

CHARACTERIZING ATTENTION CASCADES IN WHATSAPP GROUPS

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Total usors

Messenger apps popularity











LINE

Imo

Messenger

WeChat

Telegram



BBM





QQ





Kakao Talk Hike

App	iolai useis
WhatsApp	1.6 bi
Facebook Messenger	1.3 bi
WeChat	1.1 bi
Line	700 mi
Telegram	200 mi

WhatsApp, politics and misinformation



May 2018

The Americas

WhatsApp is upending the role of unions in Brazil. Next, it may transform politics.

Facebook's WhatsApp flooded with fake news in Brazil election

5 MIN READ



Anthony Boadle

October 2018



Initial question

What are the ingredients of the WhatsApp architecture that makes it a weaponizable social media platform to distribute misinformation?



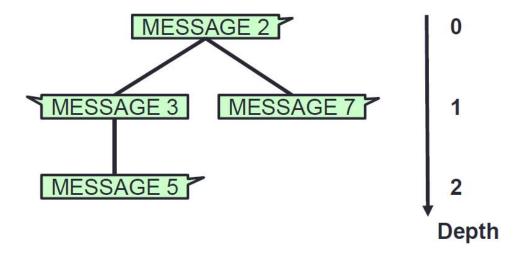
Information cascades and attention economy





Attention cascade example





Research questions

 How different are attention cascades in political and nonpolitical groups on WhatsApp?

 What is the impact of false information on the characteristics of attention cascades?



