





Coronavirus Coverage by State-Backed English-Language News Sources Understanding Chinese, Iranian, Russian and Turkish Government Media

Jonathan Bright, Hannah Bailey, Mona Elswah, Marcel Schliebs, Nahema Marchal, Christian Schwieter, Katarina Rebello, Philip N. Howard

SUMMARY

In this data memo, we examine the distribution of health-related news and information on social media of the English-language news outlets backed by the governments of China, Iran, Russia and Turkey. We measure the social distribution networks used on Twitter and Facebook and the levels of engagement with content related to the coronavirus pandemic. Over the two-week period of this study, we find that:

- the state-backed English-language news outlets of China, Iran, Russia and Turkey have a **substantial global audience**, with content being shared across networks that have tens of millions of members who engage with the content millions of times;
- they produce less content than other independent and global news sources, but can achieve as much as **ten times the effective engagement** on the material that they do produce;
- they politicize health news and information by
 - o criticizing democracies as corrupt and incompetent
 - o praising their own global leadership in medical research and aid distribution, and
 - o promoting conspiracy theories about the origins of the coronavirus and the policy choices of international public health agencies.

INTRODUCTION

In this data memo, we examine the global reach of coronavirus news and information produced by English-language, the state-backed media outlets of regimes in China, Iran, Russia and Turkey. These outlets have been highly active in producing coronavirus-related content for social media distribution. But the content they produce has been described as both misleading and biased, with some arguing that we are facing a pandemic of misinformation propelling the spread of the virus itself. [1]·[2]·[3]

What is the global audience for health-related news and information from the media agencies of these authoritarian regimes? What are the consistent themes in the content coming from different state-backed broadcasters over major social media? In this report we analyse a large sample of coronavirus-related content produced by these state-backed media outlets, estimate levels of audience engagement with such content over Twitter and Facebook, and describe the most prominent themes and frames being promoted.

First, we measure the importance of English-language coronavirus reporting by state-backed outlets, focusing on content shared over Facebook and Twitter. We measure what we call the 'social distribution network' of

these outlets, by aggregating follower counts of the ecosystem of groups, pages and accounts which share their content. We show that many of them have distribution networks that can push content to hundreds of millions of people. This is true even if prior research suggests only a few percent of those will actually read the content. We then look at the volume and nature of engagement these state-backed outlets generate, comparing them with a widely-known and respected English-language public service media broadcaster, the BBC. We show that state-backed outlets in China, Iran, Russia and Turkey generate millions of engagements and some articles they produce are many times more successful than those from the BBC.

Second, we describe in more detail the types of narratives being promoted by state-backed outlets. We show how these outlets portray Western democracies as incompetent in the face of the crisis and that authoritarian regimes have been comparatively more successful. These outlets seek to position their respective countries as world leaders, lending aid to struggling democracies and advancing the science to combat the pandemic. Finally, these outlets are circulating conspiracy theories about the origins of the virus and are calling into question the motives of Western governments in their responses to it.

MEASURING THE IMPACT OF STATE-BACKED ENGLISH-LANGUAGE REPORTING

In this report we define state-backed media outlets as organisations that are either directly funded by the state or are editorially managed by their governments. Our focus is on state-backed media based in China, Iran, Russia and Turkey, as these are countries where press freedom is limited and where governments are more likely to interfere with news reporting.[4] We restrict our analysis to state-backed outlets that produce Englishlanguage content and mostly target English-speaking foreign audiences as well as their own diaspora populations across the US and Europe.

The outlets we study include English-language international broadcasters, news agencies, and print newspapers, and all have a major web presence. From China, we focus on the China Global Television Network (CGTN), China Daily, China Plus, the People's Daily and Xinhua. From Russia, we include RT (formerly Russia Today) and Sputnik. From Iran we include Mehr News and Press TV. From Turkey, we focus on Anadolu and TRT World. While this list is not exhaustive, it includes the largest English-language media outlets from these countries (See the Data Supplement for more detail on our inclusion criteria.) For comparison, we benchmark our analyses with an examination of the BBC, one of the world's largest and most respected media organisations known for a mandate of impartiality and editorial independence. [5] [6] [7]

Several of these social media platforms are effectively banned within the countries where governments are producing content for those same platforms. Facebook and Twitter, for instance, are banned in China. The Iranian government has also been tightening its grip over these platforms by restricting access to Facebook and Twitter in recent years. Finally, while Turkey and Russia allow access to popular social media sites, they employ strict censorship measures and severely limit freedom of expression on these platforms.

