SOLAB

Resolving the neural basis of affective sound-meaning associations

Arash Aryani[1]

1. Department of Education and Psychology, Freie Universität Berlin

Abstract

A core assumption of classic linguistics —the arbitrariness of the sign— states that the sound of a word per se has no inherent semantic content, nor does it play any role in shaping the meaning of words. However, a growing body of work has provided evidence that the sound of a word can carry subtle cues to its meaning and that sound-meaning association in vocabulary is a general property of human language, which plays a crucial role for both phylogenetic language evolution and ontogenetic language development. In the affective domain, recent empirical results suggest how a word sounds (e.g., soft vs. harsh) can convey affective information (e.g., pleasantness vs. harshness), which can interact with the words' semantic content. This talk focuses on the cognitive and neural bases of sound-meaning associations in the affective domain, termed "affective iconicity". This study will present results that address the two main questions i) Does the sound of words (i.e., phonemes, acoustic features) evoke affective responses observable at the behavioral and neural levels? ii) Does the sound of words influence the processes of meaning-making and semantic decisions in the affective domain? The results of these studies were used to upgrade the standard models of language processing by conceiving corresponding modules responsible for the interactive effect of sound and meaning during the affective evaluation of words.

Keywords: Affective iconicity, Sound-meaning associations, Neurocognitive poetics, Language and emotion, Left amygdala

Email: Arash.aryani@fu-berlin.de

doi.org/10.30514/icss.25.0.21