

Understanding Engagement and Inauthentic Amplification of PRC Diplomats on Facebook and Twitter

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#### **EXECUTIVE SUMMARY**

As part of the strategy to "tell China's story well", the People's Republic of China (PRC) has significantly expanded its public diplomacy efforts. The PRC makes use of both state-controlled media outlets and over 270 diplomatic accounts on social media platforms such as Twitter and Facebook to amplify the PRC's perspective on global affairs and current events.

To understand the structure and function of the PRC's public diplomacy operations, we analyze every tweet and Facebook post produced by PRC diplomats and ten of the largest state-controlled media outlets between June 2020 and February 2021.

- PRC diplomats and state-backed media agencies are highly active on Twitter. Altogether, PRC diplomats tweeted 201,382 times, averaging 778 times a day for a nine-month period. Their posts were liked nearly seven million times, commented on one million times, and retweeted 1.3 million times. On Facebook, diplomats produced 34,041 posts over this period.
- The PRC's state-controlled media outlets managed 176 accounts on Twitter and Facebook. These accounts produced content in English and a variety of other international languages. These accounts posted seven hundred thousand times, were liked 355 million times, and received over 27 million comments and re-shares in the study period.
- Despite high levels of activity by PRC diplomats on social media, PRC diplomat user accounts are rarely labeled

- accurately. Many social networking firms have introduced transparency labelling for foreign government officials and state-controlled media organizations. Yet, we find that these labels are used inconsistently. For example, on Twitter only 14% of PRC diplomat Twitter accounts are labeled as government affiliated.
- The social media accounts of PRC diplomats and state-backed media agencies receive lots of engagement from other users, but a substantial proportion of this engagement is generated by rapid-fire "super-spreader" accounts. These user accounts rapidly engage with PRC content with just seconds between retweets. We find that nearly half of all PRC account retweets originate from the top 1% of the super-spreaders.
- On Twitter, a considerable share of the engagement with PRC accounts on Twitter come from user accounts that the company eventually suspends for platform violations. We find more than one in ten of the retweets of PRC diplomats between June 2020 and January 2021 were from accounts that were later suspended by Twitter. Many of these accounts were active for months before being disabled.

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#### 1. PRC DIPLOMATIC PRESENCE ON GLOBAL SOCIAL MEDIA

#### 1.1 Agenda Setting through Public Diplomacy on Twitter and Facebook

People-to-people diplomacy is an important element of foreign policy for the People's Republic of China (PRC).[1] That is, what is communicated in public forums, distinct from diplomatic exchanges, can matter quite considerably. This form of diplomacy is broadly defined as the involvement of ordinary people in intercountry relations. People-to-people diplomacy differs from traditional diplomacy, where communication and interaction occurs between diplomats or other representatives of nation-states.[2] People-to-people diplomacy is more commonly referred to as public diplomacy, where the direct target is a foreign public, and the indirect target is the foreign government. In other words, the term captures a strategy whereby a government relies on external communication to "influence a foreign government by influencing its citizens".[3, p. 229], [4]

The PRC is deploying a variety of methods to engage in public diplomacy. Most notably, the PRC has built a global system of state- or party-controlled news media outlets which target foreign audiences in dozens of languages. Alongside this, its diplomatic corps are engaging in "regular daily [...] communications that explain policy to foreign audiences and counter the views of opponents".[5, p. 901] While daily foreign policy

briefings by the spokesperson of the Chinese Ministry of Foreign Affairs have been a regular practice for years,[6] PRC diplomats are increasingly using international social media networks to engage with global audiences.[7] However, PRC diplomats frequently use these social media channels to propagate aggressive criticism of Western democratic institutions. This behavior is commonly referred to as "Wolf Warrior Diplomacy", where social media is used as a bridge to enable PRC diplomats to engage with global populations in an increasingly "assertive, proactive, and high-profile" manner.[8]

This trend is illustrated in Figure 1, where we see that PRC diplomats have recently started to use Twitter as a platform for communicating with external audiences.[9] Over the last eleven years we find that at least 189 user accounts have joined Twitter, accounts that are attributed to PRC embassies, ambassadors, consuls, and other embassy staff. A further eighty-four accounts linked to various PRC diplomatic missions appeared on Facebook during this period. Notably, both these social media platforms are banned within the PRC itself.

These accounts regularly post content in line with PRC messaging for an international audience, and their activity

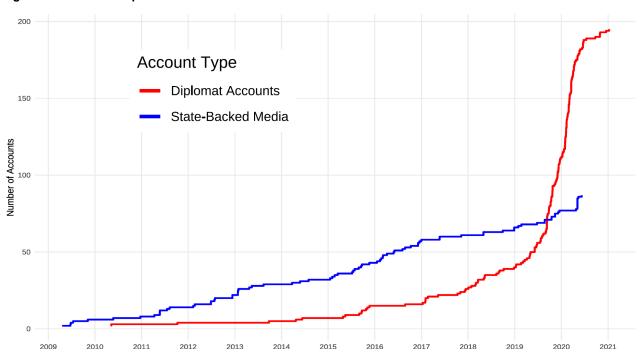


Figure 1: Number of Diplomat and State Media accounts on Twitter

Source: Authors' calculations based on account creation data collected on the 1st of March 2021.

Note: Diplomats include Embassies, Ambassadors, Consuls or Consulates, as well as staffers if clearly indicated in their profile description. State-backed media outlets include 10 of the largest state-controlled media entities. Y-Axis measures cumulative number of active accounts.

is integral to the PRC's larger propaganda objectives. To this end, the PRC is increasingly seeking to use its diplomats to amplify the outward-facing propaganda disseminated by state-backed media outlets.[7], [10]

Public diplomacy as it is outlined here has parallels in the political science literature on agenda setting. Political leaders who seek a desired outcome can often employ a variety of tools, including images, symbols, and ideas, to alter the perceptions of the public by shifting their attention from one aspect of an issue to another. Notably, the underlying facts or empirical evidence surrounding this same issue may remain unchanged, but rather, it is the attention or interpretation of the issue that is manipulated.[11] In this way, political leaders can set the policy agenda. Following this logic, PRC diplomats employ images, symbols, and ideas on social media networks to divert the attention of foreign audiences as a means of shaping the policy agendas and broad narratives in foreign countries. The end goal is the creation of a narrative in foreign countries which benefits the PRC.

This general approach has been promoted by President Xi Jinping, who has declared that the PRC should "increase [its] soft power, give a good Chinese narrative, and better communicate China's messages to the world".[12] At the National Propaganda and Ideology Work Conference in Beijing in 2013, President Xi launched a multifaceted campaign to "tell China's story

well" with the goal of spreading PRC narratives across the world".[13] The campaign has a domestic dimension which involves strengthening nationalism and maintaining stability via censorship and narrative control.[14] However, this campaign is also outward oriented and a pro-active part of the PRC's public diplomacy. More broadly, this campaign is subsumed under the PRC's "grand external propaganda" strategy, which includes "all communication efforts to promote the PRC in a positive way abroad".[15] Due to the negative connotation of the term propaganda, the PRC later adjusted the official English translation from "external propaganda" to "external publicity", while leaving the Mandarin term unchanged.[7]

As Figure 2 illustrates, the PRC's push to shape public opinion abroad has become a global effort. We find PRC diplomats stationed in at least 126 countries with active Twitter or Facebook accounts. This is part of a larger trend of increasingly proactive outreach by the PRC in recent years. The PRC has sought to manipulate public opinion [16] and elections,[17] alongside leveraging economic ties to silence criticism from Western companies.[18] This paper adds to this literature by examining how the PRC is making use of a variety of public diplomacy tools to attempt to shift the attention of international audiences. We focus on how PRC diplomats and state-backed media outlets are making use of social media platforms to strategically amplify particular messages.



