

Defining “community” through spatial reference: Communities of practice in the Isthmus of Tehuantepec

How are communities defined? How are communities of practice constructed and reinforced?

Communities are often conceptualized as concrete geo-spatial objects, when in reality their boundaries are ill-defined and membership is ever-changing. Linguistic data from three communities of Isthmus Zapotec speakers show that identity as a community member predicts the use of certain types of spatial reference frames in small-scale space. An ongoing debate about the role of linguistic and non-linguistic factors in influencing spatial reference presents first and second language, education, literacy, topography, and population geography as potential factors (Levinson et al. 2002; Li & Gleitman 2002; Palmer 2015; *inter alia*). Large-scale crosslinguistic studies have yielded research showing that topography and population density influence frame use (Bohnemeyer et al. 2014, 2015, 2016); however, the three communities in the current study cannot be differentiated by broad-grained topographic classifications or population density.

Data for the present study were collected in the Isthmus of Tehuantepec, Oaxaca, Mexico in three locales: La Ventosa, Juchitán de Zaragoza, and Santa María Xadani, each located ten to sixteen km apart within a flat plain between the Sierra Sur mountains and the Laguna Superior on the Pacific coast. Daily travel between the towns is common for commerce, as are intermarriage and migration. Buses and *colectivo* taxis make travel between the towns easy and accessible.

In each of the three communities, forty pairs of speakers performed a referential communication task describing the location and orientation of configurations of toy animals so that a partner could construct a matching configuration. Descriptions were analyzed for use of spatial reference frames, strategies for locating and orienting an object with respect to the bodies of speakers, environmental objects, or the objects themselves. Speakers in La Ventosa show a strong preference for absolute frames, anchoring descriptions in cardinal directions, whereas speakers in Juchitán and Xadani made use of a more even distribution of strategies.

Each participant provided information on their level of education, and frequency of speaking Spanish as a second language, reading, and writing. These demographic data, along with the community in which the participant conducted the task, were used as predictor variables in a linear mixed-effects regression model. Only community membership was found to be a predictor of geocentric frame use, where speakers anchor their descriptions to an environmental feature (most commonly here, the prevailing North-South winds and the rising and setting sun).

This finding can be explained by observing that language use as a cultural practice is self-reinforcing within a community. Though community membership may be non-concretely defined and fluid, the linguistic practices of a community may be considered relatively stable due to the increased interaction of its members with one another vs. individuals outside the community. Community can then be defined by a culture of behavior, linguistic practices being one of those behaviors. Individuals can therefore move between communities, yet still engage in a specific community of practice for their present communicative context.

Selected references

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