

Creativity in the forms and functions of spontaneous gestures with speech

The manual gesturing we engage in while talking is a form of behavior which moves in and out of our conscious awareness. Unlike the intentionally created products of the graphic arts or the performances of music, theater, or dance, gesturing is an everyday process we engage in, sometimes with, and sometimes without, communicative intent. Unlike languages, with form/meaning mappings codified in words or signs, spontaneous gesture is not an independent symbolic system, but a behavior that is produced with and dependent on speech (cf. “Kendon’s continuum,” McNeill 1992:37). Manual gestural expression also has its own constraints, varying according to such parameters as the anatomy of the articulators (hands, forearms), bodily posture, the dimensions of gesture space, the setting, and so on.

What does it mean to look at gestures with speech as ‘creative’ or not? Our study draws on video data of speakers of American English from two types of communicative contexts: one monologic (academic lectures on linguistics) and one dialogic (conversations between friends about academic behavior). Creative gestures were distinguished according to both formal and functional criteria. First, we can characterize gestures as creative according to a number of characteristics based on their form, such as greater than normal dynamicity, use of a more extensive gesture space, and coordination with other embodied aspects of production, such as body shifts and/or exaggerated facial expressions.

Second, creative gestures also appear to serve particular functions, such as providing a synthesis of a creative idea which appears in the accompanying speech, or making meta-comments on the speaker’s attitude toward the subject being discussed. What instances of creative gesture use share are contexts of high communicative pressure: the impetus to express a complex idea quickly. We propose that the cognitive and communicative challenges of this type of situation give rise to cognitive leaps (cf. Coulson 2001) as conceptual pathways are either overstretched (compare the phenomenon of catachresis in lexical choice) or compressed. Cognitive creativity via compression can be found, for example, in the use of

- metonymy in gestural representation, reflecting/supporting conceptual inferencing (Mittelberg & Waugh, forthcoming),
- metaphoric gesturing, depicting aspects of the source domain that the speaker is reasoning with (Cienki & Müller 2008), and/or
- conceptual blending (Fauconnier & Turner 2002), in which the gesturing hands themselves provide material anchors for imagistic concepts which the speaker is thinking with (cf. Williams 2008).

Overall, the data from gesture reflect creativity as a graded or scalar phenomenon correlating with how graphically the speaker expresses an idea in gestural form — consistent with the graded nature of our consciousness of gestural behavior itself. However, although creative gestures represent forays into imagined worlds (Chafe, this session), they still follow the basic structuring principles of gestures as a whole, including reliance on schematic patterns of action (image schemas, mimetic schemas); abstraction from salient aspects of physical actions, objects, and relations (Müller 1998a, 1998b); and metonymic extension and metaphoric mapping from those schemas and abstracted representations.

References

- Cienki, A. & C. Müller (eds.). 2008. *Metaphor and gesture*. Amsterdam/Philadelphia: Benjamins.
- Coulson, S. 2001. *Semantic leaps: Frame-shifting and conceptual blending in meaning construction*. Cambridge: Cambridge University Press.
- Fauconnier, G. & M. Turner. 2002. *The way we think: Conceptual blending and the mind's hidden complexities*. NY: Basic Books.
- McNeill, D. 1992. *Hand and mind: What gestures reveal about thought*. Chicago: University of Chicago Press.
- Mittelberg, I. & L.R. Waugh. Forthcoming. Multimodal figures of thought: A cognitive-semiotic approach to metafoor and metonymy in co-speech gesture. In C. Forceville & E. Urios-Aparisi (eds.), *Multimodal metaphor*. Berlin/New York: Mouton de Gruyter.
- Müller, C. 1998a. Iconicity and gesture. In S. Santi *et al.* (eds.) *Oralité et gestualité: Communication multimodale, interaction*, Montréal/Paris: L'Harmattan, pp. 321-328.
- Müller, C. 1998b. *Redebegleitende Gesten: Kulturgeschichte – Theorie – Sprachvergleich*. Berlin: Berlin Verlag Arno Spitz.
- Williams, R. 2008. Gesture as a conceptual mapping tool. In A. Cienki & C. Müller (eds.), pp. 55-92.