Figure 2: 270 Diplomats Stationed in 126 Countries Who are Active on Facebook and Twitter

Source: Authors' calculations based on data collected on the 1st of March 2021.

Notes: Country is colored red if at least one diplomat stationed there is active on Twitter or Facebook. For full list, see Appendix.

#### 1.2 Inauthentic Engagement and PRC Public Diplomacy

As seen in Figure 1, PRC diplomats have only recently begun establishing a presence on Twitter. More than three quarters of PRC diplomats on Twitter joined the platform within the past two years. As such, the academic literature on this digital presence is still emerging. Some studies have analyzed the contents of tweets produced by PRC diplomats,[7], [19] or diplomat account follower growth.[20] In this study we examine how successful the PRC's public diplomacy campaign has been in generating engagement.

The term engagement here refers to the actions taken by social media users in response to content shared by other users. On Twitter, users may retweet, comment, or favorite a tweet. On Facebook, users can share content, comment on a post, or react with a love, laughter, anger, sad or amazed emoji.

Engagement is relevant to online public diplomacy campaigns for two reasons. First, by engaging with public diplomacy content, audiences can expand the reach of that content by sharing it with their social network. Second, because public diplomacy aims to influence foreign publics via agenda setting, we can use engagement as a metric to measure the success of a state's public diplomacy campaign in reaching audiences. Engagement is therefore both a public diplomacy tool and a measurement of the tool's success.

Envisaging engagement as both a diplomacy tool and an indicator of its success does, however, assumes that audience engagement is genuine. If engagement statistics are being inauthentically inflated, this indicates that the instigator state is attempting to make its campaign appear more successful. It also suggests that this state is trying to artificially expand its reach by manipulating social network newsfeed algorithms. Here, we adopt Twitter's definition of inauthentic engagement as any activity that "attempt[s] to make accounts or content appear more popular or active than they are".[21] Twitter notes that examples of inauthentic behavior might include: the use of multiple coordinating accounts to inflate the prominence of a particular account or tweet; the use of one account to repeatedly engage with the same tweets or accounts; or posting identical tweets from multiple accounts operated by a single user.[21]

Recent studies have found evidence of PRC-linked information operations designed to inauthentically amplify PRC content on social media.[16], [22]–[24] We build on these studies by focusing on inauthentic engagement with accounts linked to PRC diplomats. We assess whether the PRC's public diplomacy campaign receives genuine audience interaction, or if it is artificially inflated

by inauthentic engagement. By comprehensively uncovering the scale and reach of the PRC's public diplomacy campaign, we can better understand how policy makers and social media firms should respond to an increasingly assertive PRC propaganda strategy.

Our analysis of engagement authenticity focuses on Twitter rather than Facebook, as the platform provides better accessibility to micro-level engagement data such as time stamps, usernames and reply text. Future work should extend these efforts to measure the authenticity of engagements with PRC government accounts to Facebook.

The evidence from recent studies strongly indicates that pro-PRC actors are inauthentically inflating engagement statistics. For instance, between August 2019 and June 2020 Twitter disclosed the take-down of 28,987 accounts linked to a PRC state-backed information campaign. Twitter also suspended larger networks of hundreds of thousands of accounts used for amplifying PRC content.[28]–[30] Analysis of these suspended accounts undertaken by Stanford University and the Australian Strategic Policy Institute (ASPI) reveals that they promoted the PRC's geo-strategic interests on issues such as Hong Kong and COVID-19.[16], [22]

Multiple studies have found evidence of PRC-linked Twitter operations using fake accounts and coordinated behavior to promote PRC interests. The Crime and Security Research Institute (CSRI) describes a PRC-linked Twitter operation using fake accounts and coordinated behavior to promote pro-PRC narratives and sow discord around the 2020 U.S. presidential election.[25], [26] Furthermore, ProPublica reports a network of over 10,000 forged or stolen Twitter accounts linked to OneSight (Beijing) Technology Ltd., an online marketing company with previous ties to PRC state-backed media.[24]

These studies have all prompted suspensions by Twitter, based on the strength of evidence demonstrating inauthentic activity. Evidence of inauthentic Twitter activity around the PRC's diplomatic corps, however, is more contested. Twitter has disputed claims of PRC amplification made by the US State Department's Global Engagement Center (GEC).[33], [34] The GEC maintained that accounts with "highly probable links to the Chinese Communist Party" were engaging in a "global effort" to promote content produced by Beijing's diplomats.[33]

Research by Graphika, however, further indicates that coordinated inauthentic accounts are also amplifying and echoing content from the PRC diplomatic corps. [23],

[27]–[29] Finally, analysis by the *New York Times* identifies suspicious behavior, such as Twitter accounts repeatedly retweeting PRC diplomats at fixed time intervals. This behavior suggests that these engagements were automated.[30]

While the detection of inauthentic coordination is already a significant methodological challenge, the attribution of such behavior to a foreign government is problematic for three reasons. First, on a platform like Twitter, where users are not required to use their real name or photograph, it is difficult to distinguish accounts between partially and fully automated accounts. Second, actors conducting inauthentic coordination online use a variety of tools to conceal their activity. These can include using Virtual Private Networks (VPNs) to disguise their location or introducing noise such as random time delays in tweeting activity to avoid leaving traces. Third, some forms of coordination leave digital traces that are similar to those of genuine activities. For example, nationalistic groups engaging in pro-PRC "patriotic trolling" often use tactics that emit similar traces to those from a statebacked information operation.[22] This makes it difficult to distinguish an inauthentic profile from a genuine anonymous supporter. The focus of this study is not to attribute behavior to a specific operating entity, but rather, to detect and assess patterns of inauthentic coordinated activity in our data.

This report provides a global audit of trends in engagement with diplomatic content on Twitter, highlighting inauthentic accounts already suspended by the platform. Alongside this report, we also publish a detailed case study on a coordinated inauthentic network targeting the United Kingdom. [31] This second report includes detailed analysis on how we detect inauthentic engagement and infer coordinated activity among Twitter accounts.

#### 2. SOCIAL MEDIA ACTIVITY OF DIPLOMATS AND STATE MEDIA

To understand the nature of PRC public diplomacy on social media, we collect all tweets and Facebook posts by PRC diplomats and the foreign editions of the ten largest state media outlets over a nine month period from the 9<sup>th</sup> of June 2020 to the 23<sup>rd</sup> of February 2021. In our analyses we include every account that is still active as of February 2021 and has posted at least once during our observation window. Our sample of 189 PRC diplomatic Twitter accounts is assembled and validated from three sources: (1) the Alliance for Securing Democracy's Hamilton Dashboard; [32] (2) The Associated Press' Global Investigation Team; and (3) our own research team. Using data from three sources improves sampling coverage and allows us to be confident that we capture the most prominent social media accounts of the PRC's diplomats. We also acknowledge that minor user accounts or accounts that were short-lived over this period may not have been identified by the three independent teams. A complete list of the accounts, ordered by the country to which the diplomat is assigned, along with details about account activities, are in Table 3 of the Appendix. Data collection is conducted using Facebook's CrowdTangle API and the Twitter Streaming API.

Figure 3 provides an overview of diplomat and state-controlled media outlet activity on Facebook and Twitter. Here, one icon represents 1,000 posts or tweets. This graph shows that diplomats posted 34,041 times on Facebook during the nine month window of observation. Moreover, the 189 diplomatic Twitter accounts tweeted a total of 201,382 times. Of these tweets, 63,017 are

original tweets, 111,023 are retweets of other accounts, and 27,342 are quote tweets. Many of the quote retweets are amplifying posts from state-backed media. This amplification enables the diplomats to act as bridges between PRC state media content and the local community of the country they are stationed in. State media accounts themselves are similarly active, with 93 English-language and 83 other non-Mandarin accounts posting several hundreds of thousands of times on both Twitter and Facebook.

