China's State-Sponsored Information Operations

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1 Introduction

China is increasingly using various forms of information operations to influence and disrupt international online discourse. But how large are these operations? What narratives are they spreading? And, how successful are they in influencing international audiences? This primer summarises the scale and impact of these information operations, and makes four suggestions to limit the further spread of these operations.

2 China's Motivations

Political actors, from individuals to nation-states, have historically used a multitude of techniques to influence public opinion through interventions in public discourse (McNair, 2003). Public discourse has, however, increasingly moved from traditional forums such as newspapers and television, to digital platforms (Habermas, 1991, p. xi; Bennett and Iyengar, 2008). As a consequence, political actors are actively developing new systems and strategies to manipulate public opinion in these online environments. Among these actors are authoritarian states, of which the most well-resourced and prolific are China, Iran and Russia.

But what are authoritarian states seeking to accomplish in manipulating international public discourse? This primer asserts that authoritarian states have two primary motivations for intervening in international public discourse. First, authoritarian states often attempt to manipulate international discourse as a means to gain international support by influencing governments via their populations (Hayden, 2012). Second, authoritarian states also attempt to disrupt or polarise the public in a rival state (Persily, 2017). This primer focuses on China, and in particular on: (1) what China is saying in its messaging to international audiences; (2) how China is using international social media platforms to amplify this messaging; and (3) how successful these messages are at reaching their target audiences.

3 What Tools Does China Use to Influence Domestic Discourse?

A good starting point in understanding China's interventions in international online discourse is to first examine its well-established track record in influencing its own domestic discourse. The Chinese Communist Party (CCP) uses a variety of tools to manipulate domestic discourse. We can understand these tools as serving one of three purposes: (1) preventing; or (2) removing the discourse which the Party deems problematic; or even (3) adding desirable discourse into the information environment. Here, I discuss examples of these three types of information operations tools, how these tools are used to manipulate domestic discourse, and whether China re-purposes these same tools to manipulate international audiences.

The Party's *preventative* tools largely consist of surveillance technologies. Officials use a combination of advanced surveillance tools to monitor citizens. These include online behaviour monitoring, face, voice and iris recognition, DNA biometrics and ISMI "electric fences" (Qian et al., 2022). These surveillance technologies aim

to algorithmically predict citizen activity and prevent behaviour or speech that the Party deems undesirable. Surveillance technologies also have a chilling effect on discourse, leading individuals to self-censor for fear of being detected (Link, 2002). While these surveillance technologies can have the desired chilling effect, they cannot prevent all instances of speech that the Party deems problematic.

To address this, and in addition to its use of surveillance technologies, the Party also oversees a vast domestically focused censorship apparatus (Roberts, 2018). Social media companies are required to follow domestic laws and regulations on content moderation (Ruan et al., 2016). This entails *removing* content deemed inappropriate or problematic by the Party, through dynamic keyword and URL filtering, among other techniques (Kenyon, 2020; Ruan et al., 2016).

Finally, after preventing or removing any undesirable content, the Party uses both state-backed media outlets and inauthentic accounts to add desirable narratives into domestic online discourse. State-backed media outlets help guide domestic online narratives by choosing which hashtags and stories are promoted on domestic social media platforms. Alongside state-backed media, authorities use particular types of account to flood social media platforms with messages that are distracting from unwanted narratives or promoting ones that are favourable to the Party (King et al., 2013). Here, I use the term "inauthentic social media accounts" to refer to these accounts, where their purpose is to intentionally used to mislead audiences. Often multiple inauthentic accounts are used in coordination with one another to amplify online content (Twitter, 2020). The CCP uses an estimated two million people, and twenty million part-time "network civilization volunteers" to inauthentically amplify narratives favourable to the Party (Fedasiuk, 2021). These paid commentators and volunteers are often referred to as the "Fifty-Cent Army", and operate alongside grassroots internet commentators to ensure that the discourse on domestic social media platforms is favourable to the Party (Fedasiuk, 2021).

Together, these tools allow the Party to effectively prevent or remove discourse it deems problematic and add discourse that is favourable to the Party. These three techniques allow the Party to set the agenda on domestic social media platforms, and wield considerable control over domestic online discourse. These tools have proved effective for the CCP in managing domestic audiences. However, is it able to re-purpose these same tools to control discourse on international social media platforms?

4 How Do China's International Information Operations Differ from its Domestic Operations?

It is important to first note that China's domestic internet is isolated from the wider international internet environment. The so-called "Great Firewall" acts as a barrier to prevent domestic internet users from accessing international social media platforms (Normile, 2017). This isolation enables the Party to exercise considerable control over the social media platforms that serve domestic audiences. It does not, however, exercise this same power over international social media platforms.