DATA COLLECTION AND MEASUREMENT

Data for this study was collected from the Twitter and Facebook (via CrowdTangle) APIs between March 18th and March 31st, 2020. We used these APIs to discover content generated by the outlets containing coronavirus keywords. In total we observed 7,069 pieces of coronavirus content generated by these outlets, which were collectively shared 27,645 times. We employed these data to compute the following metrics for each outlet: the social distribution network of the outlet and the amount of engagement each outlet generated. (Further details on data collection and filtering are available in the Data Supplement.)

The 'social distribution network' of an outlet is the sum of follower counts of the Facebook groups, Facebook pages and Twitter accounts that shared at least one piece of content from the outlet during the observation window. This provides an impression of how capable each outlet is in terms of distributing its content. In total there were 12,153 examples of such accounts in our data: some were owned and operated by the media outlets we studied, but most were not.

It is important to highlight that not all of these followers may not have been *reached* by this content. We cannot estimate how large this group is, though work from social marketing firms often puts the figure at around 5% as a rough rule of thumb.[8], [9] In this research we are unable to distinguish between genuine users and partially or fully automated accounts. Still, all else being equal, larger social distribution networks will imply larger reach.

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 in six ways: signalling like, love, laughter, anger, sadness, or amazement. On Twitter, users can retweet, comment and signal their favourite tweets by clicking on the heart button. Our overall engagement measure is the sum of all these actions. Again, we should emphasise that we cannot distinguish between genuine and inauthentic acts of engagement.

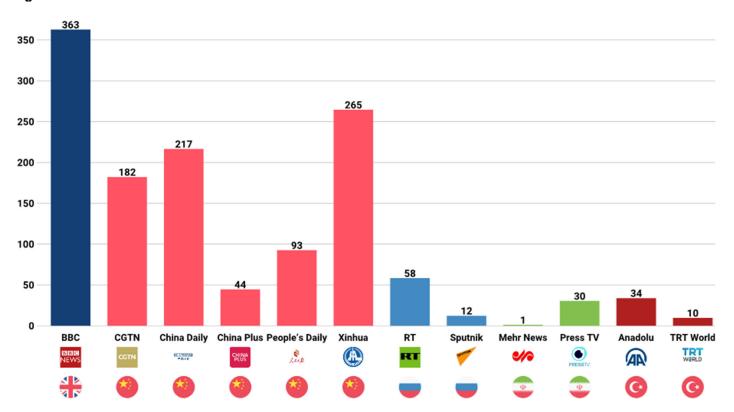
FINDINGS

The Social Distribution Networks of State-Backed Outlets

Figure 1 shows the 'social distribution network' of each state-backed outlet. This metric is simply the sum of all unique Twitter accounts and Facebook groups/pages sharing the content. By this measure, the largest statebacked outlet is Xinhua, with a distribution network that can push content to over 250 million social media users. Fully 75 million of those users come from Xinhua's own Facebook page. Both China Daily and Xinhua also have distribution networks of over 200 million users. If we use our 5% heuristic, this would suggest that each of these outlets reached more than 10 million people over our two-week observation period. However, social media firms do not provide the data necessary to know the true figure. The Iranian, Russian and Turkish outlets are comparatively smaller, though their distribution networks still measure in the tens of millions. All of these outlets are nevertheless smaller than the BBC, whose social distribution networks exceeds 350 million.