The hundreds of thousands of posts generated by diplomats and state media received high levels of engagement on social media platforms. Figure 3 shows that the 90,359 tweets posted by diplomats on Twitter comprise of 63,017 original tweets and 27,342 quote-tweets. Together, these tweets received 4,479,407 likes, which corresponds to an average of 49.6 likes per tweet. In total, posts by diplomats on Facebook and Twitter were liked nearly seven million times, received more than 1,250,000 retweets and re-shares, and were commented on more than one million times.

Taken together, we find 176 Twitter and Facebook accounts representing PRC state-controlled media outlets in English and other languages. Within our time window, these accounts posted more than 700,000 times. These posts received 355 million likes, and over 27 million comments and re-shares. The complete engagement statistics for posts made by the 449 diplomats and state media outlets on Twitter and Facebook can be found in Table 7 in the Appendix.

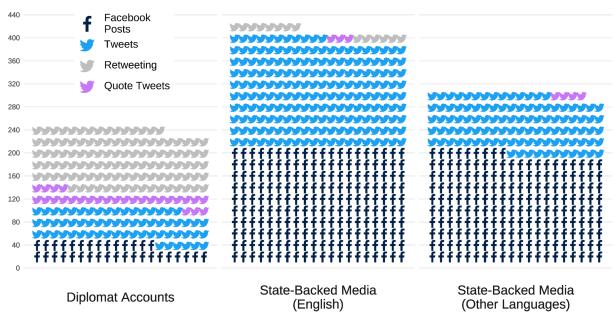


Figure 3: Total Number of Tweets and Facebook Posts (in thousands)

Source: Authors' calculations based on data collected between the 9<sup>th</sup> of June 2020 and 23<sup>rd</sup> of February 2021. Note: One icon represents one thousand posts or tweets. Other languages include all "foreign" languages except Mandarin. Due to short electricity outages and other Twitter API-related factors, true figures might be slightly higher.

#### 3. PLATFORM LABELING OF GOVERNMENT ACCOUNTS

#### 3.1 Twitter and Facebook's Policies on Labeling Government Accounts

In 2020 Twitter and Facebook both introduced official account labeling in an attempt to enhance transparency and accountability. These labels focus on highlighting accounts belonging to foreign governments and state-controlled media entities.

Twitter indicates that these labels are intended to "provide additional context about accounts controlled [...] by governments [and] state-affiliated media entities".[33] Twitter also notes that it intends to focus on "senior officials and entities that are the official voice of the nation state abroad, specifically accounts of key government officials, including foreign ministers, institutional entities, ambassadors, official spokespeople, and key diplomatic leaders".[33] According to the platform, accounts are assigned a label if they "heavily engag[e] in geopolitics and diplomacy". However, accounts are not labeled if they are "used solely for personal use and do not play role as a geopolitical or official Government communication channel".[33] Figure 4 provides an example of an account where Twitter has assigned a government affiliation label.[34] The account is that of the Chinese Ministry of Foreign Affairs Spokesperson Zhao Lijian. As seen in Figure 4, Twitter's government affiliation label appears on the profile page of the account, and above every tweet posted by this account.

In June 2020, Facebook also introduced a labeling policy targeting "state-controlled media outlets" in an effort to "help people better understand who's behind the news they see on Facebook".[35] For global audiences, the labels currently appear in the respective account's "Page Transparency" section, which is located at the bottom left of a Facebook page.[36] For US-based users, the visibility of the labeling is more prominent and also includes posts consumed via a user's news feed.

When considering whether to label an account as "state-controlled", Facebook considers factors such as "ownership structure" and "sources of funding and revenue", as well as independent "editorial guidelines", "governance and accountability mechanisms", and "information about newsroom and leadership staff". It also takes into account whether the outlets have statutes "clearly protect[ing] the editorial independence of the organization" and "established procedures [...] to ensure editorial independence".[35]

In contrast to Twitter, Facebook focuses on state-controlled media outlets only, and not diplomatic or other government accounts. Facebook does not provide an explanation for this decision. However, we can infer from observations in our data that this may stem from the fact that personal public presences by PRC diplomats are an

exception on Facebook, whereas they are frequent on Twitter. On Facebook, the majority of government-affiliated accounts are official embassy accounts which are recognizable from names such as "Chinese Embassy in ...".

Figure 4: Example of "Government Official" Label on Twitter



Source: Authors' screen captures.

Figure 5: Example of "State Controlled Media" Label on Facebook



Page transparency

See all

Facebook is showing information to help you better understand the purpose of a Page. See actions taken by the people who manage and post content.



Source: Authors' screen captures.

#### 3.2 Measuring Coverage and Consistency in Labeling of PRC Government Accounts

Twitter has an established clear definition for "government and state-affiliated media accounts". Facebook similarly defines "state-controlled media" accounts. However, neither platform provides a clear explanation for why some accounts are labeled and others not. To verify how consistently these labels are applied across groups of accounts and platforms, we examine a sample of 449 diplomatic and state media accounts on Twitter and Facebook. We record whether these accounts are assigned a PRC government official or state entity label on the 1st of March 2021.

Table 1 shows the share of PRC diplomat and state media accounts that have been assigned a label. Surprisingly, we find that of the 189 diplomatic accounts on Twitter, only 27 (14%) are labeled. The vast majority of accounts is unlabeled, including many blue checkmark verified accounts. Lacking a government account labeling policy, we could not replicate this for Facebook.

Nearly 90% of English and other language PRC statemedia accounts are labeled on Twitter. On Facebook, however, only 66% of English state-media accounts are labeled, and 22% of PRC state-media accounts that publish in other languages. The full list of accounts we catalogued with the labeling status can be found in Tables 3 to 6 of the Appendix.

Figure 6 examines the PRC Twitter diplomat accounts in more detail, dividing the accounts into groups by type of diplomat account. We find that only seven of the forty-five ambassador diplomat accounts, and thirteen of the eighty embassy accounts are assigned government labels. Remarkably, a substantial number of accounts are verified by Twitter but have not been assigned a government label. Of the eighty PRC embassy Twitter accounts, thirty-six are verified but remain unlabeled.

Figure 6 also shows that not only are overall instances of labeling low, but these labels are also inconsistently applied. As illustrated in Figure 10 of the Appendix, the ambassadors to Nepal, @PRCAmbNepal (51,923 followers on March 1st), and Lebanon, @AmbChenWeiQing (47,863), as well the embassies in Turkey (28,268) and Spain (26,764) are all verified and unlabeled. Accounts belonging to PRC embassies in Russia (2,305 followers) and Germany (3,924) however, are labeled.

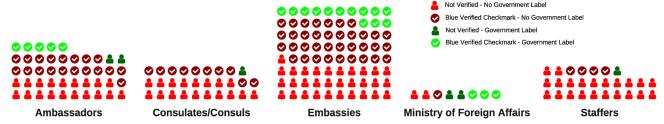
Table 1: Labelling Coverage by Platform and Language (As of the 1st of March 2021)

Account Type	Platform	Total Accounts	With Label	Share (in %)
Diplomat Accounts	Twitter	189	27	14
Diplomat Accounts	Facebook	84	-	-
State-Backed Media (English)	Twitter	49	44	90
State-Backed Media (Other Language)	Twitter	32	28	88
State-Backed Media (English)	Facebook	44	29	66
State-Backed Media (Other Language)	Facebook	51	11	22
TOTAL SUM		449	139	31

Source: Authors' data catalogued on the 1st of March 2021. By the time of publication, 5 additional state-backed media accounts had been labeled on Twitter. However, no additional diplomats were labeled after the 1st of March. After we shared a list of accounts with Facebook in early May, at least 41 additional accounts were labeled, raising the share of labeled accounts to 96% for English outlets and 82% for other language outlets. Other languages include all languages except for English and Mandarin. Accounts are included if they posted at least once between the 9th of June 2020 and 23rd of February 2021.

