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Automated Semantic Frame Analysis of Telegram News Channels

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Abstract

This study describes the experimentally developed technique of sentiment analysis in an automatic semantic parser that processes daily news input blocks. The 2022 time period was used to analyze news in Telegram channels published by twelve official news agencies and five influential non-official news sources. In the advanced analytical system that we present, automatic learning is combined with a frame-based approach to identify patterns that influence judgments based on a frame representation of the text. The parser analyzes the syntactic structure of each sentence input, constructs its semantic representation, and associates it with one of 3800 semantic frames extracted from a large text corpus. The research revealed that the relative frequency and combination of frames varied between the two groups of news sources. The results prove that news is conceptualized and represented by various media sources in very different ways with the potential to affect the recipient's beliefs and emotions.