Andrzej Jarynowski, Andrzej Buda

Hierarchical reorganization of political spheres as a consequence of massive social movements

One of the most significant events in Polish politics after communism broke up was the emergence of internal conflict after Polish president's plane crash 10.04.2010. We investigate relations between political parties in Poland during last decade. We provide analysis of preferences of voters (via polls), personal transfers between parties and public opinion associations before and after Smolensk movement (Airport in Russian where the catastrophy had happened), that represent medial perception of distances between parties. We observe a topological difference in Network, Hierarchical and Minimal Spanning Trees representing connections between political parties - before and after critical phenomenon. For example, polarization occurs on PO-PiS line (these parties are no longer neighbours in hierarchical diagram and the Minimal Spanning Tree, because of strong negative correlations according to opinion polls after 10.04.2010). Before Smolensk plane crash every link in the MST had representation in transitions between political parties, because suprisingly people changed politiucal parties directly according to the MST links. However, the real politics do not take place in the media, but in the government and the Parliament that produces law. In this study, we compare relations between parties from medial perspective (as described above) with voting behavior and discussion patterns in the Parliament. Multiscale dimension mapping methodology allows us to present political relation in both governmental and medial perception. This talk will in particular focus on two questions: Is polarization observed in both regimes or only in the media perception? And what does characteristic fingerprints of such a critical event to political ties in general (in meaningful commodity market taxonomy where 'prize' of political party is en equivalent to opinion polls). While social scientists try to understand mechanisms of political polarization with underlying psychological and political patterns, our hierarchical/network analysis with application of natural language processing and text mining, are great supplementary tools for that. The aim of this preliminary exploratory quantitative study was to generate questions and hypotheses, which could b carefully follow by qualitive methods in the future.