Note: Twitter has an established definition for "government and state-affiliated media accounts". Facebook similarly defines "state-controlled media" accounts.

Figure 6: Labelling Status on Twitter by Type of Diplomat Account



Source: Authors' data collection, every account visited on the 1st of March 2021

Note: Green color indicates government-affiliation label. Checkmark symbol indicates verified account status.

# 4. UNDERSTANDING THE DYNAMICS OF ENGAGEMENT WITH PRC DIPLOMATS ON TWITTER

The first three sections of this paper investigate the scale of PRC public diplomacy on social media, and the consistency with which social media platforms label PRC diplomat accounts. While the PRC's public diplomacy campaign may be large and well resourced, this does not necessarily mean that it is effective in reaching international audiences.

In Sections 4 and 5, we examine the nature of audience engagement with content produced by PRC diplomats. If there is a substantial amount of genuine audience engagement with PRC diplomats on Twitter, this would imply that the PRC's public diplomacy is effectively reaching audiences. If, however, engagement with PRC diplomats is largely inauthentic, this suggests that these statistics are artificially amplified.

Importantly, social media engagement cannot be measured using a single metric. In Sections 4 and 5, we combine several measurements of audience engagement with PRC diplomat tweets to assess the concentration and the authenticity of this engagement. In particular, we focus on whether engagement with PRC diplomatic content is spread equally across a large number of individual users or is concentrated among a small number of highly active supporters. We use the term "super-spreaders" to refer to small numbers of accounts that drive a high proportion of engagement with a particular user.

We analyze audience engagement with PRC diplomats on Twitter between the 9<sup>th</sup> of June 2020 and 31<sup>st</sup> of January 2021. Here, we use retweets as a measurement of audience engagement with diplomats. We choose to focus on retweets, rather than replies and quote retweets, as retweets are the most straightforward form of amplifying and expressing support for a particular tweet. During our observation window, we find that audiences retweet diplomat tweets 735,664 times, averaging nearly 100,000 retweets per month.

Figure 7 plots diplomat retweeters on a Lorenz curve, which illustrates the inequality of a distribution. The percentage of user activity is plotted on the x-axis, and the percentage of retweets on the y-axis. As such, the most active retweeters are represented on the left and the least active on the right. In this figure, blue dots mark the most active 0.1%, 1%, 5% and 10% of amplifier accounts.

A total of 150,823 users retweeted PRC diplomats at least once in our observation window. Of these users, the top 0.1% (n=151) most active super-spreaders accounted for over 25% (187,076) of all retweets. The most active 1% (n=1508) of users account for nearly half (359,996) of diplomat retweets, and the most active 5%

of retweeters account for two thirds of the diplomat retweets.

The entire distribution in Figure 7 has a Gini coefficient of 0.75. Gini coefficients can theoretically range from a value of 0, representing complete equality, to a value of 1, representing complete inequality. Higher values closer to 1 indicate that Twitter activity is concentrated among a smaller user group. We can therefore infer that there is a concentration of retweet engagement within a small group of active amplifiers.

If we examine each PRC diplomat individually, we find that some diplomats such as the ambassadors to the UK and Poland, and the PRC embassies in Kazakhstan and Nigeria have Gini coefficients above 0.8. Gini coefficients for all PRC diplomats in our data are included in Table 3 of the Appendix.

We also find interesting temporal patterns in this retweet data. We examine the most active users that retweet diplomats more than one hundred times. Of these users, 11% retweet diplomats using consecutive retweets with a median time interval of less than ten seconds. A further 25% retweet with a median time interval of less one minute. In practice, this pattern often means that a user is "sleeping" for most of any given day, only to awake and retweet a specific diplomat dozens of times within seconds.

Figure 11 in the Appendix shows the activity patterns of one high-frequency retweeter. Figure 12 in the Appendix further illustrates this pattern by plotting total amplification against median time between consecutive tweets. It is important to note, however, that we make no assessment as to whether this bulk-retweeting is automated or conducted by human operators.

Within our dataset several Twitter accounts exclusively amplify a single diplomat. For example, the nowsuspended user @Amitkum09617147 accounts for more than 60% of all retweets of the PRC embassy in Angola. Similarly, two users account for 64% of all retweets of the embassy in Kazakhstan, and just five users account for 68% of all retweets of the embassy in Nigeria. Dedicated super-spreaders also amplify the Twitter accounts of major PRC embassies. The user @peacesign21, for example, retweeted the PRC's Paris embassy Twitter account 1,003 times over a period of several months before it was suspended.

The Twitter account of the Chinese foreign ministry Spokesperson Zhao Lijian (@zlj517) also benefits from super-spreader amplification. During our observation window, 24,027 (25%) of his retweets stemmed from just

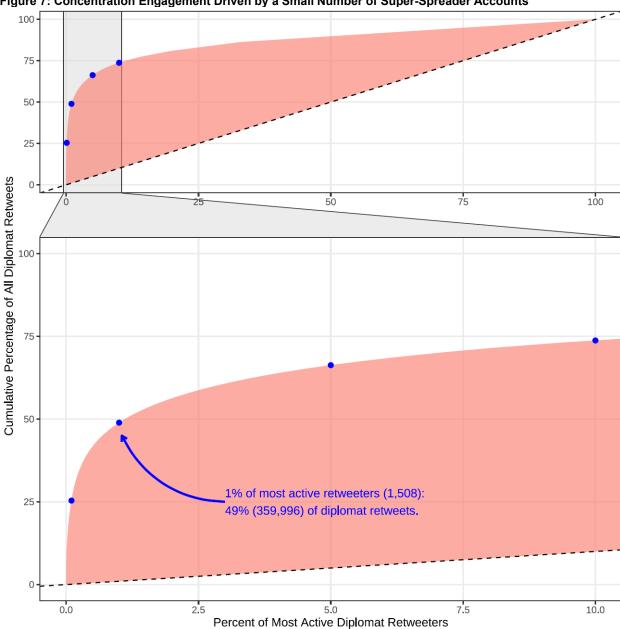


Figure 7: Concentration Engagement Driven by a Small Number of Super-Spreader Accounts

Source: Authors' calculations based on all retweets between the 9<sup>th</sup> of June 2020 and 31<sup>st</sup> of January 2021. Note: Here we use a Lorenz curve to illustrate engagement inequality among diplomat retweeters. The lower panel zooms in on the top 10% of most active retweeters from top panel.

330 retweeters. During the month of January, just twenty-eight "cheerleader" accounts have accounted for 7% of Zhao Lijian's retweets and 11% of his replies. Within these active supporters, many appear to be dedicated cheerleaders. Here, we define cheerleaders as those accounts that focus their amplification efforts on a single diplomat. These cheerleader accounts often have

usernames that imitate their amplification target such as *zlj123* or *xyz517* and use photographs of Zhao Lijian as their profile picture or banner. It is, however, important to note that this kind of user activity alone is not sufficient to prove that these accounts are performing inauthentic amplification. These accounts may belong to genuine supporters of Zhao Lijian.

# 5. PRC DIPLOMAT AMPLIFICATION BY SUBSEQUENTLY SUSPENDED ACCOUNTS ON TWITTER

Thus far, we have found that audiences engage with PRC diplomatic Twitter accounts in large numbers. PRC diplomatic accounts were retweeted more than 735,664 times between June 2020 and January 2021. Moreover, this engagement is dominated by a small number of super-spreader accounts.