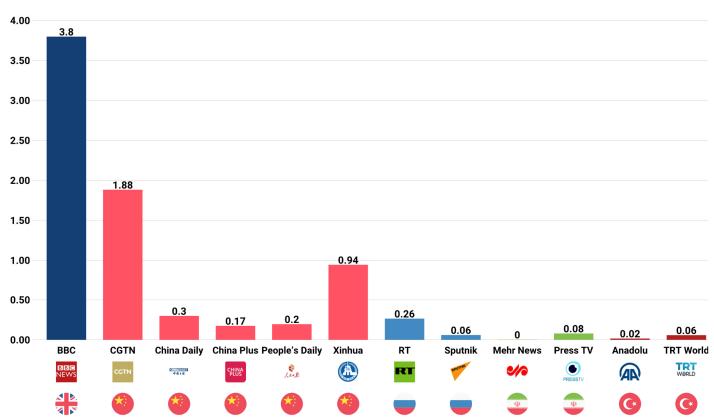
To understand how global audiences are engaging with this content, we sum the numbers of all possible modes of engagement across all three platforms. Figure 2 shows the volume of engagement generated by state-backed outlets. In our observation period, coronavirus-related reporting by the BBC generated almost 3.8 million engagements, whilst the largest state-backed outlet (CGTN) generated around 1.9 million. Most outlets generated much less, and in aggregate terms, most state-backed news agencies get little engagement with their coronavirus news and information.

Figure 1: Followers of State-Backed Social Distribution Networks



Source: Authors' calculations based on data collected between March 18th and March 31st, 2020. Note: Sum of the follower count of unique Twitter accounts and Facebook groups/pages sharing content.

Figure 2: Engagements with Content Shared by Social Distribution Networks (Millions)



Source: Authors' calculations based on data collected between March 18th and March 31st, 2020. Note: Engagement measures simply sum all potential reactions on Twitter and Facebook.

However, the amount of engagement generated by the BBC is also driven by the fact that the BBC was also the most active publisher in our data by far on the topic. If we look at the median amount of engagement generated per article, the story is different: the average CGTN coronavirus article generates ten times as much engagement as the average BBC article (see Figure 3). The four largest Chinese news organisations outstrip all the publications we studied on this measure, including the BBC.

In Figure 4, we break down engagement generated on Facebook in terms of the five possible Facebook reaction types. We exclude 'likes' which were by far the most common category across all outlets. Outlets specialise in generating different types of reactions. Chinese outlets, as well as Iran's Mehr News, generate a lot of 'love' reactions, which points to their role in spreading positive news stories about these countries. For example, Xinhua generates a lot of love reactions with news of virus hit areas in China re-opening. Press TV generates more 'angry' reactions: most of these came from content looking at current US sanctions against the country. TRT World is dominated by 'sad' reactions, driven by a focus on human suffering. For example, one article highlighted the difficulties of homeless people in the US and Europe, while another pointed to the plight of refugees living in camps in Greece, Bangladesh, and Yemen.[10], [11] Clearly, these different state-backed outlets take varied roles and frames in news production.

State-backed Narratives

In this second section, we provide a thematic overview of some of the major reporting coming out of English-language state-backed outlets about the coronavirus pandemic. We reviewed the top 10 engaged articles of each outlet and catalogued by prominent themes.

Criticizing the Democratic Response

The first theme relates to articles and reports that criticise the responses of governments in Europe and North America. Some reporting questioned how these countries handled the coronavirus pandemic. An article published by China Plus highlights a survey of US citizens that suggests that President Trump has not taken the situation seriously enough[12], and CGTN wrote that the coronavirus exposed the lack of international leadership from the US.[13] Turkey's TRT World highlighted that minority rights were allegedly under threat during the lockdown in France, labelling that country a place where 'discrimination is rampant' and constitutes a 'societal sickness'.[14]

RT carried a piece claiming that the major pillars of European liberalism—such as the right to free movement—were being torn down.[15] Some reports also claim that Western financial speculators are taking advantage with a ruthless 'opportunism' by buying up cheap stock, and that Westerners are selling medical supplies on the black market for hugely inflated prices.[14]

Further, some of the outlets ask whether the crisis would be used by Western leaders to undermine constitutional democratic rights.[16] Iranian outlets such as Press TV have stated that US sanctions have greatly exacerbated the pandemic in their country.[17]

Praising their Own Global Leadership

The second narrative theme we have identified is the emphasis that state-backed outlets have placed upon the success of their home country in containing the virus.

