring San Juan Quiahije Chatino

- “Open” Approach to Language Description
- Impact on Documentation

## Discussion/Conclusion

# Background: Open Science

- Making full datasets available to the public
- Thoroughly describing the research method

Nosek et al. (2015). Promoting an open research Culture. *Science*, 348(6242), 1422-1425.

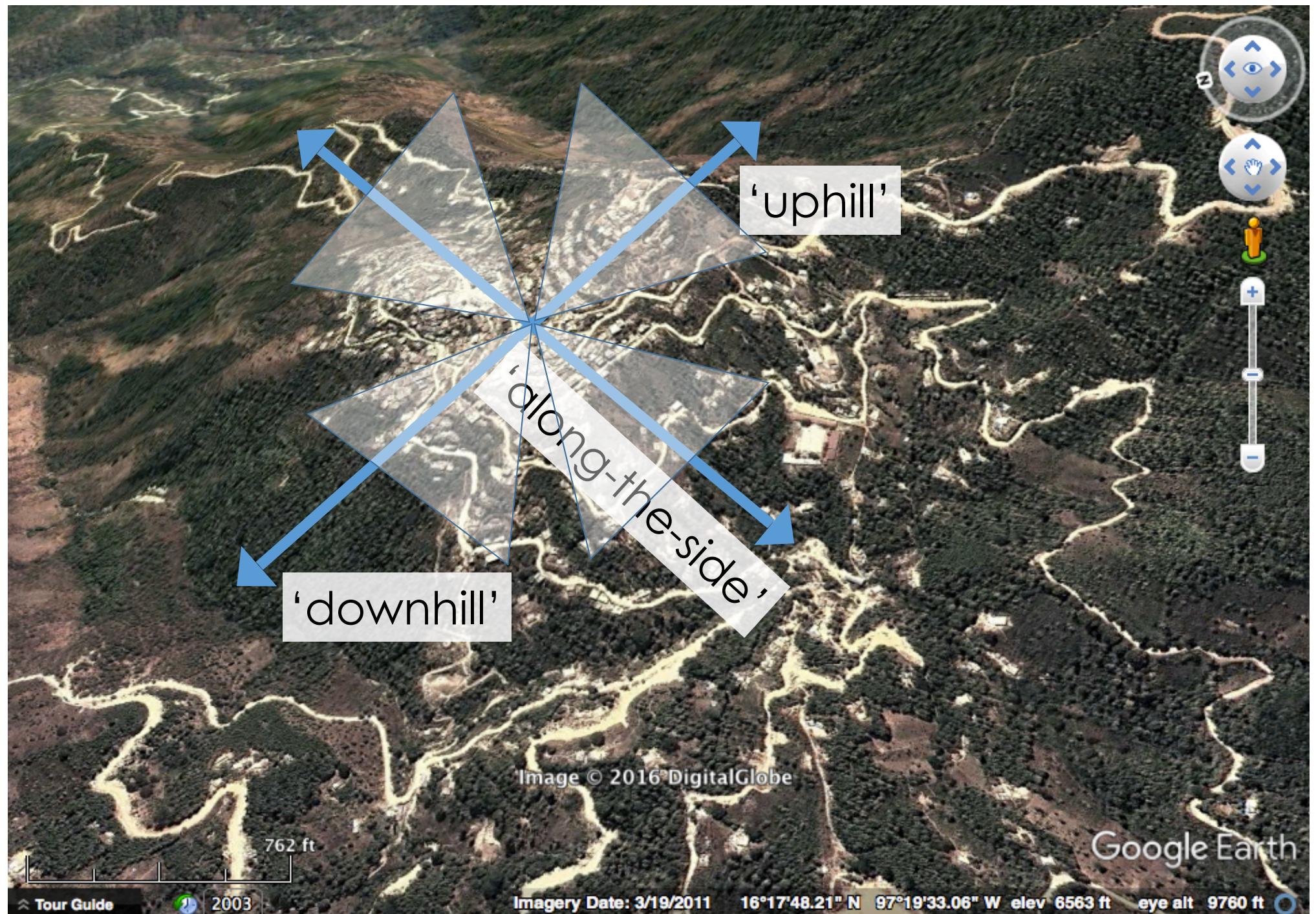
Berez-Kroeker et al (2018). Reproducible research in linguistics: A position statement on data citation and attribution in our field. *Linguistics*, 56(1), 1-18.

