

## HOGYAN VEGYÜK KOMOLYAN AZ IDEGTUDOMÁNYT A PSZICHOLOGIA SZERKÉZETÉBEN?

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HOW TO TAKE NEUROSCIENCE SERIOUSLY IN PSYCHOLINGUISTICS?

*The paper surveys the different possibility psycholinguistics can relate to neuroscience. The first option is to take neuroscience data as any soft data (e.g. reaction times, error patterns) concerning language behavior, and treat them as another support of models in a loose sense. The second option is to use neuroscience as a way to formulate our behavioral hypotheses more sharply. The third one is to use neuroscience data in deciding between competing models of language performance.*

*The author illustrates these different approaches from some well know traditional or more contemporary issues in psycholinguistics. The proposed connections between left hemisphere functions and language strategies e.g. changed substantially when the entire issue of the origin and nature of interhemispheric differences is taken not in a metaphoric but in a literal sense. Similarly, the bold claims regarding innatism are revised when the precise issue of the relationship between purportedly innate structures and language development is considered, the new approaches here helped to redefine the very concept of innate structure, and projected a more dynamic picture of neural self organization as the biological basis of language acquisition.*

*A similar change of vision is introduced concerning the relationships between semantic or categorial information and cortical structures with the advent of new technologies that can try to make literal mappings between semantic organization and its neural substrate. In this way, neuroscience indeed might help to find answers to issues that were phrased too broadly earlier. Finally, the recent debates regarding the role of rule based and rote organization, or grammar and lexicon in the structures underlying language including the proposed dissociation phenomena obtain a new frame of interpretation due to the use of detailed neuroscience data.*

*There is no place for an overall optimism yet. However. Though neuroscience taken seriously promises to give solution to psycholinguistic puzzles, sometimes recent neuroscience data are almost as controversial as the behavioral data they intend to explain.*