In this Section we investigate whether this engagement is genuine or inauthentic. To do so, we examine how many users that retweeted diplomat accounts since June 2020 have later been suspended for violating Twitter's platform policies. It is important to note that accounts can be suspended for a variety of reasons other than inauthentic behavior, including copyright infringement and hate speech. If many of the accounts that amplified PRC diplomats have since been suspended by Twitter, this may imply that Twitter suspended these accounts for acting inauthentically.

To identify whether any of the accounts amplifying PRC diplomats have been suspended by Twitter, we first restrict our retweet dataset to the period from the 9<sup>th</sup> of June 2020 to 31<sup>st</sup> of January 2021. We then query the account status of every retweeter on the 1<sup>st</sup> of March 2021. Table 2 summarizes the results of these queries. We find that 74,648 (10%) of all PRC diplomat retweets stem from 8,452 accounts. These accounts were all suspended on 1 March 2021. In total, 26,879 accounts that retweeted a diplomat or state media outlet at least once were eventually suspended by Twitter. In many cases these accounts were suspended months after they became active, allowing the account operators to retweet PRC diplomats thousands of times.

Figure 8 visualizes the network of suspended accounts in red. These suspended accounts are connected to the

diplomats they had been retweeting, here marked in blue. Many diplomats have dedicated mushroom-like amplification cones of suspended accounts that exclusively retweet that one diplomat. In this figure we see these cones surrounding major diplomats such as the Ministry of Foreign Affairs Spokesperson (@zlj517) and @SpokespersonCHN, or the Chinese Embassy to the U.S. The exclusive amplification cones are supplemented by a large number of multi-use accounts that are concentrated in the center of the graph. The larger circle size indicates that these accounts act as super-spreaders, retweeting dozens of different diplomats on a daily basis.

Furthermore, many of the suspended accounts in our dataset were created in batches with very similar naming patterns and in short sequence. Finally, several accounts can be cross-matched with a pro-China information operation called "Spamouflage Dragon" discovered by researchers at Graphika.[23] Taken together, these findings indicate that these accounts acted inauthentically.

Table 2: Share of Suspended Engagement with Diplomats and State Media

	Unique Users	Retweets
Retweeting Diplomats	150,823	735,664
Suspended accounts	8,452 (6%)	74,648 (10%)
No longer existing	3,172 (2%)	11,306 (2%)
Retweeting State Media	432,920	1,981,181
Suspended accounts	21,558 (5%)	124,052 (6%)
No longer existing	10,260 (2%)	37,001 (2%)
Combined Retweets	543,597	2,716,845
Suspended accounts	26,879 (5%)	198,700 (7%)
No longer existing	12,495 (2%)	48,307 (2%)

Source: Authors' calculations based on all retweets between the 9<sup>th</sup> of June 2020 and 31<sup>st</sup> of January 2021. Note: Account status as of the 1<sup>st</sup> of March 2021. Due to short electricity outages and other Twitter API-related factors, true figures might be slightly higher.

[12]

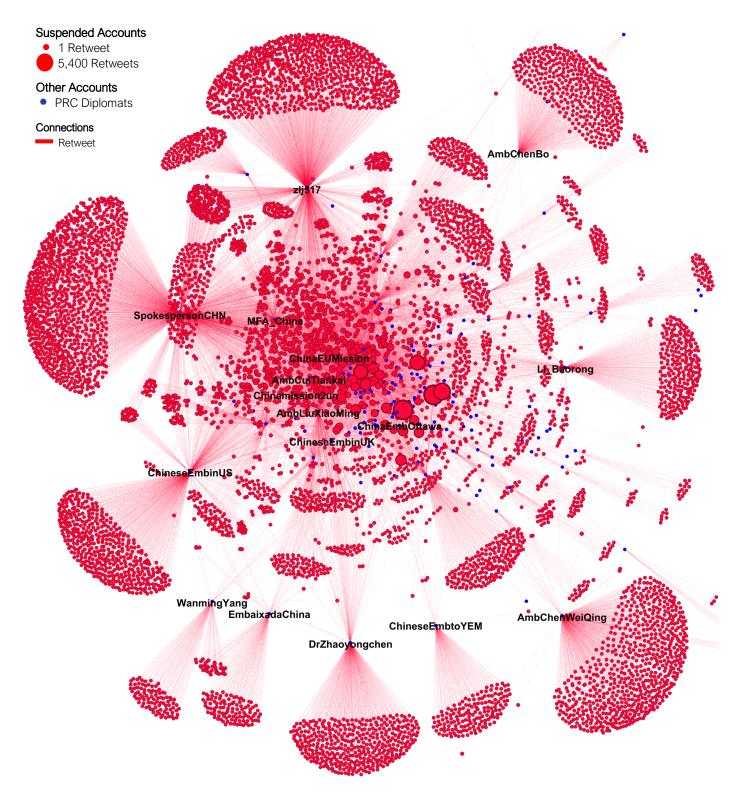


Figure 8: Network Graph of Diplomat Twitter Amplification by Subsequently Suspended Accounts

Source: All retweets of PRC diplomats between the  $9^{th}$  of June 2020 and  $31^{st}$  of January 2021. Note: Account status as of the  $1^{st}$  of March 2021. Selected group of diplomats labeled.

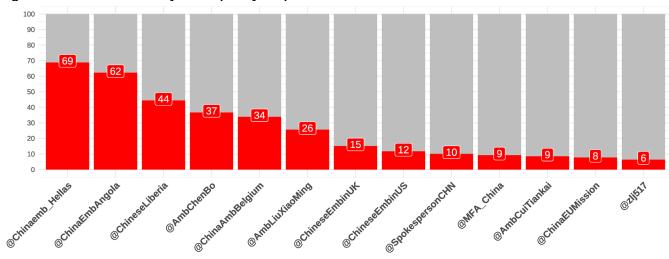


Figure 9: Share of Retweets by Subsequently Suspended Accounts

Source: Authors' calculations based on diplomat retweets collected between the 9<sup>th</sup> of June 2020 and 31<sup>st</sup> of January 2021. Note: This figure displays the top five accounts and a selection of accounts that appear elsewhere in this report. Account status as of the 1<sup>st</sup> of March 2021.

Figure 9 looks at a selection of thirteen diplomat accounts, examining the proportion of amplification that these accounts receive from suspended accounts. This share rises to over 60% for accounts belonging to the PRC embassies in Angola and Greece.

In Figure 8 we observe that the PRC spokesperson accounts @zlj517 and @SpokespersonCHN benefit the most from engagement by suspended accounts. Together, these two spokesperson accounts have

received over 20,000 retweets from later suspended accounts. The outgoing PRC ambassador to London, Liu Xiaoming, is the front-runner among ambassadorial accounts with over 10,000 retweets from subsequently suspended accounts. See Table 3 of the Appendix for the total number of retweets from accounts that were later suspended from all countries.

#### 6. CONCLUSION

In this study we find that the PRC is increasingly using social media networks as a public diplomacy tool to engage with global audiences. By strategically drawing attention to a particular issue, the PRC aims to control international narratives and "tell China's story well".[1]

To understand the scale of the PRC's online public diplomacy campaign, we analyze every tweet and Facebook made by PRC diplomats and state media accounts as well as the respective engagement between June 2020 and February 2021. We find that PRC diplomats and state media outlets are highly active on Facebook and Twitter. Over our period of study, PRC diplomats tweeted 201,382 times, averaging 778 posts a day. These posts received nearly 7 million likes, 1 million comments and 1.3 million retweets. Similarly, PRC statecontrolled media outlets posted over 700,000 times, receiving 355 million likes and 27 million comments or reshares. Despite these high levels of activity, we find that social media platforms rarely assign PRC diplomat accounts a government-affiliation label. Of the 189 PRC diplomat accounts on Twitter, only 14% are properly labeled.