The Party lacks the leverage and access to international user data that is necessary for it to use its preventative surveillance tools or to implement a censorship apparatus. The only tool at the Party's disposal is its ability to add information into the international online discourse environment. In the following sections of this primer, I outline the ways in which the CCP is attempting to influence the international information environment by strategically adding messaging which is favourable to the CCP.

5 Official State-Backed Media Outlets and Diplomat Accounts

In the 1990s the CCP became aware of the need to increase its international influence in response to: (1) strong international criticism of the PRC's handling of the Tiananmen Square incident in 1989 (Brady, 2018, p. 3-4); and (2) the emergence of the "China Threat Theory" which positions China as a rising revisionist world power seeking to upset the international order (Wang, 2008, p. 258).

In response to these threats, the CCP created the State Council Information Office in 1991, to broadcast a favourable image of China's foreign policies toward international audiences (Brady, 2018, p. 4). As part of this campaign, foreign-language branches of pre-existing state-backed media outlets were created, and officials spent a further \$8.7 billion USD on foreign propaganda efforts between 2009 and 2010 (Shambaugh, 2010, p. 5). This funding was used in part to expand the news outlet *China Daily* to incorporate five separate English-language newspapers. Similarly, the *People's Daily*, widely viewed as the mouthpiece of the CCP (Xie, 2014), expanded its publishing languages to include twelve languages, so as to broadcast messaging to a variety of international audience (peo, 2021). Other domestic outlets, including the domestic network *CGTN*, *China Plus*, *Xinhua News Agency* and the *Global Times* have also expanded their language offerings to reach foreign audiences (Brady, 2009, p. 131).

Alongside the expansion in state-backed media reach, Chinese diplomats stationed overseas have become increasingly active on international social media platforms. Between 2010 and 2021, 189 social media accounts attributed to PRC embassies, ambassadors, consuls, and other embassy staff accounts joined Twitter (Schliebs et al., 2021a). Together, the presence of multiple-language state-backed media output and narratives shaped by China's diplomats on international social media platforms both represent an increasing effort by the Party to influence international discourse.

5.1 The Size of China's Audiences on Facebook

These efforts to expand the supply of CCP-friendly narratives to international audiences has been largely successful in reaching large numbers of international online social media users. China's state-backed media outlets are particularly active on Facebook, and have amassed a large following. Figure 1 illustrates the number of Facebook posts published by seven of China's most prolific state-backed media outlets from 2011 to 2021 (*China Xinhua News, CGTN, China Daily, People's Daily, China, CCTV* and *China.org.cn*). Similarly, Figure 2 gives the volume of engagement by other Facebook users with China's state-backed media accounts. To be clear, an 'engagement' refers to an interaction of another user with a given post. This can be a like, a comment, an emoji reaction, or a share.

Figure 1 illustrates the growth in China's international information operation efforts on Facebook over the eleven-year period, with a sharp jump in post volume in 2015, and then a continued increase through 2021. Audience engagement with these posts is, however, more variable. In short, both post volume and user engagement feature a sharp increase shortly after Xi Jinping's ascension to power and subsequent drive to improve international perceptions of China (Hartig, 2016). Moreover, while the supply of state-backed media posts illustrates a clear upward trend, the engagement of international users appears to be more variable, which may reflect such factors as changes in Facebook's algorithm or changes in messaging strategy.

Overall, Figures 1 and 2 illustrate the Party's increasing efforts to influence international online discourse by amplifying favourable narratives. Moreover, online audiences are following and engaging with these messages in large numbers, although at a variable rate. China's state-backed media outlets are adding messages to international information environments, and people are engaging. But what is the content of these messages that the accounts are amplifying?