# Background: Slope-Based Quadrant Terms

Slope-based quadrant terms are part of a **geomorphic** spatial reference system, in which the positions of entities are described relative to features of the local topography

(cf. Bohnemeyer & O'Meara 2012)





# Slope-based quadrant terms in the Mesoamerican linguistic area and beyond

Tenejapan Tseltal (Mayan)

Brown & Levinson 1993; Levinson 2003; Polian & Bohneymyer 2011

Meseño Cora (Uto-Aztecán)

Vásquez Soto 2011

San Juan Quiahije Chatino  
(Otomanguean)

Mesh (2017)

Yupno (Papuan)

Cooperrider et al (2017)

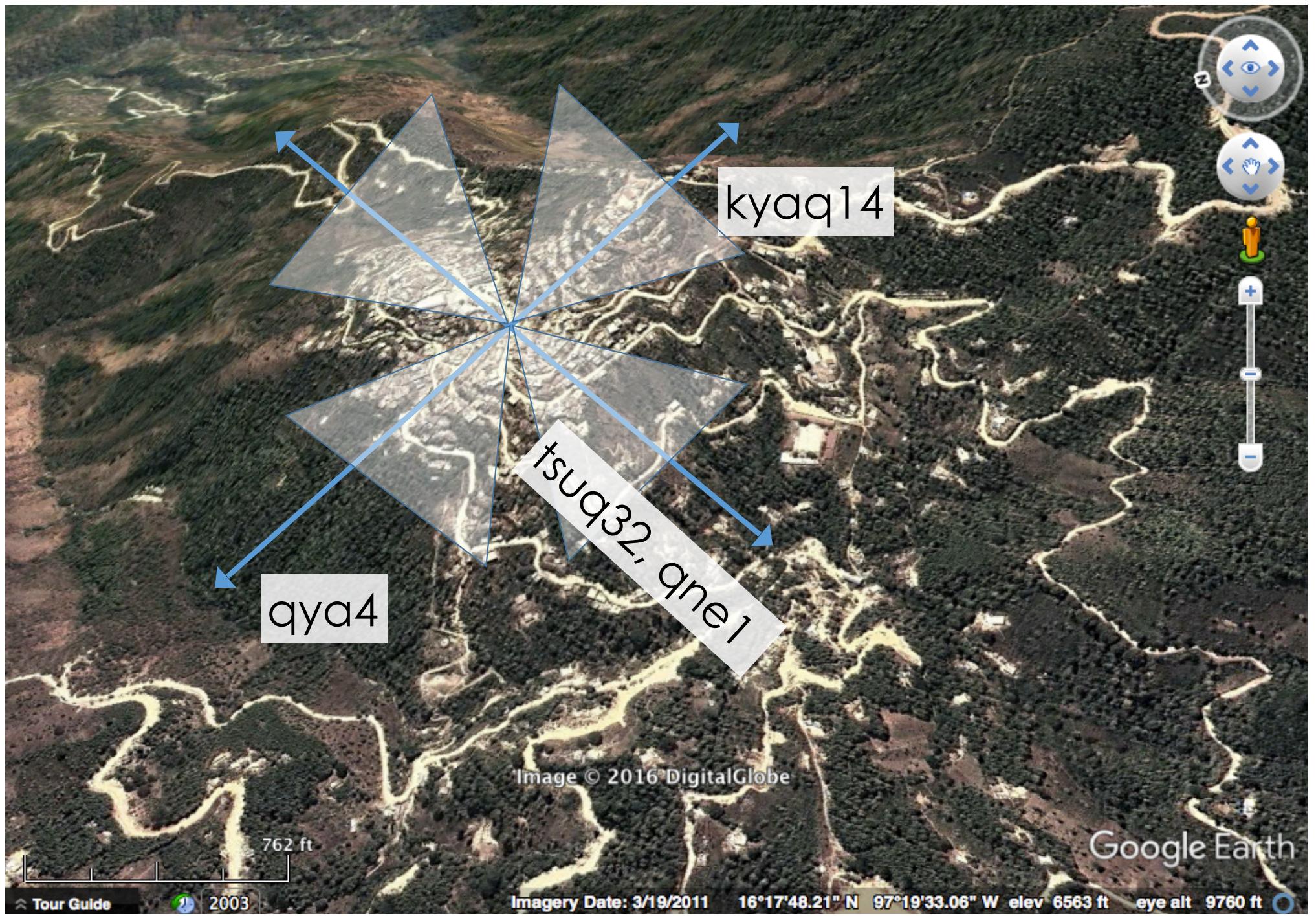
# Case Study Featuring San Juan Quiahije Chatino: “Open” Approach to Language Description



