Social Media Misinformation on Virus Origins and US Immigrants

Coronavirus Misinformation Weekly Briefing 11-05-2020

Hubert Au, Jonathan Bright, Philip N. Howard

SUMMARY

Given the evolving nature of the coronavirus pandemic—and public understanding of the crisis—we provide a weekly briefing about the spread of coronavirus misinformation across multiple social media platforms. For the seven days prior to 07-05-2020 we find:

- Of all the junk news that social media users engaged with last week, 28% of it came from state-backed news agencies, and 91% of engagement with state backed agencies involves media outlets from Russia and China.
- In total, articles produced by junk health news sources were engaged with four million times this week. On average, articles from state-backed media sources nonetheless stimulated the most engagement.
- Thematically, prominent junk health news narratives this week included (1) intimations of virus origin from the Wuhan virology lab and (2) attacks on non-citizen status residents in the US through criticism of US Democratic Party proposals.

INTRODUCTION

Using an actively curated list of major sources of junk health news and state-backed sources, we track the spread of misleading, polarizing, and inflammatory coronavirus content on social media. Sources from state-backed media include information operations and editorially controlled national media organizations. Other domestically and independently-produced sources are politically motivated sources of misinformation.[1] All such media sources play a major role in the online information ecosystem and generate engagement from millions of social media users. We define junk health news and information sources by evaluating whether their content is extremist, sensationalist, conspiratorial, or commentary masked as news.

We currently track 142 junk health news websites and 21 state-backed media outlets that are actively publishing misleading information about the coronavirus pandemic—163 in total. We examine how successful they are in terms of distributing their content on social media and generating engagement, and compare this to several major sources of credible health news and information. Our data comes from the APIs of Twitter, Reddit and Facebook, through the CrowdTangle platform. Additional analytics allow us to benchmark and track how users spread and engage with misleading information.

DISTRIBUTION & ENGAGEMENT

Understanding the flow and impact of coronavirus misinformation requires measuring how users distribute and engage with that content over social media. We analyze such patterns for the period from the 30th of April to the 7th of May, and offer comparisons between the trends for junk health news and state-backed sources, and the trends for five prominent English-language sources of credible news and information: two from the UK and three from the US: BBC News, CNN, The Guardian, The New York Times and The Washington Post.

The “social distribution network” of an outlet is the sum of the follower counts of the Facebook groups and pages, subreddits and Twitter accounts that have shared at least one of the sources’ articles over the previous week. This provides an impression of the capacity that each source has for distributing its content. It is important to emphasize that not all of these followers may have been reached by this content—only the social media firms themselves would be able to confirm this. We use “engagement” to refer to the sum of actions that users of social media took in response to content shared by the distribution network. On Facebook, users may comment on content, share it, and react by signaling like, love, laughter, anger, sadness, or amazement. On Twitter, users can retweet, comment, and signal their favorite tweets by clicking on the heart button. On Reddit, this is the sum of comments, cross posts, scores and awards on posts containing the links to articles from our watch list. Our overall engagement measure is the sum of all these actions. Again, we are not able to distinguish between genuine and inauthentic accounts or acts of engagement.

This week, we are able to offer some broad estimates of how English language social media users interact with content from junk news health sources and state-backed agencies. Fully 28% of the junk engagement we observed this week was with state-backed sources. Fully 91% of social media user engagement with state-backed media agencies involved Russian and Chinese media properties. It is very likely that there are Chinese and Russian sources we do not know about, and of
course other regimes may have sources we do not know about as well. These minor sources, however, are likely to receive little attention and not be as significant as the Russian and Chinese sources we have catalogued.

Figures 1 and 2 reveal the distributional reach for the published content from junk health news and state-backed sources, both in total for the week and as an average per article. For total distributional reach, like last week, CNN, The Guardian, and The New York Times exceed junk health news. The New York Times did not reach state-backed media levels of distribution this week. On average, state-backed media continue to have larger distribution networks.

Figures 3 and 4 reveal the levels of engagement that sources receive for their articles. Total user engagement generated for junk health news sources remains largest, though it fell from nearly five million last week to just above four million this week. CNN and The New York Times generated substantially more total user engagement than state-backed media this week. On a per-article basis, state-backed media retains the largest numbers, consistent with evidence from previous weeks, and CNN and The New York Times fell slightly on this metric compared to last week.

KEY NARRATIVES

We also conduct a thematic review of articles published by both these junk health news and state-backed sources. Previously, we found that state-backed and junk health news sources generally politicize health news and information by criticizing democracies as corrupt and incompetent.[1] Last week, prominent narratives were allegations of hospitals artificially inflating coronavirus cases and deaths, and claims that either Trump did not suggest direct Lysol injections or that he was right in making the suggestion. This week, prominent narratives involved (1) extending the virus origin story with new rumors about the Wuhan virology lab and (2) attacks on non-citizens in the US who would benefit from the economic stimulus proposals coming from the US Democratic Party.

One Daily Wire article with 58,000 engagement wrote that the University of Texas is being investigated for interactions with the Wuhan virology lab. They claimed that China had sunk its influence deep into the American higher education system and that this was to probe “how deep foreign influence has crept”. [2] They subsequently suggested that the virus not only originated from the lab. Further, they claimed that there was instruction from Beijing not to contain the virus, because their relative status compared to otherwise unaffected competitor countries would be diminished. The Daily Caller ran a similar article, though stating that Trump did not go so far as to attribute malece to Beijing.[3]

Other articles with just over 60,000 engagement and nearly 50,000 engagement respectively precipitated attacks on non-citizens in the US who would be recipients of coronavirus relief sums, deriding them as “illegal aliens” [4], [5]. These were in response to a proposal to use Taxpayer Identification Numbers as a basis of payment. A particular focus of attack was the state of California, which was derided for needing to “beg Trump” for help after care facilities had reached capacity, declaring an irony that an “illegal alien sanctuary state” was asking for support.[6]
CONCLUSION
We measure the social distribution networks used on Facebook, Twitter and Reddit and the levels of engagement with content related to the coronavirus pandemic. Sources of junk health news and information have distribution networks reaching hundreds of millions of social media users. Junk health news websites generate huge amounts of content that is widely disseminated and that sees significant engagement.

RELATED WORK
Read our review of state-backed English language media reporting on Coronavirus. Find our previous weekly briefings here.

REFERENCES

ACKNOWLEDGMENTS
The authors gratefully acknowledge the support of the European Research Council for the project “Computational Propaganda”, Proposal 648311, Philip N. Howard, Principal Investigator. Project activities were approved by the University of Oxford’s Research Ethics Committee, CUREC OII C1A 15-044. We are also grateful to the Adessium, Civitates, Luminate, and Ford Foundations for their support. Any opinions, findings, conclusions, or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the University of Oxford or our funders.

ABOUT THE PROJECT
The Computational Propaganda Project (COMPROP), based in the Oxford Internet Institute and University of Oxford, involves an interdisciplinary team of social and information scientists researching how political actors manipulate public opinion over social networks. This work includes analyzing how the interaction of algorithms, automation, politics, and social media amplifies or represses political content, disinformation, hate speech, and junk news. Data Memos present important trends with basic tables and visualizations. While they reflect methodological experience and considered analysis, they have not been peer reviewed. Working Papers present deeper analysis and extended arguments about public issues and have been collegially reviewed. Our Coronavirus Misinformation Weekly Briefing provides regular reports on the most prominent social media trends from the prior week. COMPROP articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.