

The variable time scales of verbal and gestural expression: Challenges for cognitive linguistics as a usage-based approach

Alan Cienki

Dept. of Language and Communication
VU (Vrije Universiteit), Amsterdam, Netherlands

Despite the claims that cognitive linguistics constitutes a usage-based approach to the study of language (Barlow & Kemmer 2000), only recently have there been increasing efforts to overcome the written language bias that it inherited from its predecessors (Linell 2005). One aspect of this has been the rapidly growing interest in cognitive linguistics in the variably multimodal nature of language-based communication, including the study of gesture with speech (Cienki 2010).

In this talk we will consider some of the implications for cognitive grammar (Langacker 1987, 1991) of a set of findings from gesture studies. These include the fact that speakers do not normally align their gestures with speech in a simple gesture-to-word fashion. Gestures often slightly precede the coexpressive words in speech (Kendon 1972); furthermore, speakers sometimes hold gestures in the air for some time after they are produced (a 'post-stroke hold' [Kita 1990]), they re-use some gestures repeatedly over a stretch of discourse (as a 'cohesive' [McNeill 1992] or 'catchment' [McNeill et al. 2001]), or they 'return' each other's gestures (de Fornel 1992). The examples to be shown illustrate that these processes happen with gestures used for various functions, including not only physical but also abstract (metaphoric) reference.

Given the research arguing that gesture helps maintain mental imagery (de Ruiter 1998) and that it involves and reflects mentally simulated action (Hostetter and Alibali 2008), the perseverance of gesture over a stretch of discourse can be seen as a reflection of the speaker's maintenance of conceptual imagery. Consequently, we see in gesture a different (and variable) time scale for the conceptualization of mental imagery during spoken language production than that which is revealed by verbal expression. While this may be interesting, this fact raises some problems for analysis if language is taken in the broad sense as a symbolic structure "establishing systematic connections between conceptualizations and observable phenomena like sounds and gestures" (Langacker 2008: 6) – a characterization from a recent exposition of cognitive grammar. We will consider the theoretical implications of the phenomena discussed above as well as the practical ramifications they have for analysis. One conclusion is that there is a need for new graphic means of representing semantic structures, ones which can render the differing temporal contours of verbal and gestural means of expression.

References:

- Barlow, M. & Kemmer, S. 2000. Usage-based models of language. Stanford, CA: CSLI Publications.
- Cienki, A. 2010. Gesture and (cognitive) linguistic theory. In R. Caballero Rodriguez & M. J. Pinar Sanz (eds.), *Ways and modes of human communication*, 45-56. Cuenca: Universidad de Castilla-La Mancha.
- de Fornel, M. 1992. The return gesture: Some remarks on context, inference, and iconic gesture. In P. Auer & A. di Luzio (eds.), *The contextualization of language*, 159-176. Amsterdam: Benjamins.
- de Ruiter, J. P. 1998. Gesture and speech production. PhD dissertation, University of Nijmegen.

- Hostetter, A. & Alibali, M. 2008. Visible embodiment: Gestures as simulated action. *Psychonomic Bulletin & Review* 15: 495-514.
- Kendon, A. 1972. Some relationships between body motion and speech. In A. Siegman & B. Pope (eds.), *Studies in dyadic communication*, 177-210. New York: Pergamon Press.
- Kita, S. 1990. The temporal relationship between gesture and speech: A study of Japanese-English bilinguals. MS thesis, Dept. of Psychology, University of Chicago.
- Langacker, R. 1987. *Foundations of Cognitive Grammar*, vol. 1: Theoretical prerequisites. Stanford: Stanford University Press.
- Langacker, R. 1991. *Foundations of Cognitive Grammar*, vol. 2: Descriptive application. Stanford: Stanford University Press.
- Langacker, R. 2008. *Cognitive Grammar: A basic introduction*. Oxford: Oxford University Press.
- Linell, P. 2005. *The written language bias in linguistics: Its nature, origins, and transformations*. London: Routledge.
- McNeill, D. 1992. *Hand and mind: What gestures reveal about thought*. Chicago: University of Chicago Press.
- McNeill, D., Quek, F., McCullough, K.-E., Duncan, S., Furuyama, N., Bryll, R., Ma, X-F., & Ansari, R. 2001. Catchments, prosody and discourse. *Gesture* 1: 9-33.