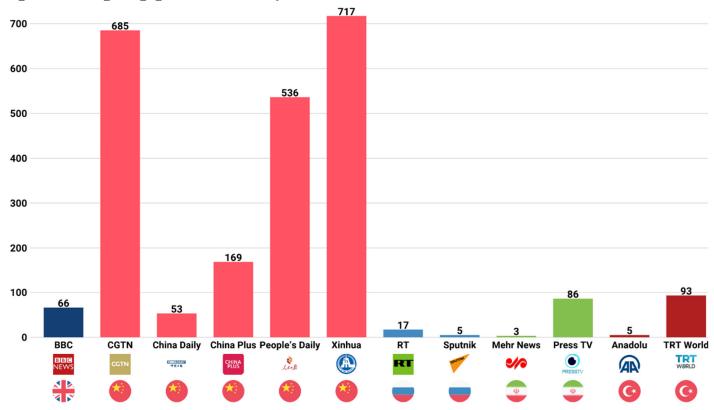
Chinese state-backed outlets have been keen to emphasise China's successful containment of the virus, and position China as an exemplar to other nations. Such claims allowed them to build the large amount of 'love' reactions referenced above. A People's Daily article praised 'academicians from the Chinese Academy of Sciences and Chinese Academy of Engineering [who] have become known as "warriors in white". They highlight China's resolution of the admissions crisis for the nation's hospitals.[18] A China Daily article pronounces that 'Wuhan provides hope for the rest of the world', while a dedicated section of the China Daily website promotes 'Fighting COVID-19 the Chinese way', with links to "five potential treatments" that Chinese researchers have identified as potential treatments for coronavirus. The site also prominently features an article with the claim that "TCM (traditional Chinese medicine) [is] effective in treating COVID-19 patients".[19]

Outside of China, TRT World has published articles portraying Turkey positively, asserting that Turkey is better equipped to handle the pandemic with a higher number of ICU beds per capita than China, Europe and the US.[20]

These state-backed agencies present their governments as world powers offing assistance to struggling democracies and other nations suffering from the pandemic—help is greatly appreciated by those nations. China is especially engaged in a major effort to improve its international reputation by providing assistance to other countries during the pandemic, and these efforts have been widely covered in their state outlets. A CGTN article titled "China announces to help 82 countries fight COVID-19" highlights the wide scope of China's international aid.[21] Similar articles in Chinese state outlets show the distribution of Chinese medical supplies such as masks and respirators to highly affected regions such as Italy[22], Spain[23] and the UK.[24] In another instance, CGTN promoted a video showing Italians playing the Chinese anthem to thank China and singing "Grazie China" [25], which a number of independent researchers have claimed was manufactured.

Russian outlets employed similar narratives. One Sputnik article claimed that "Russia may supply to Latin America, Africa mobile hospitals to combat COVID-19". Another notes Russia's efforts to provide aid to Italy, with "seven Russian Ilyushin II-76 military transport planes carrying medical supplies and experts to help

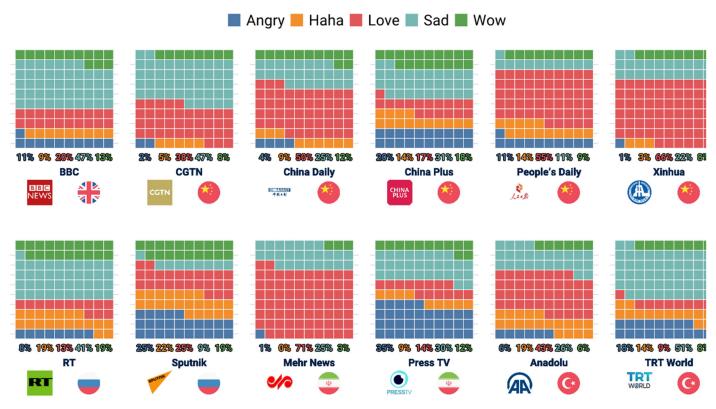
Figure 3: Average Engagement Generated per Article.



Note: Median engagement for all Facebook and Twitter posts.

Source: Authors' calculations based on data collected between March 18th and March 31st, 2020.

Figure 4: Breakdown of Facebook Reactions in Social Distribution Networks



Source: Authors' calculations based on data collected between March 18th and March 31st, 2020. Note: One square indicates 1% of observed reactions on content published by the outlet.

