

PROSPECTS OF APPLYING COGNITIVE TECHNOLOGIES TO RHETORICAL ANALYSIS

Fedoriv, Yaroslava

The National University of Kyiv-Mohyla Academy

Rhetorical analysis, as it is traditionally described in the studies of language and communication [1], attempts at breaking a text into parts and examining how the parts work together to create a certain effect by exploring the rhetorician's goals, the techniques used, examples of those techniques, and their impact on the recipient. Usually the rhetorical analysis involves consideration of a big number of strategies that a rhetor may employ in order to effectively communicate the message to the intended audience. The variety and scope of such strategies presume scrupulous and time-consuming work by the researcher and call for more efficient methods of language processing, bringing in the idea of optimising this process by delegating the routine procedures to computer systems.

The above prerequisites eventually turn our attention to cognitive technologies. As outlined by David Schatsky, Craig Muraskin, and Ragu Gurumurthy, these technologies originate from the research field known as artificial intelligence (AI), "the theory and development of computer systems able to perform tasks that normally require human intelligence" [2]. As such, cognitive technologies imply "the application of information technology to tasks traditionally performed by humans," (ibid.) which fall into two basic types: perceptual and cognitive tasks. Considered from the viewpoint of rhetorical analysis, cognitive technologies become the focus of our interest because they are known to allow automating perceptual tasks, such as natural language processing, text and speech recognition, or face identification, and cognitive tasks, such as "reasoning based on partial or uncertain information," (ibid.) among other areas. Specifically, the cognitive technologies applied to rhetorical analysis are seen as a semi-supervised learning system based on a set of rules and algorithms that would speed up the process of identifying the rhetorical strategies, persuasive appeals, and argumentation patterns.

Employing text analysis, speech recognition, and audience response identification (analysis of facial expressions, body movements) will make it possible to predict and model communicative events based on the collected data on public speaking. A great variety of communicative situations will require clustering and developing algorithms for a narrowed number of functionally homogeneous speech acts, yet all of these technologies have currently been mastered by AI specialists and therefore suggest realistic outcomes.

LITERATURE

Longaker M. G. Walker. *Rhetorical Analysis: A Brief Guide for Writers* / M. G. Longaker and J. Walker. – Boston, MA : Longman Publishing Group, 2010; 2. Schatsky D *Demystifying Artificial Intelligence* / D. Schatsky, C. Muraskin & R. Gurumurthy. 2014. <http://dupress.com/articles/what-is-cognitive-technology>