Tracking the viral spread of incivility online: An interdisciplinary approach to studying profanity use in Chinese-language online platforms

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OBJECTIVES

1. To draw upon the advances in machine learning and natural language processing to tackle online incivility.
2. To collect a large corpus of profane speech from a variety of Chinese-language online platforms.
3. To identify the mechanisms and processes behind the spread of nasty talk in social media at both individual and group levels, and have implications for the development of cost-effective long-term solutions to online uncivil behavior.

HIGHLIGHTS

### Chinese Weibo Posts Classification and Social Network Analysis

• When expressing their opinions, people would like to include cursing words to emphasize their feelings.
• Rude and offensive cursing is always seen as a way people express their negative feelings.
• However, our investigations observe that cursing is may also used to express positive feelings.
• We adopt machine learning techniques for sentiment analysis, topic modelling, and emotion diffusion in social networks.
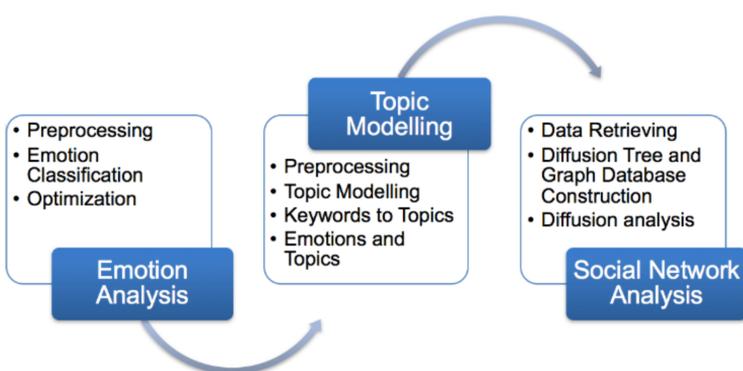

Sentiment Analysis of Tweets

• Sentiment analysis is identifying the emotions of a given sentence.
• Propose a deep-neural-network model based on CNN and LSTM for multi-label sentiment classification tasks.
• Develop a demonstration website for short text sentiment analysis, w.r.t. real-time tweets or user queries.

Topics of Weibo Posts with Angry/Disgust Emotions
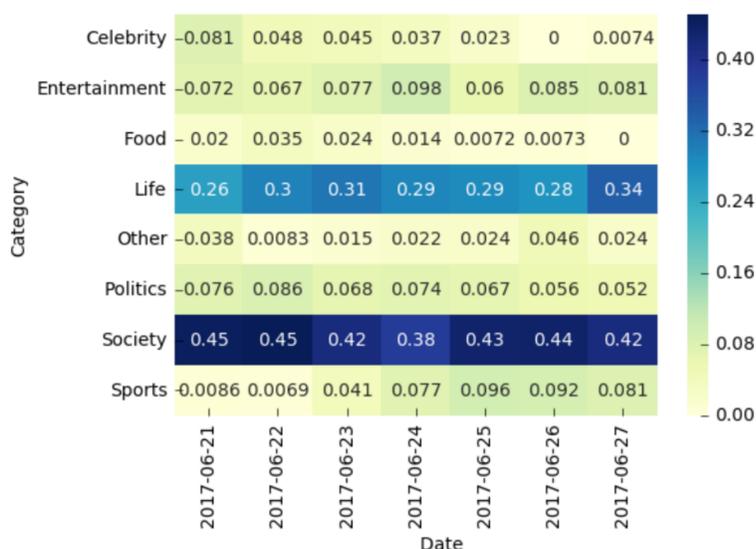
Topics of Weibo Posts with Happy/Like Emotions
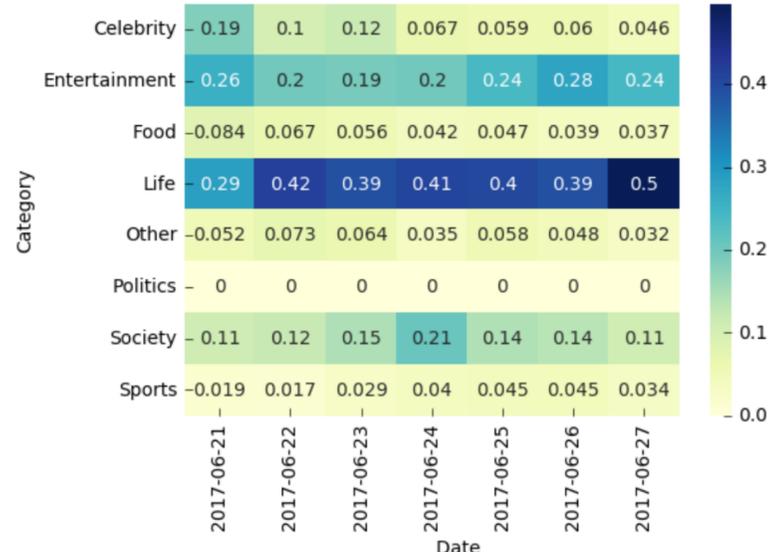
SELECTED PUBLICATIONS

1. C. Song, H. Kwon, J. Xu, X. Huang, S. Li, "Chinese-Language Cursing Analysis in Online Weibo Social Networks", in Association for Education in Journalism and Mass Communication, 2019 (to appear).