

Resolving the Cognitive and Neural Basis of Affective Iconicity

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About Me



Academic Background:

Ph.D. in Psychology, Freie Universität Berlin
M.Sc. in Electrical Engineering, University of Hanover
B.Sc. in Computer Engineering, University of Ferdowsi Mashhad, Iran

Research Interests:

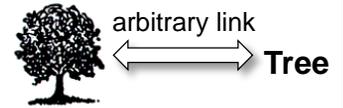
Cognitive and Neural Aspects of Language Processing, Language and Emotion, Sound-Meaning Relationships, Neurocognitive Poetics

Theoretical Background

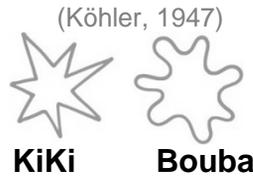
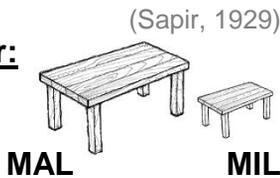
Question: Is there any relationship between the sound and meaning of words?



The Arbitrary Nature of the Linguistic Sign: No!
“the bond between the signifier and the signified is arbitrary”
(De Saussure, 1916)

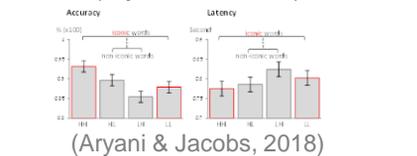
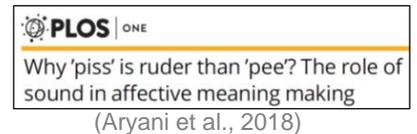
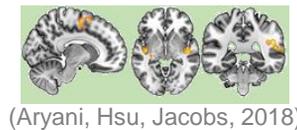


However:



Previous Research

- The existence of Sound-Meaning relationship in the emotional domain: **Affective Iconicity**
- The sound of a word has a stand-alone affective impact observable at both behavioral and neural level.
- This affective potential of the sound of a word can interact with the affective meaning of that word influencing semantic processing.



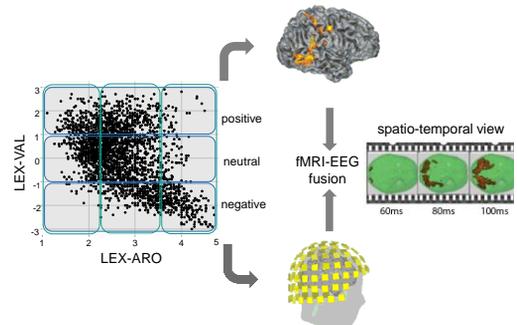
Research Plan

UCL:

- WP1:** the influence of words' affective sound on the perception of words' affective meaning
- WP2:** the effect of iconicity in implicit word recognition (standard lexical decision task)

FU Berlin:

- WP3:** assessing the complex spatiotemporal neural dynamics underlying affective iconicity



References:

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- Aryani, A., Conrad, M., Schmidtke, D., & Jacobs, A. (2018). Why 'piss' is ruder than 'pee'? The role of sound in affective meaning making. *PLoS One*, 13(6).
- Aryani, A., Hsu, C. T., & Jacobs, A. M. (2019). Affective iconic words benefit from additional sound-meaning integration in the left amygdala. *Human Brain Mapping*, 1-12
- Aryani, A., Hsu, C.-T., & Jacobs, A. M. (2018). The Sound of Words Evokes Affective Brain Responses. *Brain Sciences*, 8(6)