Italy." RT aired a report about an Italian businessman who replaced an EU flag on his factory grounds with a Russian flag, "to thank Russia for sending 12 planes [while] the EU closes everything down." [26] Turkish outlets also followed this line with, for example, Anadolu airing articles expressing support for Italy and Gaza. [27]

Conspiracies about Virus Origins

The final narrative involved conspiracy theories about the origins of the virus. Iran's Press TV was the outlet that focussed most on this angle, with reporting arguing that the virus had originated in 'biowarfare' labs based in the US.[28] We also observed some instances where Chinese outlets sought to shift the blame of the origin of coronavirus to other nations. For example, CGTN quoted an Italian scientist who allegedly suggested that the virus may have originated in Italy.[29] The cited scientist, however, later said that he had been quoted out of context.[30] Multiple Chinese outlets further reported claims, including by the Chief of China's coronavirus expert team Zhong Nanshan, that the virus may not have originated in China. In one of these examples, CGTN published an editorial in which the author speculated that the U.S. military might have carried the coronavirus to Wuhan.[31] English-language Russian reported heavily on the claims made by other outlets, especially the Iranian outlets Press TV and Mehr News Agency [32] Conspiracy narratives were not observed in this sample of English-language Turkish outlets.

CONCLUSION

In this study we systematically examined the Englishlanguage reporting of state-backed outlets from China, Iran, Russia and Turkey during the ongoing coronavirus pandemic. A mixed quantitative and qualitative methodology was employed. We measured the social distribution networks used on Twitter and Facebook, and the levels of engagement with content related to the coronavirus pandemic. Over the two-week period of this study, we find that the state-backed English-language news outlets of China, Iran, Russia and Turkey have a substantial global audience, with content being shared across networks that have tens of millions of members who engage with the content millions of times. These state-backed media outlets produce less content than some other global news sources such as the BBC, but can achieve as much as ten times the effective engagement on the content that they do produce. The media agencies of these governments also politicise health news and information by criticizing democracies as corrupt and incompetent, praising their own global leadership in medical research and aid distribution, and promoting conspiracy theories about the origins of the coronavirus and the policy choices of international public health agencies.

REFERENCES

- [1] EEAS, 'Short Assessment of Narratives and Disinformation Around the COVID-19 Pandemic', EU vs Disinfo, Apr. 2020. Accessed: Apr. 03, 2020. [Online]. Available: https://euvsdisinfo.eu/eeas-special-report-update-short-assessment-of-narratives-and-disinformation-around-the-covid-19-pandemic/.
- [2] V. Molter, G. Webster, and C. 94305 C. Complaints, 'Coronavirus Conspiracy Claims: What's Behind a Chinese Diplomat's COVID-19 Misdirection', 2020. Accessed: Apr. 03, 2020. [Online]. Available: https://fsi.stanford.edu/news/china-covid19-origin-narrative.
- [3] J. Kao and M. Shuang Li, 'How China Built a Twitter Propaganda Machine Then Let It Loose on Coronavirus', ProPublica, Mar. 2020. Accessed: Apr. 03, 2020. [Online]. Available: https://www.propublica.org/article/how-china-built-a-twitter-propaganda-machine-then-let-it-loose-on-coronavirus.
- [4] '2019 World Press Freedom Index', Reporters Without Borders, 2019. [Online]. Available https://rsf.org/en/ranking/2019.
- [5] I. Gaber, E. Seymour, and L. Thomas, 'Review Commentary: Is the BBC biased?: The Corporation and the coverage of the 2006 Israeli—Hezbollah war', *Journalism*, vol. 10, no. 2, pp. 239–259, Apr. 2009, doi: 10.1177/1464884908100603.
- [6] R. K. Nielsen, A. Schulz, and R. Fletcher, 'The BBC is under scrutiny. Here's what research tells about its role in the UK', Reuters Institute for the Study of Journalism, 2020. Accessed: Apr. 02, 2020. [Online]. Available: https://reutersinstitute.politics.ox.ac.uk/risj-review/bbc-under-scrutiny-heres-what-research-tells-about-its-role-uk.
- [7] P. Glader, '10 Journalism Brands Where You Find Real Facts Rather Than Alternative Facts', Forbes, 2017.
- [8] 'How to (Still) Get Organic Reach on Social Media', *Buffer*, 2018. https://buffer.com/resources/social-media-organic-reach (accessed Apr. 08, 2020).
- [9] '10 Need to Know Facebook Marketing Stats for 2019', Social Media Today, Feb. 05, 2019. https://www.socialmediatoday.com/news/10-need-to-know-facebook-marketing-stats-for-2019/547488/ (accessed Apr. 08, 2020).
- [10] 'Advised to stay home: but what about the homeless in times of coronavirus?', TRT World, Mar. 23, 2020. https://www.trtworld.com/perspectives/advised-to-stay-home-but-what-about-the-homeless-in-times-of-coronavirus-34804 (accessed Apr. 08, 2020).
- [11] 'Coronavirus fear cripples refugees living in unsanitary camps', TRT World, Mar. 23, 2020.
- [12] 'Most Americans say Trump hasn't taken virus seriously: poll', China Plus, Mar. 19, 2020.
- [13] T. Fowdy, 'G7 FM meeting row on virus exposes America's lack of leadership', CGTN, Mar. 26, 2020.
- [14] N. Ramadani, 'Coronavirus lockdown in France leads to the brutalisation of minorities', TRT World, Mar. 24, 2020.
- [15] G. Dockery, 'Covid-19 dismantles the hollow commandments of European liberalism', RT, Mar. 20, 2020.

