

Report on Framing and Agenda-setting in Russian News: a Computational Analysis of Intricate Political Strategies

Background

Authoritarian governments' control of media through manners such as state-owned media, fake news, censorship is well studied and documented in academic work and we have reliable methods to identify such actions. However, the same cannot be said for subtle manipulation techniques such as agenda-setting and framing. Agenda setting refers to shifting focus towards certain issues, and framing refers to the idea of highlighting and focusing on certain aspects of an issue or presenting it in a certain manner, for ex. Abortion as a woman's freedom of choice vs. a child's life. This includes things like covering irrelevant news to distract from other issues, or promoting certain viewpoints to bias readers and promote state interests. This type of manipulation is harder to identify and mitigate, and has the potential to affect Western countries as well, not just authoritarian ones, an alarming fact considering the recent rise of polarisation observed in countries like India and America. This is a pressing issue, and although this idea is studied in English, there's a strong need to be able to study this in other languages. Methods to effectively perform cross-lingual projections of frames is extremely relevant, more so in a country like India with over 23 languages where only approximately only 10% speak English.

Summary

The study focuses on a single Russian newspaper(Izvestia) over a period of 13 years, in an attempt to find evidence of agenda setting and framing. The paper establishes a strong correlation between Russian economic downturn(determined by RSTI's performance and GDP) and mention of the U.S in articles in the month proceeding the economic downturn. In order to analyze the articles and their mention of the U.S, the study proposed the idea of multiple frames, each article with a primary, secondary frame to define which attributes of a topic are highlighted in a

given article. The frames were defined based on lexicons obtained from MFC annotations (from the Policy Frames Codebook). These lexicons are then translated to Russian, and then query expansion was used and it also modified to be more specific to Izvestia corpus. After the derived corpus is evaluated in both English and Russian, the articles are evaluated with these frames, and each article is assigned a primary, and if applicable a secondary frame. In addition, for each frame they identify salient words whose usage serves a marker of the frame. This method manages to avoid the drawbacks of both fully supervised and unsupervised approaches, as supervised methods require extensive manual annotation, and unsupervised approaches, while adept identifying themes, the identified themes are harder to interpret and much more specific to the corpus itself. Each frame has a lexicon of approximately 100-300 words. In order to test the derived lexicons for frames in Russian, they conducted an intruder detection task with native Russian annotators. The researchers also determined that a multiple frames approach is more effective in understanding an article the same way a reader might, as opposed to STMs(Structured Topic Models) which are more effective at identifying corpus specific topics. The increased effectiveness methodology, in addition to its applications in cross-lingual projections and improvements in regards to supervision and manual effort make it quite promising. In addition to highlighting novel cross-lingual projection methodology, this paper also displays NLP's success at identifying indirect manipulations such as distraction and framing allowing for more awareness and responsiveness to combat such attempts.

Areas of Improvement

- The study focuses on only one media entity over 13 years, instead we could study multiple media entities.
- Although the authors establish a relationship using Granger causality, they do not establish true causality, and one might find that U.S sanctions might truly be the cause behind RTSI downturns, and hence explain the increase of U.S mentions in articles.
- In order to further improve this methodology, they can approach more supervised approach and try to create frame lexicons from scratch by evaluating Russian data rather than cross lingual projection of MFC frames developed from evaluating English data.