Engagement is an essential component of an online public diplomacy campaign, as it can be both a tool to reach wider audiences and a measurement of a campaign's success. If a public diplomacy campaign is met with a large amount of genuine engagement, this indicates that it has been successful. If, however, engagement with a public diplomacy campaign is largely inauthentic, this suggests that the instigator state may be artificially inflating the engagement statistics.

To understand the nature of audience engagement with PRC diplomatic accounts on Twitter better, we gather a sample of over 735,000 retweets of PRC diplomats between the 9th of June 2020 and 31st of January 2021. The number of retweets may be slightly higher than the numbers we record here, due to short electricity outages and under-coverage in the Twitter Streaming API. However, there is no reason to believe that these limitations systematically impact our results.

We find that a significant proportion of retweet engagement is generated by a small number of superspreader accounts. The most active 0.1% of superspreaders are responsible for more than 25% of all PRC diplomat retweets, while the most active 1% contribute to

nearly half of all retweets. For several smaller embassies, a single user produces for over two thirds of all retweets. These super-spreaders also behave in a manner that indicates inauthentic coordination, with a number of accounts bulk-retweeting with as little as two to ten seconds in between consecutive retweets.

While these accounts behave in a manner that indicates they are inauthentically amplifying PRC diplomats, it is important to note that only Twitter can confirm inauthentic activity. We can, however, take a closer look at accounts that have been suspended by Twitter over the course of our investigation. We find that more than 10% of all diplomat retweets are generated by accounts that have since been suspended from the platform. These suspended accounts display inauthentic behavior, with some exclusively amplifying individual PRC diplomat accounts, and others acting as super-spreaders, amplifying multiple diplomats. It is important to note, however, that only Twitter has knowledge of the specific rule violation that led to a user's suspension. Furthermore, it is possible that there is additional inauthentic activity that has not been identified and removed from the platform yet. Many of the accounts in our dataset amplified PRC diplomats thousands of times before being suspended, successfully evading the platform's detection efforts over several months.

Finally, we do not attempt to attribute this inauthentic behavior to a specific government or state-affiliated organization, as we do not have the necessary meta-data to confidently make such an assessment. We do, however, conduct an in-depth case study of a coordinated inauthentic campaign dedicated to amplifying PRC diplomats stationed in London. This case study is published as an accompaniment to our global report.[31] In this case study, we use a variety of methodological approaches to investigate the behavior of a group of accounts to uncover coordinated inauthentic behavior.

In a world where social media platforms have been increasingly influential in global communications, our study has identified another area where powerful actors systematically exploit the facilities provided by these platforms. Our study provides extensive evidence for where and how a powerful state actor like the PRC may be able to create an illusion of inflated influence over global discourse.

#### REFERENCES

- [1] S. Wang, "China's People-to-people Diplomacy and Its Importance to China-EU Relations: A Historical Institutionalism Perspective," *J. China Int. Relat.*, vol. 4, no. 1, 2016.
- [2] K. W. Deutsch, *Nationalism and Social*Communication: An Inquiry into the Foundations of Nationality, vol. 34. Cambridge: MIT Press, 1953.
- [3] Howard H. Frederick, Global Communication & International Relations. Wadsworth Publishing Company, 1993. [Online]. Available: https://books.google.co.uk/books?id=RBsQAQAA MAAJ
- [4] G. D. Malone, "Managing public diplomacy," *Wash. Q.*, vol. 8, no. 3, pp. 199–213, Jul. 1985, doi: 10.1080/01636608509450301.
- [5] K. Edney, "Soft Power and the Chinese Propaganda System," *J. Contemp. China*, vol. 21, no. 78, pp. 899–914, Nov. 2012, doi: 10.1080/10670564.2012.701031.
- [6] Chinese Ministry of Foreign Affairs, "Regular Daily Press Conference," 2020. [Online]. Available: https://www.fmprc.gov.cn/mfa\_eng/xwfw\_665399/ s2510\_665401/2511\_665403/
- [7] Z. A. Huang and R. Wang, "Building a Network to 'Tell China Stories Well': Chinese Diplomatic Communication Strategies on Twitter," *Int. J. Commun.*, vol. 13, p. 24, 2019.
- [8] Z. Zhu, "Interpreting China's Wolf Warrior Diplomacy'," *The Diplomat*, vol. 15, pp. 648–658, 2020.
- [9] Z. A. Huang and R. Wang, "Panda Seems Like a New 'Cat': China's Digital Panda Public Diplomacy on Twitter: Affective Sign, Image Promotion, and the Permanent Chinese Diplomat," EUPRERA 2018 Congr. Big Ideas-Challenging Public Relat. Res. Pract.-Soc. Media, 2018.
- [10] V. Molter and G. Webster, "Coronavirus Conspiracy Claims: What's Behind a Chinese Diplomat's COVID-19 Misdirection," 2020. [Online]. Available: https://fsi.stanford.edu/news/china-covid19-origin-narrative
- [11] F. R. Baumgartner and B. D. Jones, *Agendas and Instability in American Politics*. University of Chicago Press, 1993.
- [12] Wilson Center, "China's Soft Power Campaign," 2020. https://www.wilsoncenter.org/chinas-softpower-campign
- [13] J. Szczudlik, "'Tell China's Stories Well': Implications for the Western Narrative," *Pol. Inst. Int. Aff. PISM*, vol. 9, no. 169, p. 11, 2018.
- [14] A.-M. Brady, "Guiding hand: The role of the CCP Central Propaganda Department in the current era," in *Critical Readings on the Communist Party of China (4 Vols. Set)*, Brill, 2017, pp. 752–772.

- [15] W. Sun, "Slow Boat from China: Public Discourses Behind the 'Going Global'media Policy," *Int. J. Cult. Policy*, vol. 21, no. 4, pp. 400–418, 2015.
- [16] C. Miller, V. Molter, I. Garcia-Camargo, and R. DiResta, "Sockpuppets Spin Covid Yarns: An Analysis of Prc-Attributed June 2020 Twitter Takedown," 2020. [Online]. Available: https://fsi.stanford.edu/publication/june-2020-prc-takedown
- [17] J. Kurlantzick, "How China Is Interfering in Taiwan's Election," *Counc. Foreign Relat. Novemb.*, vol. 7, 2019.
- [18] M. Rae, *The NBA–China Tension: What's at Stake?* SAGE Publications: SAGE Business Cases Originals, 2020.
- [19] Z. A. Huang and R. Wang, "Exploring China's Digitalization of Public Diplomacy on Weibo and Twitter: A Case Study of the US-China Trade War," *Int. J. Commun.*, vol. 15, p. 28, 2021.
- [20] J. Brandt and B. Schafer, "How China's 'Wolf Warrior' Diplomats Use and Abuse Twitter," *Brookings*, Oct. 28, 2020. https://www.brookings.edu/techstream/how-chinas-wolf-warrior-diplomats-use-and-abuse-twitter/
- [21] Twitter Inc., "Twitter's Platform Manipulation and Spam Policy | Twitter Help," 2020. https://help.twitter.com/en/rules-andpolicies/platform-manipulation
- [22] T. Uren, E. Thomas, and J. Wallis, "Tweeting Through the Great Firewall: Preliminary Analysis of PRC-linked Information Operations on the Hong Kong Portest," *Aust. Strateg. Policy Inst. Int. Cyber Policy Cent. Barton*, 2019.
- [23] B. Nimmo, I. Hubert, and Y. Cheng, "Spamouflage Breakout," 2021. [Online]. Available: https://publicassets.graphika.com/reports/graphika\_report\_spa mouflage\_breakout.pdf
- [24] ProPublica, "How China Built a Twitter
  Propaganda Machine Then Let It Loose on
  Coronavirus," 2020.
  https://www.propublica.org/article/how-china-builta-twitter-propaganda-machine-then-let-it-loose-oncoronavirus
- [25] Crime and Security Research Institute, University of Cardiff, "China-linked Influence Operation Detected on Twitter Interacting with the US Presidential Election (1/2)," Crime and Security Research Institute, Cardiff, Detection Report, 2020. [Online]. Available: https://www.cardiff.ac.uk/news/view/2491763-hundreds-of-fake-twitter-accounts-linked-to-chinasowed-disinformation-prior-to-the-us-election,-