# San Juan Quiahije Chatino

- Otomanguean, Zapotecan, Chatino
- Oaxaca, Mexico: San Juan Quiahije Municipality
- ~3700 speakers (INEGI 2014)





Tour Guide

2003

Imagery Date: 3/19/2011

16°17'48.21" N 97°19'33.06" W elev 6563 ft

eye alt 9760 ft

# Method: Metalinguistic Interviews

# Method: Metalinguistic Interviews

## Interview Participants:

- C1: Female, ~45, homemaker
- C2: Male, ~40, farmer/rancher
- C3: Male, ~45, farmer/rancher
- C4: Female, ~55, teacher
- C5: Male, ~50, teacher

# Interview Format

Participants were asked for:

- An **example** of how they might use each term
- Assessments of the acceptability of the term for  
**8 invented use contexts**

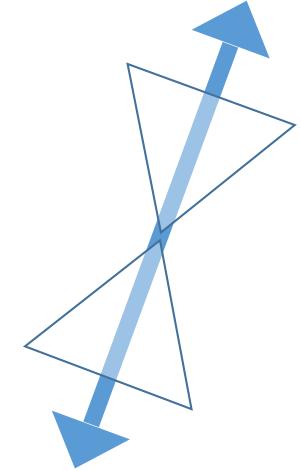
e.g., you are at the church; your friend is at school X.  
Can you say that they are in the [U/D/S] direction?

# Interview Format

Participants were asked for:

- An assessment of whether there is **disagreement** over the use of the term
- A **translation** of the term into Spanish, and/or an explanation of the difficulties of translation

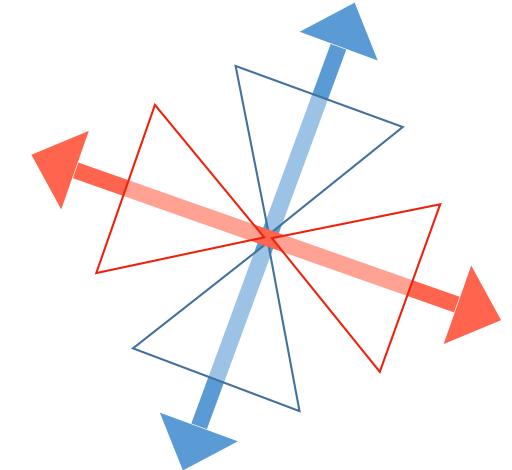
Results: agreement about terms  
for the **uphill and downhill quadrants**



kyaq14      The 'uphill' end of the up-down axis

qya4      The 'downhill' end of the up-down axis

# Results: disagreement about terms for the **two transverse quadrants**



tsuq32      Lit. 'along-the-side.'  
Refs on the trans. axis that are:

1. Not saliently positioned
2. Behind the speaker

C1, C2, C3  
C4, C5

qne1      Lit. 'in front'  
Refs on the trans. axis that are:

1. In front of the speaker
2. distant from speech location
3. Proximal to speech location

C2  
C1, C4  
C3

# What to do with this set of responses?

Create a transparent or  
“open” description, w/  
judgments attributed  
to specific consultants.



