## Grammar as gestural action

Building on Arnheim's claim that « there are perceptual equivalents of all theoretical notions» (1969), McNeill's theory of « abstract pointing» (1992, 2005), Talmy's concept of « ception » (2000), I would like to show that the conceptual organization and hidden cognitive mechanisms of grammar can be made visible and meaningful by using special iconic, deicitic and metaphoric gestures called KineGrams (Lapaire 2006). This special kind of "gestural action" (Kendon 2004) and its associated symbolism require the creation, observation and manipulation of *imaginary objects of conception*, as well as a highly plastic and symbolic use of space in order to represent *conceptual regions* and *domains of experience*. In this visuo-kinetic rendering of grammatical processes and meanings, *speakers* and *cognizers* are cast in the role of *viewers* and *movers* who adopt a number of *epistemic* and *socio-pragmatic stances*. Postural and gestural analogs of grammatical notions and processes are thus created that are visually explicit.



Figure 1 – Comparatives Visuo-kinetic activation of the BALANCE-schema (Johnson 1987)



Figure 2 : Variations on superlatives Going to upper / lower extremes



Figure 3: Preterition as retrospection



Figure 4 – Grasping essentials with the zero article in English e.g. *Life* ... *Beauty* ... *Silence* ...

The visuo-kinetic display is to a large extent *image schematic* (Johnson 1987, Lakoff & Johnson 1999), and consistent with the «schematicity » of grammatical meaning (Langacker 2000). KineGrams make full use of the « abstract properties of gesture » (McNeill 1992). More importantly, they enact some of the moves characteristically made by the IBC – or *Idealized Body of Cognition* (Lapaire 2008). This is the abstract body image and metaphoric bodily activity that is unconsciously invoked by ordinary speakers to construe and report socio-physical experience, like « weighing options », « grasping essentials » (HANDS), « going ahead », « following », « moving forward », « standing in the way » (LEGS / FEET), « observing », « looking back / ahead » (EYES), etc.

KineGrams may serve as a basis for visuo-kinetic explorations of language structure and language use in workshop settings. In this presentation, filmed scenes from « Grammar and movement » sessions held with linguistics students (aged 20-30) and bilingual schoolchildren (aged 8-10) will be shown.





Figure 5 – Exploring socio-physical scripts for negation "Standing in someone's way" along a given "action path" / "Forcing one's way", "Getting around"

The presentation will end with remarks on how KineGrams may also be used to develop an awareness of the contribution of spontaneous gestural activity to grammatical meanings and processes in oral discourse. Examples will be given of the verbo-gestural construction of aspect, comparison, concession, epistemic modality, changes of state and processes, time reference, etc. in spontaneous speech (Calbris 1990, Fricke 2010). As will be shown, abstract

grammatical meanings may be performed and even drawn by children, after careful observation and workshop practice.



Figure 6 – Yasser's schema for "maybe"

## References

Arnheim, Rudolf. (1969). Visual Thinking. Berkeley: University of California Press

Billioti de Gage, Cécile. (2012). Hands and manipulation in the grammar and cognitive system of English. Unpublished PhD dissertation. Université Michel de Montaigne-Bordeaux 3, Università Orientale, Napoli.

Calbris, Genevière. (1990). The Semiotics of French Gestures. Bloomington: Indiano University Press.

Fauconnier, Gilles and Mark Turner. (2002). *The Way We Think. Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.

Fricke, E. (2011). *Grammatik Multimodal : Wie Worter Und Gesten Zusammenwirken*. Berlin: Walter de Gruyter.

Hannaford, Carla. (2005). Smart Moves. Why Learning Is Not All In Your Head. 2d Edition. Salt Lake City, Utah: Great River Books.

Johnson, Mark (1987). The Body in the Mind. Chicago: The University of Chicago Press.

Johnson, Mark (1993). Moral Imagination. Chicago: The University of Chicago Press.

Kendon, Adam (2004). Gesture. Visible Action as Utterance. Cambridge: Cambridge University Press.

Lakoff, George & Johnson, Mark (1999). Philosophy in the Flesh. New York: Basic Books.

Langacker, Ronald. (2000). Grammar and Conceptualization. Mouton de Gruyter, Berlin / New York.

Lapaire, Jean-Rémi. (2008). The meaning of meaningless grams - or emptiness revisited. *Cognitive approaches to language and linguistic data*. Lódź Studies in Language. Wieslaw Oleksy and Piotr Stalmaszczyk (eds), Frankfurt/M: Peter Lang.

Lapaire, Jean-Rémi & Masse, Jean (2006). *La grammaire anglaise en mouvement*. Includes the *Grammar in Motion* DVD from which screen captures can be made. Paris: Hachette.

McNeill, David (1992). Hand and Mind. Chicago: Chicago University Press.

McNeill, David (2005). Gesture and thought. Chicago: Chicago University Press.

Merleau-Ponty, Maurice. (1962). *Phenomenology of Perception*. Translated from the French by Colin Smith. London / New York: Routledge & Kegan Paul.

Özçaliskan, Şeyda. (2005). Metaphor meets typology: ways of moving metaphorically in English and Turkish. *Cognitive Linguistics* 16-1, 207-46.

Talmy, Leonard. (2000). Towards a Cognitive Semantics. Volume 1. Cambridge Mass.: MIT Press.

Turner, Mark. (1996). *The Literary Mind*. The Origins of Thought and Language. New York / Oxford : Oxford Paperbacks.

Williams, Stephen (2008). Metaphor of the Lower Body. A Corpus-Based and Diachronic Analysis of Metaphoric and Metonymic Locomotion. Unpublished M.A. dissertation. Université Michel de Montaigne-Bordeaux 3.