The studies presented here bring together methods of language documentation and ethnosemantics with methods of field psycholinguistics in the investigation of questions related to Semantic Typology and more broadly, the interaction between language, cognition, and culture. The broader project works with speakers of Diidxa za, or Isthmus Zapotec (Otomanguean; Oaxaca, Mexico), to explore the role of local landscape, among other factors, in the use of spatial frames of reference in speakers’ discourse and recall memory. Topography and population geography are two language-external factors that have been claimed to influence speakers’ use of reference frames, which are conceptual coordinate systems used to locate and orient entities in space (Li & Gleitman 2002). The Isthmus of Tehuantepec is an ideal location for the study of these geographical factors because of the range of variables covered by a large speaker base. Unlike other Zapotec varieties, Diidxa za has many speakers across a large and topographically diverse area (100,000 according to 2010 INEGI census data). Community size varies from 74,800 in the central city of Juchitán de Zaragoza to 4,800 in La Ventosa and 7,800 in Santa María Xadani (INEGI 2010).

To explore reference frame use in discourse, a referential communication task is conducted with 40 pairs of speakers in each of three communities. The task is realized as a matching game such that a speaker describes a configuration of toy animals for their partner to construct its match. The task is audio- and video-recorded and analyzed for reference frames used to locate and orient the animals. This task is performed in conjunction with several tasks to assess the influence of local landscape on reference frame use in Diidxa za. These tasks include a listing task with 10 individual speakers per community and a route description task with five pairs of speakers per community.

In the listing task, speakers are audio-recorded naming landscape entities, then listen to their own recording with the researcher and a native-speaker assistant to create a written list of terms. Speakers are then audio-recorded describing each item in the list, responding to questions about the features of each item and any other information they would like to add. The lists speakers produce are later analyzed for recurrence of landscape entities across speakers in order to establish salience of landscape features across populations.

The route description task is realized as a guessing game where one speaker thinks of a place and describes to their partner how to get to that place so that the partner can guess the name of that place. The task is audio- and video-recorded to observe gestures. A screen between speakers prevents gaze- or gesture-sharing. This task provides information on what landscape entities are used in direction giving. Those landmarks are then compared to landmarks used in the reference frame elicitation task.

This presentation discusses how a combination of these tasks, conducted in three communities with distinct local topography and population density, supports the analysis of effects of landscape on reference frame use as well as contributing to an ethnography of landscape for these communities.
References