Studying attention cascades on WhatsApp using 3 dimensions

Structural

- Number of nodes
- Depth
- Maximum breadth
- Structural Virality

Temporal

- Duration
- Structural characteristics over time

User participation

- Unique users
- Relationships motifs

Data collection and anonymization



links on the Internet







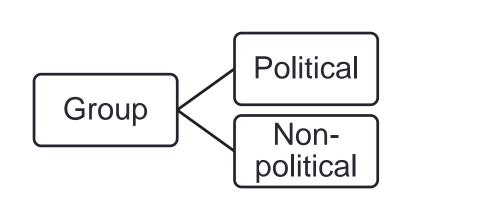


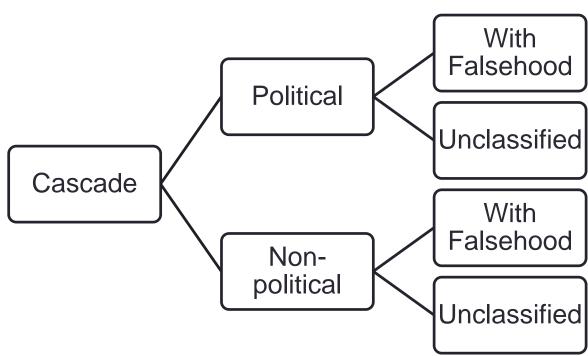
Anonymize dataset

WhatsApp dataset

# of messages	1.7 mi
# of users	31 k
# of groups	120

Group and cascade classification





We used six Brazilian fact-checking websites





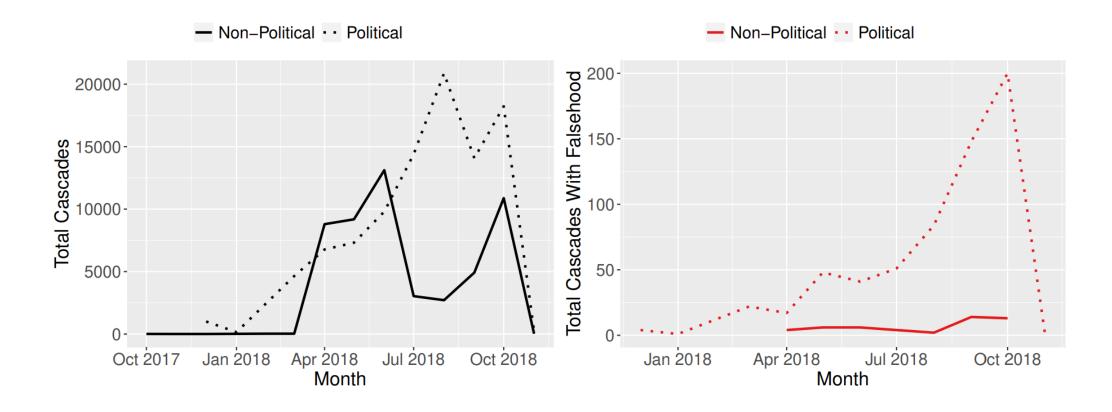




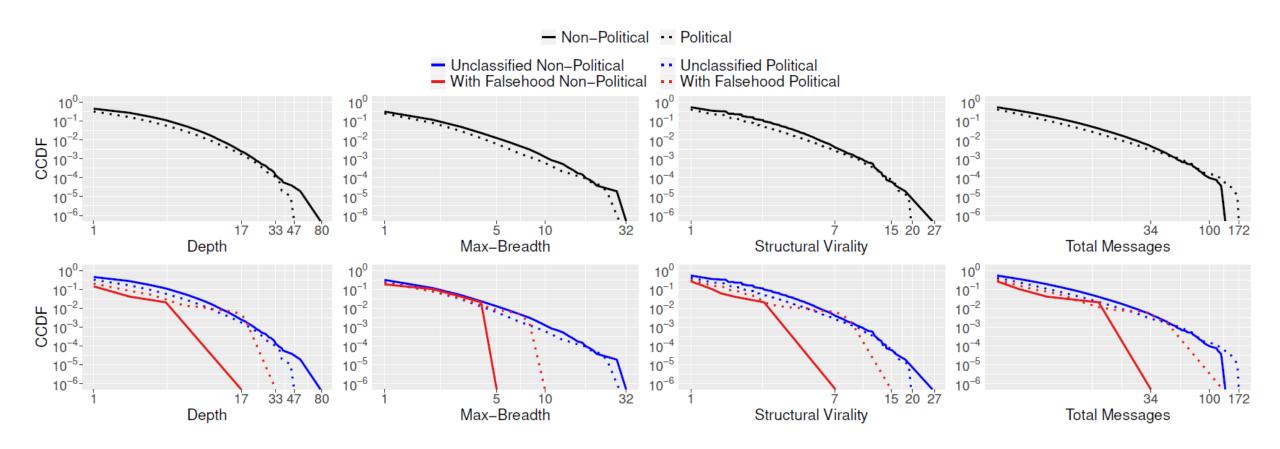




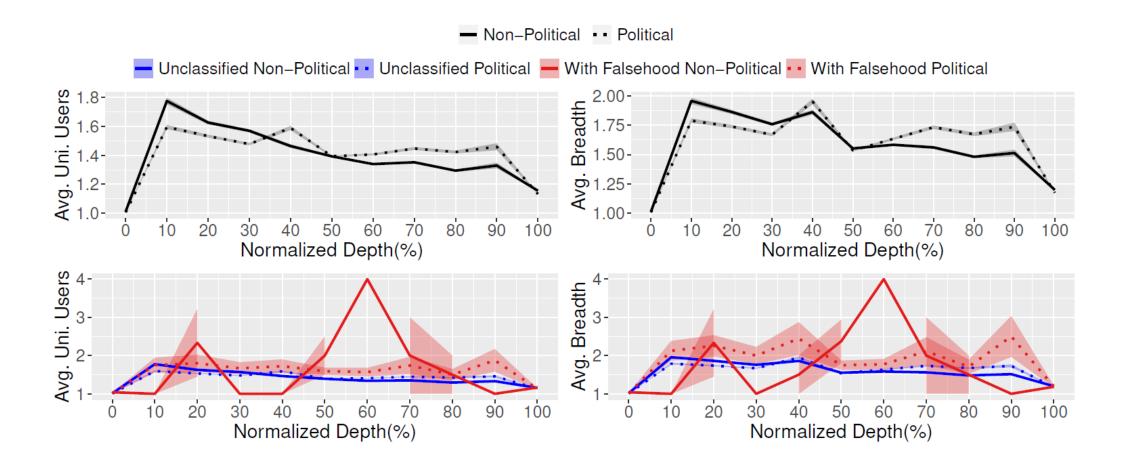
Overall cascade analysis



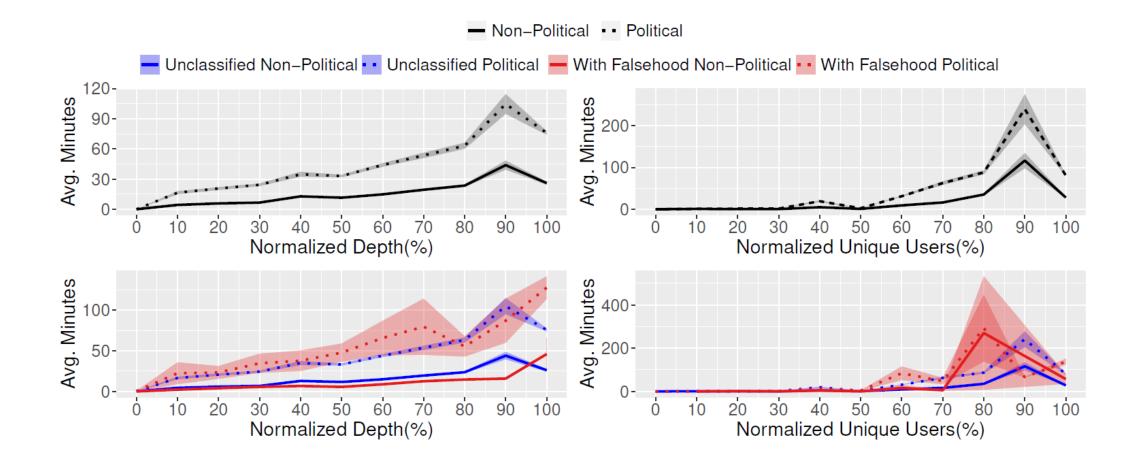
Structural characteristics (I)