- [16] R. Barnes, 'I am an American constitutional lawyer and I see our government using Covid-19 to take away our fundamental rights', *RT International*, Mar. 22, 2020.
- [17] 'Iran only state that can't buy medical items from abroad due to US bans: Envoy to Madrid', *Press TV*, Mar. 19, 2020.
- [18] 'Top Chinese academicians become warriors in battle against novel coronavirus', *People's Daily*, Mar. 19, 2020.
- [19] 'Fighting COVID-19 the Chinese way', China Daily, 2020.
- [20] 'Why Turkey is better-equipped to tackle coronavirus', TRT World, Mar. 16, 2020.
- [21] 'China announces to help 82 countries fight COVID-19', CGTN, Mar. 21, 2020.
- [22] L. Hongyang, 'Chinese companies make donation to Italy', Mar. 20, 2020.
- [23] 'China's medical supplies arrive in Spain as Beijing pledges more help', CGTN, 18 2020.
- [24] 'Chinese team and equipment arrive in UK to support virus fight', China Daily, Mar. 29, 2020.
- [25] 'Italians play Chinese national anthem to thank China for its aid', CGTN, Mar. 15, 2020.
- [26] 'Italienischer Unternehmer ersetzt EU-Fahne durch die Russlands [Italian entrepreneur replaces EU flag with Russia's]', *RT*.
- [27] Q. Abu Samra, 'Turkish hospital to operate in Gaza to curb coronavirus', *Anadolu Agency*, Mar. 31, 2020.
- [28] 'US has to shut down biowarfare labs to save the world from pandemics', Press TV, Mar. 20, 2020.
- [29] 'Coronavirus may have existed in Italy since November: local researcher', CGTN, Mar. 22, 2020.
- [30] D. Tang, 'Beijing twisted my words on coronavirus's Italian origin, says scientist Giuseppe Remuzzi', *The Times*, 2020.
- [31] W. Fuhua, '10 questions for the U.S.: Where did the novel coronavirus come from?', CGTN, Mar. 19, 2020.
- [32] 'Iranian Doctors Urge Neighbours to Liquidate Any US Biological Labs Amid Coronavirus Fears', *Sputnik*, Mar. 19, 2020. https://sputniknews.com/middleeast/202003191078623300-iranian-doctors-urge-neighbours-to-liquidate-any-us-biological-labs-amid-coronavirus-fears/ (accessed Apr. 08, 2020).

ACKNOWLEGMENTS

The authors gratefully acknowledge the support of the European Research Council for the project 'Computational Propaganda: Investigating the Impact of Algorithms and Bots on Political Discourse in Europe', Proposal 648311, 2015—2020, 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, Luminate, and Ford Foundations for supporting this work. 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), which is based at the Oxford Internet Institute, 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 analysing how the interaction of algorithms, automation, politics, and social media amplifies or represses political content, disinformation, hate speech, and junk news. Data memos integrate important trends identified during analyses of current events with basic data visualizations, and although they reflect methodological experience and considered analysis, they have not been peer reviewed. Working papers present deeper analysis and extended arguments that have been collegially reviewed and engage with public issues. COMPROP's articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.