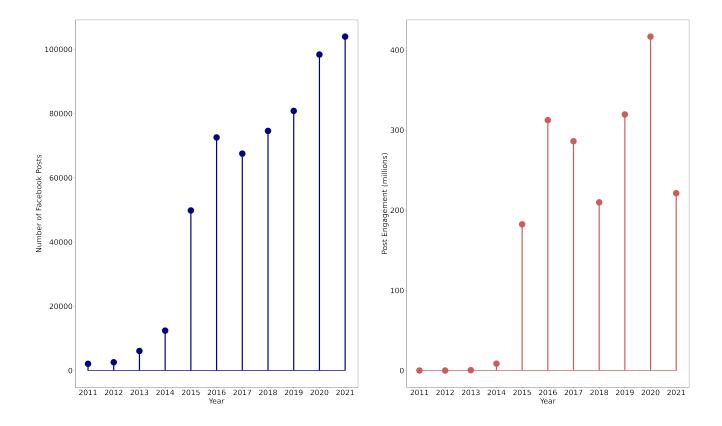


Figure 1: Facebook Post Volume

Figure 2: Facebook User Engagement

5.2 The Narratives Amplified by China's Official Twitter and Facebook Accounts

Studies have shown that other authoritarian states, such as Russia, aim to use information operations to disrupt democratic elections and amplify polarising narratives (Wastnidge, 2015). But China's objectives are less well understood in the academic literature. In its messaging which is targeted toward international audiences, I argue that China appears to have two objectives. The first is to project the image of China as a responsible global leader engaging in peaceful diplomacy and humanitarianism. The second is to aggressively counter messages from rival nation-states, with a focus on the US (d'Hooghe, 2021). While the first narrative is intended to improve China's reputation among international audiences, the second undermines the reputations of its rivals. With these two motivations, when and why does China choose to either promote itself or undermine its rivals?

The Party's choice in narrative strategy is dependent on a variety of factors, including: the media platform; whether the mouthpiece is the media or a diplomat; and fluctuating geopolitical events. Here I briefly discuss the different narrative strategies used by China's state-backed media, and China's so-called 'Wolf-Warrior' diplomats.

China's state-backed media outlets have propagated both diplomatic and aggressively critical narratives. During the first few months of the COVID-19 outbreak, China's state-backed media spread three key messages (Bright et al., 2020). First, these outlets criticised the initial response by democratic states to the pandemic. An article in CGTN, for example, argued that COVID-19 had revealed the US to be a weak international leader (Bright et al., 2020). Second, China's state-backed media outlets also praised their own global aid distribution efforts and medical research on the virus. Articles in international online editions of China's state-backed media outlets praised China's

international medical aid programs, highlighting its distribution of medical supplied to European countries. These outlets also claimed that traditional Chinese medicine (TCM) was an effective treatment for COVID-19 (Bright et al., 2020). Third, China's state-backed media outlets spread conspiracy theories on the origins of the COVID-19 virus, in an apparent attempt to shift blame for the outbreak onto other countries. CGTN published an editorial speculating that the US military was responsible for the emergence of the virus in Wuhan (Bright et al., 2020).

Similarly, during Russia's initial invasion of Ukraine, China's state-backed media alternated between diplomatic narratives and criticisms of the actions of Western democratic states (Bailey, 2023). In the initial aftermath of the Russian invasion, China's state-backed media predominantly discussed topics related to China's diplomatic and humanitarian efforts, alongside developments in peace talks between Russia and Ukraine. By April 2022, however, these outlets had moved towards overtly criticising the West, and in particular the US. Between April and June much of China's state-backed media outlets discourse on Ukraine blamed the US for its continuation and thus blamed the war on Western expansionism (Bailey, 2023). In June, for example, one Facebook post by a state-backed media outlet stated that:

"It's been 100 days since the onset of the Russia-Ukraine conflict. As the U.S.-led West continues to fuel the crisis, observers say that prospects for peace remain elusive. (Bailey, 2023)

In short, China's state-backed media outlets alternate between promoting China as a responsible world-leader, and criticising Western democratic states.

China's diplomats also engage with audiences on international social media platforms through so-called 'Wolf Warrior' diplomacy. The term 'Wolf Warrior' in this context refers to a more proactive and and aggressive form of diplomatic engagement, and is named after two nationalist Chinese action blockbusters (Smith, 2021). The aim of 'Wolf Warrior' diplomacy is to promote the superiority of China's governance model over existing Western democratic forms of governance (Huang, 2022). China's diplomats use international social media platforms as a tool to amplify these assertive messages, and counter Western media narratives on the platforms used by Western, and wider international, audiences. During the COVID-19 crisis, for example, a Chinese diplomat published a social media post claiming that French nurses had left their nursing home patients to starve (Rédaction, 2020). In a similar incident, the Chinese ambassador in Stockholm was summoned to the Swedish foreign ministry to discuss his comments where in discussing Sweden's relations to China, invoked the analogy of a lightweight boxer provoking a fight with a heavyweight (Pinghui, 2020).

This confrontational style of online diplomacy has received significant attention from online audiences, media and politicians in the targeted states. Between June 2020 and February 2021 China's diplomats tweeted over 200,000 times (Schliebs et al., 2021a), in turn generating over one million comments and 1.3 million retweets (Schliebs et al., 2021a). It is not clear, however, that this diplomacy strategy has had the desired effect of promoting China's governance model. In early 2022 there were signs that the Party's diplomatic efforts were moving away from the 'Wolf Warrior' approach and toward a more measured approach. In May 2022, Wu Hongbo, a special representative of the Chinese government for European affairs stated that China had made "mistakes" with Wolf Warrior diplomacy and maintained that officials were aware that "they have gone too far" (Wang, 2022).

