

Natural Grammar

Janos J. Sarbo, Jozsef I. Farkas, Auke J.J. van Bremen

Radboud University Nijmegen

Abstract

By taking as a starting point for our research the function of language to generate meaning, we endeavor in this chapter to derive a grammar of natural language from the more general Peircean theory of cognition. After a short analysis of cognitive activity, we introduce a model for sign (re)cognition and analyze it from a logical and semiotic perspective. Next, the model is instantiated for language signs from a syntactical point of view. The proposed representation is called natural insofar as it respects the steps the brain/mind is going through when it is engaged in cognitive processing. A promise of this approach lies in its potential for generating information by the computer, which the human user may directly recognize as knowledge in a natural, hence economic way.