

Factors Influencing Resolution of Anaphora with Collective Nominals in Russian

Authors : Anna Moskaleva

Abstract : A prolific body of research in theoretical and experimental linguistics claims that a preference for conceptual or grammatical information in the process of agreement greatly depends on the type of agreement dependency. According to the agreement hierarchy, an anaphoric agreement is more sensitive to semantic or conceptual rather than grammatical information of an antecedent. Furthermore, a higher linear distance between a pronoun and its antecedent is assumed to trigger semantic agreement, yet the hierarchical distance is hardly examined in the research field, and the contribution of each distance factor is unclear. Apart from that, working memory volume is deemed to play a role in maintaining grammatical information during language comprehension. The aim of this study is to observe distance and working memory effects in resolution of anaphora with collective nominals (e.g., team) and to have a closer look at the interaction of the factors. Collective nominals in many languages can have a holistic or distributive meaning and can be addressed by a singular or a plural pronoun, respectively. We investigated linguistic factors of linear and rhetorical (hierarchical) distance and a more general factor of working memory volume in their ability to facilitate the interpretation of the number feature of a collective noun in Russian. An eye-tracking reading experiment on comprehension has been conducted where university students were presented with composed texts, including collective nouns and personal pronouns alluding to them. Different eye-tracking measures were calculated using statistical methods. The results have shown that a significant increase in reading time in the case of a singular pronoun was demonstrated when both distances were high, and no such effect was observed when just one of the distances was high. A decrease in reading time has been obtained with distance in the case of a plural pronoun. The working memory effect was not revealed in the experiment. The resonance of distance factors indicates that not only the linear distance but also the hierarchical distance is of great importance in interpreting pronouns. The experimental findings also suggest that, apart from the agreement hierarchy, the preference for conceptual or grammatical information correlates with the distance between a pronoun and its antecedent.

Keywords : collective nouns, agreement hierarchy, anaphora resolution, eye-tracking, language comprehension

Conference Title : ICLLL 2024 : International Conference on Language, Literature and Linguistics

Conference Location : Paris, France

Conference Dates : September 16-17, 2024