- with-some-continuing-to-amplify-reactions-to-the-capitol-building-riot-report
- [26] Crime and Security Research Institute, University of Cardiff, "China-linked Influence Operation Detected on Twitter Interacting with the US Presidential Election (2/2)," Crime and Security Research Institute, Cardiff, Development Report, 2021. [Online]. Available: https://www.cardiff.ac.uk/news/view/2491763-hundreds-of-fake-twitter-accounts-linked-to-chinasowed-disinformation-prior-to-the-us-election,-with-some-continuing-to-amplify-reactions-to-the-capitol-building-riot-report
- [27] B. Nimmo, C. Shawn Eib, and L. Tamora, "Cross-Platform Spam Network Targeted Hong Kong Protests Spamouflage Dragon Used Hijacked and Fake Accounts to Amplify Video Content," 2019. [Online]. Available: https://public-assets.graphika.com/reports/graphika\_report\_spamouflage.pdf
- [28] B. Nimmo, C. Francois, C. Shawn Eib, and L. Ronzaud, "Return of the (Spamouflage) Dragon -Pro-Chinese Spam Network Tries Again," 2020. [Online]. Available: https://publicassets.graphika.com/reports/Graphika\_Report\_Sp amouflage\_Returns.pdf
- [29] B. Nimmo, C. Francois, C. Shawn Eib, and L. Ronzaud, "Spamouflage Goes to America," 2020. [Online]. Available: https://public-assets.graphika.com/reports/graphika\_report\_spamouflage\_goes\_to\_america.pdf
- [30] R. Zhong, A. Krolik, P. Mozur, R. Bergman, and E. Wong, "Behind China's Twitter Campaign, a Murky

- Supporting Chorus," *The New York Times*, Jun. 08, 2020. [Online]. Available: https://www.nytimes.com/2020/06/08/technology/china-twitter-disinformation.html
- [31] M. Schliebs, H. Bailey, J. Bright, and P. N. Howard, "China's Inauthentic UK Twitter Diplomacy: A coordinated network amplifying PRC Diplomats," Oxford, UK: Programme on Democracy and Technology, Oxford University, 2021. [Online]. Available: https://demtech.oii.ox.ac.uk/china-publicdiplomacy-casestudy-uk
- [32] Alliance for Securing Democracy (German Marshall Fund), "Hamilton Monitored Accounts on Twitter," *Alliance For Securing Democracy*, 2021. https://securingdemocracy.gmfus.org/hamiltonmonitored-accounts-on-twitter/
- [33] Twitter Inc., "About Government and State-Affiliated Media Account Labels on Twitter," 2020. https://help.twitter.com/en/rules-and-policies/stateaffiliated-china
- [34] L. Zhao, "Lijian Zhao 赵立坚 (@zlj517) / Twitter," *Twitter*, 2021. https://twitter.com/zlj517
- [35] N. Gleicher, "Labeling State-Controlled Media On Facebook," *About Facebook*, Jun. 04, 2020. https://about.fb.com/news/2020/06/labeling-state-controlled-media/
- [36] CGTN, "CGTN | Facebook," 2021. https://www.facebook.com/ChinaGlobalTVNetwork

#### ABOUT THE PROJECT

The Programme on Technology and Democracy investigates the use of algorithms, automation, and computational propaganda in public life. This programme of activity is backed by a team of social and information scientists eager to protect democracy and put social data science to work for civic engagement. We are conducting international fieldwork with the political consultants and computer experts who are commissioned to activate or catch information operations. We are building original databases of incidents and accounts involved in such activities, and we use our knowledge to make better tools for detecting and ending interference with democracy. We engage in "real-time" social and information science, actively disseminating our findings to journalists, industry, and foreign policy experts. Our network of experts helps civil society, industry, government, and other independent researchers develop a better understanding of the role of technology in public life.

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#### **APPENDICES**

#### A.1 Data Collection, List of Included Accounts, and Descriptive Statistics

As part of this research project, we collected all tweets and Facebook posts by PRC diplomats and the foreign editions of the ten largest state media outlets over a nearly nine month period from the 9th of June 2020 to 23rd of February 2021, as well as all retweets and replies to one of the target accounts. In our analyses, we include every account that has posted at least once during our observation window and was still active as of February 2021. The list of 189 diplomatic Twitter accounts was created by triangulating three independently compiled lists of PRC diplomats on Twitter: one from the Alliance for Securing Democracy's Hamilton Dashboard, [32] one compiled by the Associated Press (AP) Global Investigation Team, and one created by our research team. Our list was created by going through a list of every country in the United Nations and searching Twitter with a number of keywords including "Chinese Ambassador <Country>", "Chinese Embassy <Country>", as well as in other languages where appropriate. Furthermore, we also relied on a network approach by manually examining the followee-lists of many core diplomats which tend to follow every other diplomat. As such, we are confident to have included nearly every diplomat in our sample.

The data collection was conducted using the Twitter Streaming API and Facebook's CrowdTangle API. Data collection was interrupted for several hours on the 6<sup>th</sup> of December, 13<sup>th</sup> of January, and 11<sup>th</sup> of February due to power outage in the University of Oxford's computing center. Because of these outages, we estimate that we captured 99% of the activity shared from the Twitter API. Furthermore, the API is known to sometimes exhibit slight under-coverage, meaning that a small share of tweets or retweets may not be included in data from the Streaming API. However, the impact of this on sampling is not fully understood. It is likely that our estimates are conservative and that the findings and implications are not impacted by these small uncertainties.

The tweet and user ids will be made available in accordance with Twitter's data sharing policy as well as the Oxford University Research Ethics guidelines (CUREC). The complete R and Python code used to collect data and produce all statistics, figures, and tables will be released alongside this publication. See the project website.

#### Legend for descriptive statistics table:

- Country: Country where a diplomat is stationed
- Type: Type of diplomat
- Created: Account Creation Date
- Followers: Number of Twitter followers as of the 1<sup>st</sup> of March 2021
- Total Tweets: Number of times the account has tweeted between the 9<sup>th</sup> of June and 23<sup>rd</sup> of February.
- Total Retweets: Number of retweets of the account received during observation window.
- Gini RTs: Gini coefficient of distribution of a diplomat's retweeters. Higher numbers indicate a larger proportion of RT engagement generated by a small minority of highly active super-spreader accounts
- Susp. RTs (in%): Share of retweets by now suspended accounts, account status as of the 1st of March 2021.
- GOV Label: Labelled by Twitter as government account as of March 2021, e.g. China government account.
- · Verified: Verified accounts with blue checkmark
- Other Symbols:
  - Username\*: Account added during the data collection period, so real figures potentially higher.