6 Inauthentic Accounts

China's state-backed media outlets and diplomats represent the official presence of the Party-State on international social media. But, they are not the only tool used to add narratives into the international discourse environment. Just as the Party uses inauthentic accounts to flood domestic social media platforms with favourable messaging, it uses this same tactic to on international social media.

6.1 How Large are China's Networks of Inauthentic Accounts?

Figure 3 illustrates the scale of China's networks of inauthentic accounts relative to those used by other nation states. This graph plots a normalised index of the number of inauthentic accounts operated from within particular nation-states on Facebook, Instagram and Twitter. Figure 3 plots the twenty-five countries with the largest networks of accounts. From this figure we can see that China is the dominant instigator of information operations. China accounts for more than twice the number of inauthentic accounts than the second ranked country, Iran.

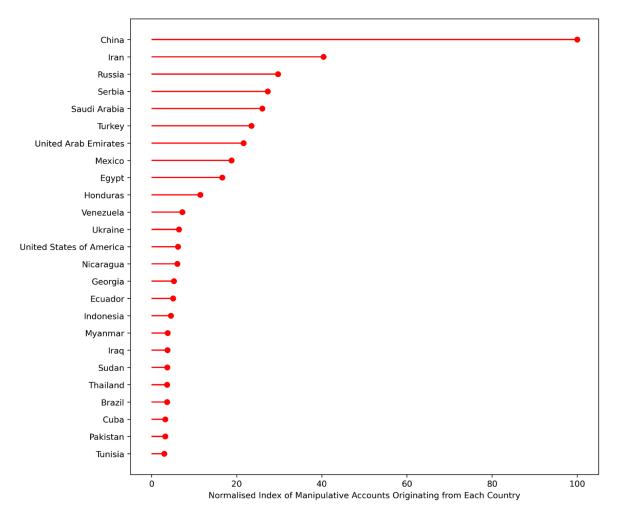


Figure 3: Top 25 Countries Instigating Information Operations on Facebook, Instagram and Twitter Between 2017 - 2021

Source: Account take-down data from Meta and Twitter.

Note: Country-level data are normalised using min-max normalisation between 0-100.

Between 2017 and 2021, Twitter removed 31,151 'core' inauthentic accounts originating from China, and a further 150,000 accounts that were used to amplify this content (Twitter, 2020). Note that only the 'core' network of inauthentic accounts are included in Figure 3. These 'core' accounts were responsible for spreading a variety of narratives, including: attacking Hong Kong activists; praising China's response to the COVID-19 virus; and criticising Taiwan's virus response (Miller et al., 2020).

6.2 How Effective are These Networks?

While these networks of inauthentic accounts may be large in size, this does not mean that they had a notable impact on public discourse. For example, in the case of one network of inauthentic Twitter accounts removed in 2020, most of the 23,750 accounts had fewer than 10 followers (Miller et al., 2020). This suggest that these narratives failed to reach many real users on the platform. A separate investigation into a Twitter network of inauthentic accounts amplifying China's ambassador to the UK found that, while this network was responsible for 44% of his retweets and 20% of his replies, this network received low levels of genuine engagement among real users (Schliebs et al., 2021b).

It appears that the networks of inauthentic accounts operated on behalf of the Party on international social media platforms have limited impact on wider online discourse. However, it is important to consider that these networks may serve a variety of wider goals. First, manipulating user engagement metrics can cause the social media algorithm to recommend the content to more genuine users. Second, the ambassador or official responsible for operating the account being amplified may receive promotions or an improvement in status as a result of the higher engagement levels indicating support among international audiences. Finally, it is important to note that we do not know the impact of inauthentic networks that may still be in operation and evading detection.

7 What Can Governments, Social Media Platforms and Regulatory Bodies do to Limit the Impact of these Operations?

There are a variety of actions that governments, social media platforms and regulatory bodies can take to detect and limit the impact of these information operations on online discourse.

- Regularly liaise with journalists, civil rights groups and academics working on information operations to create streamlined processes for reporting suspected inauthentic networks.
- Collaborate with social media companies to automate the detection of state-backed inauthentic networks. Easier access to data from social media companies would allow researchers to train AI tools to automate network detection.
- Continue the process of labelling state-backed social media accounts on international social media platforms. These labels have a 'priming' effect on genuine users that minimises the impact of the narratives spread by these accounts (Nassetta and Gross, 2020).
- Intervene to remove state-backed media accounts when the content they are producing is deemed problematic. Russian state-backed media outlets were removed from international social media platforms following Russia's invasion of Ukraine. Governments and social media companies should take similar actions if China's state-backed media outlets spread problematic narratives.

These actions would allow social media companies to better identify and remove problematic state-backed accounts, and make their users more aware of the origins of the narratives that they consume. Together, these efforts would limit the ability of China's information operations to impact international discourse.

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