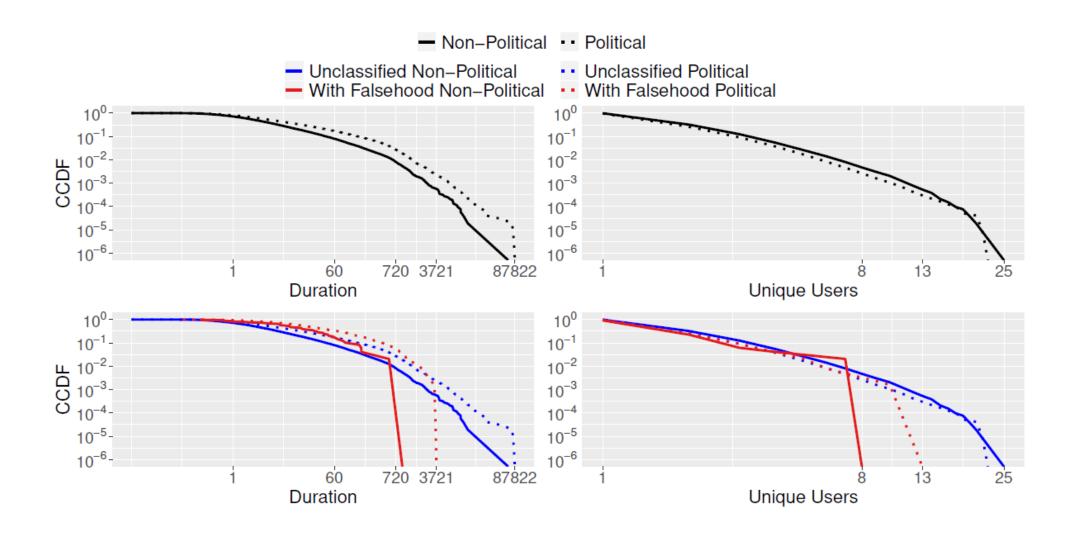
Structural characteristics (II)



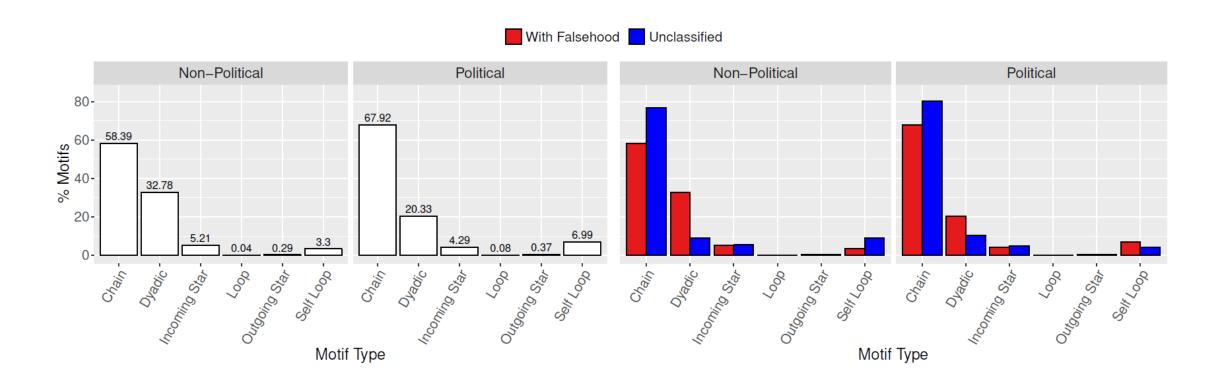
Temporal characteristics



Cascade duration and unique users



User participation motifs



Present and future work

What kind of content would extend the duration of attention cascades?

What is an adequate metric for quantifying attention in a group chat?

 What is the impact of hate content on the characteristics of attention cascades?





Thank you!

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