

The effect of sound symbolism on the processing of Czech words in persons with aphasia

Eva Pospíšilová & Michal Láznička

(Charles University & Charles University)

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Sound symbolism and iconicity have, during the last two decades or so, become an increasingly studied topic in typology, evolutionary linguistics, and psycholinguistics. Both iconicity and sound symbolism are hypothesized to have played a crucial role in the origins of language (Perlman 2017; Ćwiek et al. 2021) and have also been found to facilitate language acquisition and processing (Imai et al. 2008; Lockwood, Dingemanse & Hagoort 2016; Sidhu, Vigliocco & Pexman 2020). While a processing advantage was hypothesized both for language acquisition and language impairments (Ramat 1995), the research has mostly focused on the former. An exception to this is Meteyard et al. (2015)'s study. Using four different tasks (repetition, reading aloud, auditory lexical decision and visual lexical decision), they have found that iconicity aids spoken word processing for individuals with aphasia. This paper follows up on Meteyard et al.'s results. Our research question is whether iconic words are easier to process than non-iconic words for Czech speakers with aphasia.

Firstly, we have selected 40 Czech iconic words and 40 matched control words. Most of these words were translations of Meteyard et al.'s stimuli, the rest of the words were selected using the Czech Etymological Dictionary (Rejzek 2015), words that this dictionary marked as onomatopoeia were included. The control words were matched for word class, corpus frequency, and length. The set of selected words were rated for sound iconicity by Czech speakers without aphasia. Finally, the selected and rated words were used in a lexical decision task and a repetition task with a group of participants with aphasia (approx. 15) and a group of matched neurotypical speakers. The data will be analyzed both in terms of error rates and reaction times and expect to find similar advantages as Meteyard et al. for iconic words, i.e. the iconic stimuli will be faster and have fewer errors. The results of this experiment will contribute to a greater understanding of sound symbolism and its function in language impairments. They also have the potential to be used in therapeutic practice (e.g. in the creation of diagnostic tools and new therapeutic procedures).

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