Ten Lectures on Field Methods in Cognitive Linguistics – Program

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Lecture 1. Setting the stage: meaning, cognition, culture, and crosslinguistic variation

Field linguistics is the gathering of language data from speakers. These ten lectures aim to provide cognitive linguists with the theoretical, epistemological, and methodological tools to study crosslinguistic variation in meaning. Crosslinguistic variation is evidence for cultural transmission. Semantic typology, the typological study of semantic representations, aims to map the boundary between biology and culture in cognition and to clarify the workings of the language-cognition interface and the syntax-semantics interface in the process.

Lecture 2. Field semantics: studying meaning without native speaker intuitions

Linguistics has evolved as an epistemological hybrid, combining hermeneutic methods from the humanities rooted in interpretation with empirical methods from the social and behavioral sciences rooted in observation. From an empirical perspective, there is no difference between semantic research on the researcher's native language and on any other language: in any case, the researcher's intuitions are insufficient as evidence in support of semantic analyses. Like the child learning the meanings of the expression of her native language, as modeled in Brown's (1958) 'original word game', the empirical semanticist must start out observing utterances produced by competent speakers and their apparent referential correlates in the observable world. Child and researcher then formulate hypotheses concerning the meanings of the utterances and their constituents and proceed to test these.

Lecture 3. Data gathering in linguistics: a practical epistemology of elicitation techniques

Elicitation can be defined as a data gathering technique that involves three principal components: a stimulus, a task, and a response. In any kind of linguistic elicitation, the stimulus may be a target language utterance, a contact language utterance, a linguistic representation of some state of affairs (e.g., a description of some scenario the native speaker consultant is asked to assume), a nonverbal representation of some state of affairs, or a combination of any of the above. The response may consist of a target language utterance produced by the speaker, a judgment of wellformedness, truth conditions, etc., or again a linguistic (e.g., explication by paraphrase) or nonlinguistic (e.g., in demonstrations and act-out tasks) representation of some state of affairs. All possible tasks may then be defined as mappings between possible stimuli and possible responses. I argue that there are exactly seven possible types of elicitation techniques in linguistics. Applications of all of these to semantic research will be illustrated with examples from my fieldwork.

Lecture 4. Sources of evidence: semantic and pragmatic diagnostics

In a broad sense, hypothesis testing in semantics and pragmatics can rely on any of the elicitation techniques introduced in the previous lecture and on corpus evidence. Hypothesis testing in a narrower sense must be able to produce *negative* evidence: evidence that speakers cannot or would not use a given utterance, be it under specified conditions or under any conditions. Production and comprehension data can constitute negative evidence regarding ease of processing and prototypicality. Diagnostics of other semantic and pragmatic properties

chiefly rely on speaker judgments: judgments of whether an utterance is interpretable (vs. anomalous), whether it is true in reference to a given scenario, or whether it is felicitous in a given context. A variety of diagnostics will be discussed to exemplify the types.

Lecture 5. Ethnosemantics and cognitive anthropology: a short history

This lecture focuses on the results of five decades of research on the lexicalization of concepts of the natural world by ethnosemanticists and cognitive anthropologists, in domains such as color, kinship, flora and fauna, and, more recently, the body and the landscape (e.g., O'Meara & Bohnemeyer 2008). Much of this research has been driven by the theoretical positions of relativism and universalism. Although not necessarily typologically oriented, ethnosemantics can be seen in many ways as a precursor of semantic typology.

Lecture 6. Semantic typology: the crosslinguistic study of semantic categorization

The focus of this lecture is the approach to semantic typology on the basis of the collection and analysis of primary data. The starting point of this procedure is the construction of an "etic grid", a possibility space created by a few independent notional dimensions in which every semantic categorization in the domain under study can be located as a data point. I discuss and respond to criticisms that have been advanced against work based on etic grids. The cells of the grid are exhaustively encoded in sets of nonverbal stimuli and both preferred descriptions and ranges of possible descriptions of these are collected in a typologically broadly varied sample of unrelated languages with multiple speakers per language according to a standardized protocol. Follow-up elicitation should go beyond the extensional data elicited with the stimuli and isolate the lexical meanings of the recorded descriptors by weeding out pragmatic meaning components (implicatures and presuppositions). The observed distribution of the response types across the languages of the sample is then described in terms of implicational generalizations.

Lecture 7. Framing Whorf: reference frames in language, culture, and cognition

A significant body of evidence (Brown & Levinson 1993, 1994; Levinson 1996; Pederson et al. 1998; Wassmann & Dasen 1998; Levinson 2003; Mishra et al. 2003; inter alia) suggests that languages vary greatly in which types of reference frames their speakers use for spatial descriptions and that biases in linguistic frame selection tend to align with similar biases in nonlinguistic cognition. The causal interpretation of this alignment is controversial: Brown & Levinson, Pederson, and colleagues argue for language as a driving force, whereas Li & Gleitman 2002 and Li et al 2011 propose that population-specific biases in both discourse and cognition are the result of adaptations to external factors of topography, population geography, literacy, and education. The lecture summarizes the history of the debate and presents new evidence from *MesoSpace*, a large-scale comparative project on languages inside and outside the Mesoamerican *sprachbund*.

Lecture 8. Doing the math: quantitative methods in semantic typology

All areas of linguistic typology are currently experiencing a statistics boom due to the necessary computational resources recently having become widely and cheaply accessible. This lecture discusses the use of statistical techniques in semantic typology ranging from Multi-Dimensional

Scaling (Levinson & Meira 2003) via Principal Component Analysis (Majid et al 2008) and analyses of the optimal partitioning of similarity spaces in categorization (Regier et al 2007; Khetarpal et al 2009) to phylogenetic methods (Bohnemeyer et al 2012) and linear regression (in unpublished work of the MesoSpace project introduced in the preceding lecture).

Lecture 9. Event description: variation at the syntax-semantics interface

Previous typological studies of event segmentation have focused on segmentation into syntactic (Pawley 1987) or intonational units (Givón 1991). The correlation between such units and semantic/conceptual event representations is language-specific. As an alternative, Bohnemeyer et al 2007 introduce the 'macro-event property' (MEP): a construction has the MEP if it packages event representations such that temporal operators necessarily have scope over all subevents. A case study on the segmentation of motion events into macro-event expressions in 18 genetically and typologically diverse languages has produced evidence of two types of design principles that impact motion event segmentation: language-specific lexicalization patterns and universal constraints on form-to-meaning mapping. Bohnemeyer et al 2010 extend this approach to the segmentation of causal chains and Bohnemeyer & Van Valin 2009 present evidence for a universal correlation between the MEP and core-layer junctures in Role & Reference Grammar.

Lecture 10. The language-specificity of conceptual structure: taking stock

It is argued that the absence of strong absolute universals in semantic categorization and the simultaneous existence of striking crosslinguistic similarities in semantic categories is precisely what one should expect on a view of language as a "bio-cultural hybrid" (Evans & Levinson 2009). The discussion then moves on to address the most explicit model of the mind and the language-cognition interface that has been suggested by a linguist: the model developed in Jackendoff (1997, 2002). Following up on Bohnemeyer (2010), it will be argued that representations in a Jackendoffian "Conceptual Structure" - algebraic, symbolic representations - may be much more language-specific than iconic, image-schematic representations in the "Spatial Structure" system envisioned as part of the same framework. This in turn suggests that, rather than language having evolved as a system of external representations of Conceptual Structure, as Jackendoff suggests, Conceptual Structure may have co-evolved with language as an interface between language and Spatial Structure, with culture being the driving force behind both processes.