Theme Session

Evolinguistics: Where Cognitive Linguistics and Generative Grammar Meet

Organizer: Koji Fujita (Kyoto University)

This theme session features seven talks on Evolinguistics as an interdisciplinary, cross-theoretical approach to language evolution. We assume that language arose from multiple domain-general cognitive functions which may have evolved in humans and other species alike. Given this viewpoint, studies of the evolution of human language necessitates collaborations between different linguistic frameworks. For example, although Generative Grammar (GG) and Cognitive Linguistics (CL) started with contrasting, often conflicting understandings of the nature of human language and human mind, we believe that it is necessary to bring their advantages together to discuss the evolution of language.

This session focuses on two fundamental aspects of human language: form (syntax) and function (communication). Hierarchical syntax is a distinctive feature of modern human language, while its evolution and maintenance may be shaped by demands of human triadic communication via linguistic symbols. GG currently claims that uniquely human hierarchical compositional syntax can be reduced to the basic combinatorial operation "merge." As will be proposed in this session, this operation is very likely to be rooted in the sensori-motor system ("action grammar," i.e. combinational strategies observable in manipulation of physical objects) or in the conceptual-intentional system ("interrelational categorization," i.e. grouping of distinct objects into a set based on their shared properties). Either way, the evolution of merge can be understood in a way which is fully compatible with some basic ideas of CL, including embodiment, grouping, etc. We will show that constructing complex linguistic structures essentially presupposes domain-general cognitive processes such as integration, categorization, pattern abstraction and so forth.

In addition to this formal aspect, communicative motivation for language evolution cannot be dismissed. Conveying and understanding what a linguistic symbol refers to can be successful only with joint attention and shared intentionality between the speaker and the hearer, as proposed by Tomasello. Such social aspects are significant in linguistic activities using highly developed systems of symbols. We will also argue that human capacity of sharing attention and intention is relevant to the formation of complex syntactic structures.

From this broad perspective, we will discuss some current topics of Evolinguistics: language processing (Chang), motor action and syntax (K. Fujita), internalization and externalization (H. Fujita), symbolic communication (Hashimoto), categorization and recursion (Hoshi), image schemas (Taniguchi) and joint attention (Uno). We pay special attention to the possible evolutionary link between communicative functions and syntax to stress the collaborative status of CL and GG in Evolinguistics.

Hopefully, we will offer an opportunity for all participants to learn the latest research and findings of CL, GG, and beyond, and consider how these different perspectives can be linked and unified to explore human language evolution.

Speakers & Titles (in the order of presentation):

- 1. Koji Fujita / Kyoto University
 - Syntax, Cooperation and Self-Domestication
- 2. Koji Hoshi / Keio University
 - A Possible Link between Cognitive Linguistics and the Lennebergian View on Biological Evolution of Language
- 3. Kazumi Taniguchi / Kyoto University
 - On the Emergence of Grammar and Image Schemas: A Cognitive Linguistic View
- 4. Haruka Fujita / Kyoto University
 - On the Co-evolution of Internalization and Externalization in Human Language
- 5. Franklin Chang / Kobe City University of Foreign Studies
 Using the P-Chain to Understand the Evolution of Language
- 6. Ryoko Uno / Tokyo University of Agriculture and Technology
 - Shared Intentionality and the Emergence of Sentence Types in Natural and Artificial Languages
- 7. Takashi Hashimoto / Japan Advanced Institute of Science and Technology
 Filling a Gap between Pre-linguistic and Linguistic Pragmatics: An Experimental Semiotic Approach
 to the Formation of Symbolic Communication Systems with Intention Sharing



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