## Conceptualization and Linguistic Encoding of Spatial Concepts in South Bolivian Quechua: Results of Fieldwork, May-June 2017 Julia Nee

During May and June, 2017, I spent three weeks investigating how spatial relations, complex motion events, and path are conceptualized and linguistically encoded by speakers of South Bolivian Quechua (SBQ). In addition to this formal linguistic investigation, I observed social aspects of language use in the region. Finally, I formed contacts with speakers of Quechua and researchers working on Quechua that have already proven fruitful, as these individuals have drawn on their expertise to provide useful feedback on my work.

The main purpose of my fieldwork was to continue investigation of spatial concepts, specifically the representation of path in SBQ. Path is closely related to directionals and associated motion morphemes, which I had begun to research at UC Berkeley as part of my Fieldwork Methodology course, and which continue to remain highly understudied. Although I originally set out to study these morphemes in Cochabamba, it quickly became apparent to me that I would not be able to analyze them effectively without first having a theoretical description of path phrases. For that reason, I shifted my focus to the details of how path is expressed in SBQ, starting with a detailed investigation of these phrases with a native speaker of SBQ living in the Bay Area. Once I arrived in Cochabamba, I worked to identify speakers of Quechua who could work with me to replicate my findings from the original speaker. However, I quickly realized that the grammar of the original speaker was quite different from what I was hearing in Cochabamba. This is not entirely surprising, given that the original speaker has lived in the United States for approximately 40 years, during which time he has been speaking mostly Spanish and English. Thus, I set out to identify the ways in which path is canonically expressed by speakers in Cochabamba at present.

I collected data primarily from two speakers, as well as confirmed these data with other speakers and researchers. During data collection, I used direct semantic elicitation between SBQ and Spanish, as well as asked speakers to judge if utterances were semantically or pragmatically anomalous in particular contexts (following methodology developed by Matthewson 2004). These data contradicted previous data I had collected in that the new data did not show flexibility in word order as did my original data. The lack of flexible word order was present quite robustly in the SBQ I recorded in Cochabamba, and was only allowed with a different semantic interpretation than the target interpretation. Based on these facts, I conclude that the original data that I collected was anomalous in one of two ways: either the speaker has an idiosyncratic grammar that indeed allows for this free word order, or he was providing sentences with different semantic interpretations than the target sentences. With the new data collected in Cochabamba, I was able to revise my analysis of path in SBQ to reflect a fixed word order that more accurately reflects the use of path expressions in SBQ.

The SBQ path data have led me to new conclusions in the area of theoretical syntax and semantics. Specifically, the data on Quechua follow the predictions of two previously unconnected proposals in the syntax of path, each of which decomposes aspects of path into smaller syntactic and semantic units. SBQ overtly shows a distinction between source, goal, place, and configuration, elements which had previously been treated as simply place (composed of place and configuration) and path (including both source and goal). At the same time, SBQ presents a problem for the specific semantics that have been proposed by Pantcheva (2010) for source and goal. According to Pantcheva, source and goal paths entail achievement – either a successful exit from the source or a successful arrival at the goal. In SBQ, however, these paths do not entail

achievement. Thus, they indicate not transitions (to or from a relevant space), but rather progressions (towards or away from a relevant space). While this may seem to be a subtle difference, it opens a larger question of where transitions are encoded in the syntax, and suggests that path can be further decomposed to contain an element that encodes aspect, with continuative aspect corresponding to progressions, and non-continuative aspect corresponding to transitions. In fact, such a proposal has been made by Sanchez (1996), with independent motivation. Thus, the data collected on SBQ in Cochabamba have served to unite previously disjoint theories of path, and have deepened our understanding of the syntax and semantics of path, especially in a broader cross-linguistic area that extends beyond the Indo-European languages which have traditionally formed the basis for such theoretical investigations.

