Cognitive Methods in Political Discourse Analysis": Identifying political orientation among Czech media classes using Market Basket Analysis

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Political language is one of the areas that is extensively discussed in cognitive linguistics (Lakoff 2004, Lakoff and Wehling 2012). This pilot study uses a set of quantitative tools with an aim to capture conceptual networks in two classes of Czech media portals that are presumably different in political orientation: the mainstream and anti-system media classes. We first identify keywords (Scott 2002) shared by both media classes; these are the words that are prominent in the online media of a specific period (measured against the background of the traditional periodicals) and are used as "seed words". We then examine how the seed words are interconnected differently in the two media classes: we apply Market Basket Analysis (Cvrček and Fidler 2022) to 10 media portals from each media class and examine how different keywords cluster around the same seed words in the two media classes. This information will be used to characterize the portals using Hierarchical Cluster Analysis (HCA) and multi-dimensional scaling.

Our earlier studies based on the data from 2020 (Cvrček and Fidler and Fidler and Cvrček, forthcoming) show striking differences between the mainstream and anti-system media classes. For example, the seed keyword "coronavirus" points to different conceptual networks within the mainstream and anti-system media classes. In both media classes, the keyword co-occurs with concepts related to the West, Russia, health threats, and human needs, but the anti-system media class uniquely co-occurs with concepts related to military and security-threats and violence, Ukraine, and Bill Gates. By zooming in on the texts where these keywords co-occur, we found that the anti-system media class, unlike the mainstream, connects COVID-19 to geopolitical threats by the West and conspiracy theory by "globalists". Similarly, while the word "racism" is not associated with any prominent concepts in the mainstream media class, it co-occurs with concepts related to the West and military and security-threats, violence, and the white population in the anti-system media class. Texts where these keywords co-occur suggest narratives that connect racism to violence and disarray in the West (thereby representing the West negatively), and to victimization of the white population.

The results of this probe are expected to substantiate the existing media class typology (mainstream vs. anti-system) by Šlerka (2018). Šlerka groups media portals into several clusters in terms of the similarity of their readers, more precisely, their online behavioral patterns, such as visits to web sites (based on Alexa Rank https://www.alexa.com/) and sharing and liking social media articles (based on the CrowdTangle service). The clustering based on audience overlap therefore does not stem from linguistic characteristics, topic preferences, or political stance of the media portals. Market Basket Analysis tests Šlerka's typology from a cognitive angle by comparing worldviews based on the network of associations in different media portals. Moreover, the pilot study could lead to a fine-grained differentiation among the media portals within one and the same media class. The current method has the potential to unpack ideological undercurrent within political texts in texts beyond the Czech media portals.

References
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