

Patterns of Variation in Frames of Reference in Nahuatl of Tequila and Cuacuila

The use of Frames of Reference has been heavily investigated in Meso America where languages have been shown to prefer allocentric Frames of Reference in contrast to egocentric strategies (see O'Meara and Pérez Báez 2011). This is also found in the two Nahuatl varieties that has been documented in this regard: the Nahuatl variety spoken in El Salvador, and the Nahuatl variety spoken in the community of Las Gardenias, Puebla (Salgado Rodríguez 2014, Hernández Vásquez 2014). Although previous studies in Meso America find a strong preference for allocentric Frames of Reference, they also document quite a lot of variation both within and between varieties.

This paper investigates the nature of this variation regarding the use of Frames of Reference. We have worked on two varieties of Nahuatl spoken in Tequila, Veracruz and Cuacuila, Puebla.

To research the patterns of variation, we have **firstly** carried out a battery of experiments investigating the relationship between the linguistic coding of spatial relations and cognition to document the use of Frames of Reference in the language communities. The experiments are developed by the Max Planck Institute for Psycholinguistics (Levinson et al. 1992) and the MesoSpace project at the University of Buffalo (Bohnenmeyer 2008). Specifically, we have used the Man & Tree game, the Ball & Chair game and the New Animals game. **Secondly**, we have collected a range of sociolinguistic data. We do this to investigate if we can explain the inter- and intra-variety variation in the use of Frames of Reference by sociolinguistic variables, and if the inter-variety variation is primarily a matter of differing language codes or if the differences in landscape and landscape experience plays a central role. If the variation is strongly tied to the differences in landscape, it could be argued to support the *Environmental Correspondence Hypothesis* of sociotopography proposed by Palmer et al. (2017). The sociolinguistic variables we employ are bilingualism, landscape experience, gender, and age.

We will present our results regarding what Frames of Reference are employed in the two language communities. We find a large amount of variation between speakers in the two communities and we determine what sociolinguistic parameters are correlated with the variation we find. In both communities age (as a proxy for Spanish influence) is an important variable. We discuss the results and what variance can be attributed to dialect and what is an effect of the different sociolinguistic variables and speaker background.

We also discuss the possible influence of the different landscape types the communities are situated in.

Literature

- Bohnemeyer, J., (2008). Elicitation task: frames of reference in discourse – the Ball & Chair pictures. In Pérez Báez, G. (Ed.), *MesoSpace: Spatial language and Cognition in Mesoamerica. Field Manual. University at Buffalo, Suny*, pp. 34–37, <http://www.acsu.buffalo.edu/~jb77/MesoSpaceManual2008.pdf>
- Hernández Vázquez, J. I. (2014). Marcos de Referencia y categorías de espacialidad en el Nawat de las Gardenias, Hueyapan, Puebla. In *Lenguas Yutoaztecas: Acercamiento a su Diversidad Lingüística*. Dakin, K. (ed.) Mexico: UNAM
- Levinson, S. C., Brown, P., Danzinger, E., De León, L., Haviland, J. B., Pederson, E., & Senft, G. (1992). Man and Tree & Space Games. In Levinson, S. C. (Ed.), *Space stimuli kit 1.2* (pp. 7-14). Nijmegen: Max Planck Institute for Psycholinguistics. doi:[10.17617/2.2458804](https://doi.org/10.17617/2.2458804).
- O'Meara, C. and Báez, G. P., (2011). Spatial frames of reference in Mesoamerican languages. *Language Sciences*, 33(6), pp.837-852.
- Palmer, B., Lum, J., Schlossberg, J., & Gaby, A. (2017). How does the environment shape spatial language? Evidence for sociotopography. *Linguistic Typology*, 21(3), 457-491.
- Salgado Rodríguez, Á. H. (2014). Topological spatial relations and frames of reference in Santo Domingo de Guzmán pipil: typological and historical implications. MA thesis.