Texas Data Repository

☰

**Metalinguistic interview data for  
the dissertation, Points of  
Comparison: What Indicating  
Gestures tell us About the Origins  
of Signs in San Juan Quiahije  
Chatino Sign Language** Version 1.0

**kyaq14:** Denoting ‘uphill’ or ‘on the mountain,’ this term is used to refer to the upward direction of the uphill-downhill axis. When the slope is abstracted from the incline of the mountainside along which the San Juan town was built, the ‘uphill’ direction is approximately 177° SSE as located on a compass. When the slope is abstracted from the gentle valley incline underlying the village of Cieneguilla, the ‘uphill’ direction is approximately 302° WNW as located on a compass.

**qya4:** Denoting ‘downhill,’ this term is used to refer to the downward direction of the uphill-downhill axis. When the slope is abstracted from San Juan’s overall topography, the ‘downhill’ direction is approximately 357° NNW as located on a compass. When the term is abstracted from overall incline of Cieneguilla, the ‘downhill’ direction is approximately 122° ESE as located on a compass.

**tsuq32:** Denoting ‘along the side’ or ‘across,’ this term is used to label either end of an axis transecting the slope-derived ‘uphill-downhill’ axis. While there is another term used to refer to the two directions of the transverse axis, *tsuq32* is the unmarked lexical item.

**qne1:** Denoting ‘ahead,’ *qne1* is an alternative term for identifying directions on the transecting axis. Some speakers report that *qne1* is available only when the speaker is facing in a direction on the transecting axis, and may only be used to describe the direction in which the speaker is facing. Other speakers report that *qne1* may be used independent of the speaker’s orientation, and is used to refer to distal referents on the transecting axis. Still other speakers report that the term may be used independently of the speaker’s orientation and is used to refer to proximal referents on the transecting axis.

# Case Study Featuring San Juan Quiahije Chatino: Impact on Documentation



# Documentary Project: Gesture, Speech & Sign in Chatino Communities



Gesture, Speech and Sign in Chatino Communities

[Deposit](#) [Bundles and resources](#)

**Gesture, Speech and Sign in Chatino Communities**

Language:	Chatino Sign Language
Depositor:	Kate Mesh
Location:	Mexico
Deposit Id:	0459
Grant id:	SG0186
Funding body:	ELDP
Level:	<a href="#">Deposit</a>

**Summary of deposit**  
This deposit contains a record of communication in gestured, and signed communication in the San Juan Quiahije municipality of Oaxaca, Mexico. It focuses on communicative practices for wayfinding and direction-giving in the mountainous topography of the municipality, as well as practices for maintaining a household, including many cooking activities. Two languages are featured: San Juan Quiahije Chatino (Zapotecan, Otomanguean) and San Juan Quiahije Chatino Sign Language (a sign language isolate emerging in the municipality).  
The data were collected by Kate Mesh and community members pseudonymized as CF32, CF23, CM13 and SF21. In a related project, Kate worked with Lynn Hou to document the structure of San Juan Quiahije Chatino Sign Language; their joint work is found in ELAR deposit 0355: Documenting Chatino Sign Language.

