

Text Type Constraints on the Choice of Linguistic Mechanisms in Scientific Publications

Corpus-Based Approach

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The aim of my current research is to identify distinct linguistic features for the different section types that appear in the same corpus of a scientific publication, as well as to provide a quantitative and qualitative evaluation of the distinctions with regard to the communicative goals of the section types.

The analysed section types include *abstracts, introductions, related works, discussions, and conclusions* retrieved from 8,000 research articles in the field of Computational Linguistics (CL). In order to verify that the intentions of the individual section types constrain the language expression, I investigate across these section types the distribution/the frequency of occurrence of linguistic features associated with academic writing such as *nominalization, hedging, self-mentions, passive voice*, as well as features contributing to text coherence such as *coreference chains, lexical repetitions, and explicit connectives*.

During my talk, I will give an overview of the extracted features, present a quantitative assessment of the current research results, and comment on the possible applications of the findings.

These findings could help us gain insights into the section-specific linguistic characteristics in the context of CL and help us develop a better understanding of how the different sections interact with one another so that the overall purpose of the scientific paper is achieved. In addition, the results could help us deepen our knowledge of the rhetorical functions of the extracted features, as well as improve our understanding of the argumentation strategies employed in academic writing.

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