The semiotic status of onomatopoeia

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In this presentation, we will aim at defending the idea according to which a neuro-linguistic analysis of onomatopoeias can help us determining their semiotic status. Indeed, thanks to analysis of their effects on the brain, one can identify which neuronal networks are activated by onomatopoeic stimuli and distinguish two kinds of onomatopoeias: *echoic* ones and *imitative* ones.

First, we will report an experiment aimed at analysing the brain processing of onomatopoeic words in contrast with their non-onomatopoeic semantically correlates and with their corresponding environmental sounds (Hashimoto et al., 2006). Onomatopoeic stimuli appear to activate both regions involved in the recognition of environmental sounds and regions involved in the recognition of verbal speech. Second, we will explain the difference between *imitative* and *echoic* onomatopoeias (Meinard, 2013). The former are words that imitate sounds produced by a human or animal vocal apparatus and the latter imitate environmental sounds. This semantic distinction also appears at a perceptual level and neurological researches (Lewis et al. 2005, 2009) have given evidence that vocalizations and tool sounds activate different neuronal networks: there is a "vocal sound" related network in the brain, preferentially activated by animal sounds, even in case of miscategorization.

References

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