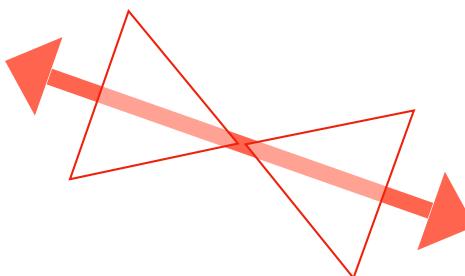


# Local Environment Interviews

- Interview protocol following Kita (2011)
- 29 SJQ Chatino Speakers
- 6h 39m of footage
- For utterances accompanied by a pointing gesture,
  - Speech transcribed and translated
  - Referent locations mapped

# Results Overview: 29 Interviewees

- 8 participants **did not use** tsuq or qne
- 8 Participants **used only 1 term**, tsuq or qne
- 12 participants used **both terms**
  - 9 with a clear usage pattern
  - 3 with an ambiguous pattern



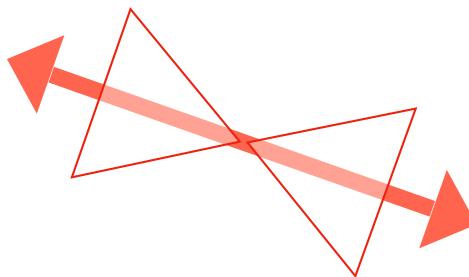
# Results Overview: Clear Usage Patterns



# Results Overview: Clear Usage Patterns

# Results Overview: Clear Usage Patterns

- Qne for **near**: 4 participants (compatible w/ 2 more)
- Qne for **front**: 1 participant (compatible w/ 2 more)
- Qne for **far**: 3 participants
- Tsuq for **behind**: 1 participant



All interviews  
tagged in  
ELAR with:

## *Local Environment Interview*

**Bundle**

### [Local Environment Interview with CF03](#)

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

CF32 interviews CF03 about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-01-29

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment - Topography - Direction-giving - CF32 - CF03

**Bundle**

### [Local Environment Interview with CF04](#)

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

CF32 interviews her mother, CF04, about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-01-29

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment - Topography - Direction-giving - CF32 - CF04

**Bundle**

### [Local Environment Interview with CF05](#)

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

CF32 interviews CF05 about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-02-10

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment - Topography - Direction-giving - CF32 - CF05

**Bundle**

### [Local Environment Interview with CF06](#)

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

CF32 interviews CF06 about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-02-10

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment -

# Where are we now?

**kyaq14:** Denoting ‘uphill’ or ‘on the mountain,’ this term is used to refer to the upward direction of the uphill-downhill axis. When the slope is abstracted from the incline of the mountainside along which the San Juan town was built, the ‘uphill’ direction is approximately 177° SSE as located on a compass. When the slope is abstracted from the gentle valley incline underlying the village of Cieneguilla, the ‘uphill’ direction is approximately 302° WNW as located on a compass.

**qya4:** Denoting ‘downhill,’ this term is used to refer to the downward direction of the uphill-downhill axis. When the slope is abstracted from San Juan’s overall topography, the ‘downhill’ direction is approximately 357° NNW as located on a compass. When the term is abstracted from overall incline of Cieneguilla, the ‘downhill’ direction is approximately 122° ESE as located on a compass.

**tsuq32:** Denoting ‘along the side’ or ‘across,’ this term is used to label either end

The screenshot shows a research project titled "Metalinguistic interview data for the dissertation, Points of Comparison: What Indicating Gestures tell us About the Origins of Signs in San Juan Quiahije Chatino Sign Language Version 1.0". The page includes a star logo, the title, and a brief description of the data: "directions on the only when may only be her speakers station, and her speakers orientation".

