

# Bridging the Gap: From Cognitive Anthropology to Cognitive Science

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Although cognitive anthropology once was a pioneer in the cognitive revolution and a founding member of the cognitive science, over the years its participation and influence have diminished—to the detriment of both cognitive anthropology and cognitive science more generally. Meanwhile, though, interactions between culture and cognition are increasingly recognized as being of prime interest for cognitive science. Among the most important issues that call for anthropological expertise is the question of cognitive and/or linguistic universals (Evans & Levinson, 2009; Henrich, Heine & Norenzayan, in press; Norenzayan & Heine, 2005). Anthropology, with its expertise in culture and language, thus becomes an invaluable partner for respective research. But only recently, initiatives have been launched to re-calibrate the relationship among the subfields of cognitive science (Bender, Hutchins & Medin, in press).

This symposium is intended as one step in this direction, bringing together scholars from different disciplinary backgrounds (e.g., anthropology, linguistics, and psychology) to present what they regard as the main strengths of their respective disciplines and why and how this could be useful for each other.

The symposium is co-organized by an anthropologist and a psychologist who will give an introduction to the symposium's topic by summarizing some of the evidence for the cultural constitution of cognition (e.g., Beller & Bender, 2008; Beller, Bender & Song, 2009). The presenters are among the leading scientists in their fields. Besides striving for the re-integration of anthropology into cognitive sciences, each of them has contributed considerably to our expanding knowledge on the cultural constitution of cognition (for instance, in comprehensive monographs or articles in high ranking journals):

- Giovanni Bennardo of Northern Illinois University, having a background in anthropology, linguistics, and cognitive science, seeks to model cognitive conceptualizations for various cultural domains (e.g., Bennardo, 2009; Bennardo & Read, 2007).
- Anthropologist and ethnolinguist James Boster of the University of Connecticut is an expert on methodology

in cultural research and on intracultural variation (e.g., Boster, 1999, in press) and has published extensively on semantic categories (e.g., Majid, Boster & Bowerman, 2008).

- Asifa Majid from the MPI for Psycholinguistics in Nijmegen combines approaches from cognitive science, psychology, linguistics, and anthropology for her research into the semantic categorization of so far unquestioned domains as body categorization or sensory experiences (e.g., Majid, 2006; Majid et al., 2008).
- And Douglas Medin, being one of the leading scholars on categorization, learning, and decision making, has for many years now scrutinized the cultural constitution of cognition (e.g., Atran & Medin, 2008; Medin & Atran, 2004; Medin, Bennis & Chandler, in press).

Based on own cross-cultural (and often interdisciplinary) research, each presenter in this symposium will argue why anthropology is necessary for cognitive science and how it can contribute to a more comprehensive understanding of cognition (cf., d'Andrade, 1995; Hutchins, 1995). In particular, they will address the question of universals, from the level of syntax through semantic categories and sensory experiences to the relationship between human and nature.

## **Word order and a cultural model: From universal mind to cultural mind**

Giovanni Bennardo

Goldin-Meadow et al. (2008, p. 9167) suggest that SOV (subject – object – verb) is the “natural [mental] order for humans” and that “as a language community grows and its functions become more complex, additional pressures may exert their influence on language form, in some cases pushing the linguistic order away from the semantically clear ArPA (actor, patient, action or SOV) order”. Tongan (in Polynesia) is typically regarded as a Verb-Initial language and specifically a VSO language. In this talk, a frequency analysis will be presented of a good number of Tonga texts that partially challenges this assumption. Besides, a founda-

tional cultural model 'radiality' (Bennardo, 2009) in Tongan cognition will be proposed as the engine that might be responsible for the move from 'natural' SOV to Tongan V-initial.

### **Are translation equivalents referential equivalents?**

James S. Boster

Sets of translation equivalent emotion terms were identified in Polish and English. These terms (and others) were used in two tasks, one naming the emotion expressed in facial gestures of emotion, the other naming the emotions elicited by affectively evocative scenarios. In neither case were the translation equivalent terms referentially equivalent. However, treating the question as one requiring a yes/no answer does not do it justice. This paper measures degrees of translation and referential equivalence and compares those measures.

### **The senses in mind and culture**

Asifa Majid

The cognitive sciences aim to understand the human mind but too often fall prey to unwarranted generalizations from a narrow subset of the population: Western, Educated, Industrialized, Rich, Democratic societies. Anthropologists provide one kind of corrective to this bias, providing ethnographies of many alternative ways of thinking. But we still struggle to grasp what is common across cultural groups, and what truly exceptional. I propose that large-scale cross-cultural comparison can bridge this gap between the fields. For example, it has been assumed that sensory experiences are differentially accessible to language. That is, it is easier to describe distal senses (vision, audition) than proximal senses (olfaction, taste). Current theories assume this to be an established fact on the basis of English data alone. In a large-scale collaborative project, involving 25 researchers and 22 languages, we have found the codability of the senses is culturally-relative. This is a challenge to existing theories.

### **Cognition in context: Why anthropology and the rest of cognitive sciences need each other**

Douglas L. Medin,  
Megan Bang, Ananda Marin & Sandra Waxman

There is a great deal to be said about the lack of interaction between Anthropology and the other cognitive sciences. Such analyses can be constructive. Our present focus leaves the abstract issues behind to focus on a set of empirical issues linked to psychological distance and how humans are conceptualized in relation to the rest of nature. Native-American and European-American perspectives are contrasted. The research we report begins with ethnographic observations and interviews and then shifts to an analysis of cultural artifacts (children's books). We show how these data can be used in conjunction with the Trope and Liberman (2003) temporal construal theory to predict a number of related cul-

tural differences. The punch line is that Anthropology and the other cognitive sciences need each other if we are to understand cognition in context.

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