In addition to the data that I collected on path, I collected data on spatial relations (Bowerman & Pedersen 1992) and complex motion events (Bohnemeyer & Caelen 1999) using stimuli developed by researchers at the Max Planck Institute for use in fieldwork. These stimuli are intended to aid in collecting data that can be compared across languages. I hope to use the data on SBQ in comparison with other languages, especially Teotitlán del Valle Zapotec (Oto-Manguean), to develop theoretical accounts of the syntax and semantics of these expressions. This data will serve as a pilot study, and I hope to return to Bolivia to collect more data in future field seasons.

Alongside my research, I developed new connections with academics working in Bolivia. I was warmly welcomed at the Universidad de San Simón in Cochabamba, where I worked with Dr. Pedro Plaza. His expertise in Quechua shaped my understanding of the data that I had collected. He also invited me to give a talk at the University, which was attended by faculty, graduate, and undergraduate students. This opened the door for me to meet others interested in similar research topics to those I am working on. Dr. Plaza also invited me to participate in a workshop he led through his organization "Quechua en acción" which helps teachers in public schools to incorporate Quechua into their classrooms, as they are now required by Bolivian law to teach indigenous languages beginning in elementary school. Interacting with the teachers in the workshop, I came to understand more fully the extent to which Quechua is (and often is not) used in schools, and learned many of the motivations behind teachers' failure to use Quechua in the classroom. This understanding was expanded through observation of another Quechua teacher, Julieta Zurita, who teaches Quechua at the University level to students of diverse majors. In these classes, I witnessed a range of motivation on the part of the students, which led to difficulties in instruction that Sra. Zurita adeptly handled through innovative teaching techniques. The overall lack of interest – even among students for whom Quechua was an integral and necessary part of their major and future profession – was striking, and shows the extent to which the language is in danger of being lost to future generations.

Within the Universidad de San Simón, I was also invited to hear presentations by current master's students in Linguistics regarding language use among undergraduate students of different majors. The focus was on whether indigenous languages are being used by the current generation of students, and the findings generally were that indigenous language use is low across majors. Furthermore, both master's students and faculty in the department shared with me their desire to improve the statistics that were being used to reach conclusions about language use, indicating that it would be useful to have an expert in this area come and give classes on the topic. I plan to help facilitate coordination of a workshop on the topic the next time that I am able to do research in Cochabamba.

Towards the end of my time in Cochabamba, I was invited to give a workshop on formal syntax and semantics. I taught a group of approximately 60 students, giving them a brief overview of key concepts in generative syntax and semantics, as well as presenting some key terms in English to help them if they wish to pursue further research on the topic, as the vast majority of literature in this subfield is published in English. Students gave me positive feedback on the course, and I have been invited to return next year to give a longer and more in-depth version of the course.

In all, my three weeks in Cochabamba were highly productive. I gathered the data necessary to complete my analysis of the syntax and semantics of path in SBQ, as well as pilot data in related areas. I formed connections with a number of individuals who have already helped me improve my research and with whom I am in continued contact. Furthermore, being in Cochabamba allowed me to contextualize the patterns of language use that predominate in the area and helped me to understand how the language and its use is shifting and changing. My observations have led me to believe that further documentation of SBQ is necessary in the upcoming years as language use declines and the language reaches a higher level of endangerment. Especially given that SBQ has contributed to a deeper understanding of theoretical syntax and semantics, it is imperative that this language be fully documented and analyzed while fluent speakers are still available to help in the task of language documentation.

## **Works Cited**

- Bohnemeyer, Jürgen & Martijn Caelen. 1999. The ECOM clips: a stimulus for the linguistic coding of event complexity. In David Wilkins (ed.), Manual for the 1999 Field Season, 74-86. Nijmegen: Max Planck Institute for Psycholinguistics.
- Bowerman, Melissa & Eric Pederson. 1992. Topological relations picture series. In Stephen C. Levinson (ed.), Space stimuli kit 1.2: November 1992, 51. Nijmegen: Max Planck Institute for Psycholinguistics.
- Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics*. 70(4):369-415.
- Pantcheva, Marina. 2010. Directional expressions cross-linguistically: Nanosyntax and lexicalization. Nordlyd, [S.I.], v. 36, n. 1, pp. 7-39, jan.