# How did we get there?



Bundle

**Local Environment Interview with CF03**

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

CF32 interviews CF03 about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-01-29

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment - Topography - Direction-giving - CF32 - CF03

Bundle

**Local Environment Interview with CF04**

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

CF23 interviews her mother, CF04, about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-01-29

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment - Topography - Direction-giving - CF32 - CF04

Bundle

**Local Environment Interview with CF05**

**Deposit title:** Gesture, Speech and Sign in Chatino Communities

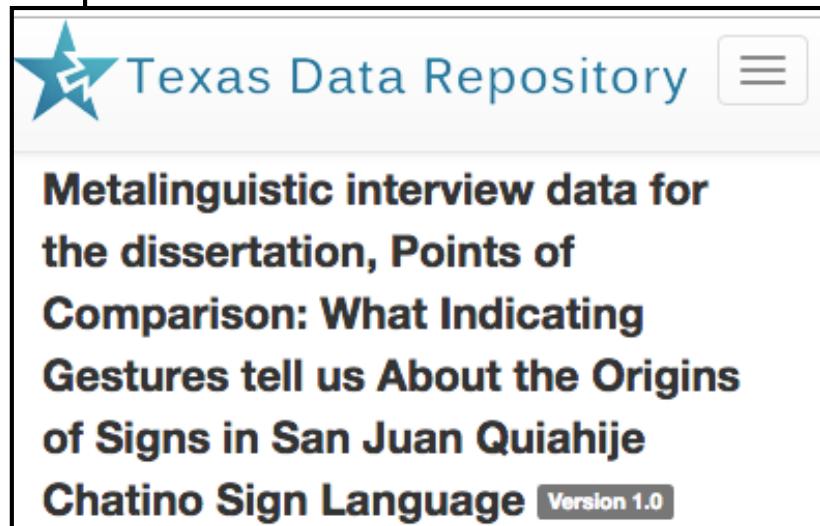
CF32 interviews CF05 about local landmarks and frequent travel destinations, as well as the routes taken to reach them. Interview conducted in the San Juan Quiahije variety of Western Highland Chatino.

Recorded on: 2015-02-10

**Keywords:** Chatino - Spanish - Interview - Local Environment - Topography - Direction-giving - Local Environment - Topography - Direction-giving - CF32 - CF05

# Two clear benefits of an ‘Open Description’ approach

A more representative record of a language’s structure(s)



An impact on how collected texts from documentary projects are annotated and understood

# References

- Brown, P., & Levinson, S. C. (1993). 'Uphill' and 'downhill' in Tzeltal. *Journal of Linguistic Anthropology*, 3(1), 46-74.
- Brown, P. (2014). Gestures in native Mexico and Central America: The Mayan cultures. In Müller, C. (Ed.). *Body-Language-Communication* (Vol. 2). Walter de Gruyter. (pp. 1206-1215)
- Campbell, L., Kauffman, T., Smith-Stark, T.C., 1986. Meso-America as a linguistic area. *Language* 62 (3), 530–570.
- Enfield, Nicholas J. *The anatomy of meaning: Speech, gesture, and composite utterances*. Vol. 8. Cambridge University Press, 2009.
- Hanks, W. F. (1990). *Referential practice: Language and lived space among the Maya*. University of Chicago Press.
- Haviland, J. B. (2000). 1 Pointing, gesture spaces, and mental maps. *Language and Gesture*, 2, 13.
- Haviland, John B. "How to point in Zinacantán." *Pointing: Where language, culture, and cognition meet* (2003): 139-170.
- Haviland, J. B. (2005). Directional precision in Zinacantec deictic gestures: (cognitive?) preconditions of talk about space. *Intellectica*, 2005(2-3), 25-54.

# Thank You

ELDP

Mesh, K. (2017). "Metalinguistic interview data for Points of Comparison: What Indicating Gestures Tell us About the Origins of Signs in San Juan Quiahije Chatino Sign Language," Texas Data Repository Dataverse.



<https://doi.org/10.18738/T8/RJP2JR>

Mesh, K.(2018). "Gesture, Speech and Sign in Chatino Communities." The Endangered Languages Archive. Access: Public.



<https://elar.soas.ac.uk/Collection/MPI1053087>

**Slides for this talk**

[www.katemesh.com/talks](http://www.katemesh.com/talks)

# Questions or feedback?

Please contact me at: *kate.a.mesh at gmail dot com*