Table 3: Diplomat Accounts on Twitter between the 9th of June 2020 and 23rd of February 2021

			Created	Followers	Total Tweets	Total Retweets	Gini RTs	Susp. RTs	GOV	
Country	Type	Handle	Jan 2017	13,428	173	623	0.42	(in%) 8	Label	Verified
Afghanistan	Ambassador	@ChinaEmbKabul	Apr 2019	1,629	175	80	0.42	18		
Albania	Embassy	@ChinaembassyT	Oct 2019	1,885	134	143	0.74	62		
Angola Antigua and	Embassy	@ChinaEmbAngola	001 2019	1,000	134	143	0.74	02		0
Barbuda	Embassy	@ChinaEmbAntigua*	Apr 2020	26	1	0	-	-		
Argentina	Embassy	@ChinaEmbArg	Mar 2020	4,506	507	2,686	0.56	1		
Australia	Consul(ate)	@ChinaConSydney	Apr 2020	1,951	2,632	4,458	0.60	15		
Austria	Ambassador	@li_xiaosi	Sep 2019	17,340	1,417	7,869	0.68	15		0
Austria	Embassy	@chinaembaustria	Jan 2020	2,871	939	3,075	0.71	9		<b>©</b>
Barbados	Ambassador	@YXiusheng	Apr 2020	1,961	2,233	1,082	0.64	11		
Belarus	Embassy	@ZhongBai2020	Feb 2020	2,170	78	47	0.33	13		
Belgium	Ambassador	@ChinaAmbBelgium	Dec 2019	3,586	392	684	0.48	33		<b>©</b>
Bolivia, Plurinational State of	Consul(ate)	@WangJialei4*	Jan 2020	353	216	159	0.64	1		
Bolivia, Plurinational State of	Consul(ate)	@ConsuladoCHNSC*	Jan 2020	167	44	16	0.50	0		
Botswana	Ambassador	@DrZhaoYanbo	Feb 2020	2,897	826	1,828	0.60	11		<b>©</b>
Brazil	Embassy	@EmbaixadaChina	May 2018	82,240	1,527	20,448	0.49	3	血	0
Brazil	Consul(ate)	@CGChinaLiYang	Mar 2020	3,244	547	2,433	0.40	5		0
Brazil	Ambassador	@WanmingYang	Nov 2015	53,174	530	8,480	0.40	3	血	0
Brazil	Consul(ate)	@CGChinaSP*	Jun 2020	216	34	47	0.20	0		
Brazil	Consul(ate)	@ConsulChinaRJ	Dec 2019	1,798	33	36	0.25	11		<b>©</b>
Bulgaria	Ambassador	@AmbDongXiaojun*	May 2020	1,078	233	157	0.31	12		
Burundi	Embassy	@AmbChineBurundi	Jun 2019	2,312	75	293	0.35	2		
Cameroon	Embassy	@AmbChineCmr	Dec 2019	1,656	400	172	0.54	6		0
Canada	Consul(ate)	@ChinaCGCalgary	Dec 2019	1,974	812	552	0.73	5		0
Canada	Embassy	@ChinaEmbOttawa	Jun 2014	7,135	769	110	0.26	8	血	<b>©</b>
Chad	Embassy	@ambchinetchad	Sep 2019	3,127	883	252	0.51	9		<b>©</b>
Chile	Embassy	@ChinaEmbajada	Dec 2019	991	80	21	0.40	0		
Colombia	Embassy	@china_embajada	Feb 2020	2,346	341	435	0.51	3		<b>©</b>
Congo	Embassy	@chinaembcongobz*	Apr 2020	600	52	18	0.38	33		
Congo, the Democratic Republic of the	Embassy	@AmbCHINEenRDC	Jan 2020	7,481	549	1,192	0.50	1		0
Congo, the Democratic Republic of the	Ambassador	@Amb_ZhuJing	Jan 2020	5,865	469	953	0.43	1		<b>©</b>
Cuba	Embassy	@EmbChinaCuba	Mar 2020	2,210	446	709	0.50	2		<b>②</b>
Cuba	Staffer	@yiwen_zh*	Nov 2015	194	21	8	0.13	0		

Cyprus	Ambassador	@AmbassadorHuang	Feb 2020	2,422	129	372	0.33	15		
Czech			Feb 2020	946	383	91	0.72	1		
Republic	Embassy	@ChineseEmbinCZ*	May 2017	1,150	417	47	0.29	23		
Denmark	Embassy	@ChinaInDenmark	-							0
Djibouti Dominican	Embassy	@ChineAmbDjibout	Apr 2020	1,009	555	143	0.50	10		
Republic	Ambassador	@EmbZhangRun	Dec 2018	13,389	997	3,312	0.54	3		
Dominican Republic	Embassy	@ChinaEmbajadaRD	Apr 2019	5,474	298	1,221	0.48	0		
Dominican Republic	Staffer	@luisxu9	Jan 2019	1,834	72	50	0.35	0		
Ecuador	Embassy	@EmbajadaChinaEc	Dec 2019	6,459	1,148	766	0.58	6		
Egypt	Staffer	@CHN_EGY*	Jun 2020	669	519	50	0.57	8		
Egypt	Ambassador	@AmbLiaoLiqiang	Dec 2019	10,835	398	3,883	0.40	5		0
El Salvador	Embassy	@EmbajadaChinaSV	Feb 2019	10,369	435	2,025	0.57	1		
El Salvador	Ambassador	@oujianhong	Aug 2018	5,343	236	56	0.23	0		
Equatorial Guinea	Embassy	@EmbChinaGE	Mar 2020	950	251	185	0.48	5		
Ethiopia	Embassy	@ChinaEmbAddis	Dec 2019	4,864	81	128	0.38	2		<b>©</b>
Finland	Embassy	@ChinaEmbFinland	Dec 2019	201	53	5	0.00	0		
France	Embassy	@AmbassadeChine	Aug 2019	30,394	4,072	17,708	0.63	14	血	<b>②</b>
France	Consul(ate)	@consulat_de	Feb 2020	681	1,364	181	0.60	12		
France	Consul(ate)	@China_Lyon	Mar 2020	593	147	15	0.24	13		
Germany	Embassy	@ChinaEmbGermany	Dec 2019	3,796	910	1,861	0.76	4	<b>m</b>	<b>©</b>
Germany	Consul(ate)	@GeneralkonsulDu	Feb 2020	1,046	471	183	0.63	4		<b>©</b>
Ghana	Embassy	@ChinaEmbinGH	Mar 2020	1,750	210	100	0.33	17		<b>©</b>
Greece	Embassy	@Chinaemb_Hellas*	Jul 2020	1,067	165	176	0.69	65		<b>©</b>
Grenada	Embassy	@ChinaEmbGrenada	Oct 2019	3,731	1,160	319	0.50	15		<b>©</b>
Grenada	Ambassador	@DrZhaoyongchen	Jul 2019	4,549	786	3,676	0.39	22		<b>©</b>
Guinea	Embassy	@chine_guinee	Sep 2019	3,215	151	199	0.38	8		<b>②</b>
Hungary	Embassy	@ChineseEmbinHU	Oct 2019	4,002	1,016	318	0.64	12		<b>©</b>
India	Consul(ate)	@ZhaLiyou	Aug 2019	13,163	8,470	12,953	0.77	27		<b>©</b>
India	Staffer	@ChinaSpox_India	Mar 2020	7,584	1,324	728	0.18	7		<b>©</b>
India	Ambassador	@China_Amb_India	Dec 2017	80,513	1,259	3,667	0.50	8	Ħ	<b>©</b>
Iran, Islamic Republic of	Ambassador	@AmbChangHua	Oct 2019	18,629	1,505	3,289	0.63	13		0
Iraq	Embassy	@Chinalrag	Jan 2020	4,553	158	88	0.38	5		<b>②</b>
Ireland	Embassy	@ChinaEmblreland	Feb 2020	2,574	216	352	0.36	5		0
Italy	Embassy	@AmbCina	May 2018	34,506	983	6,026	0.71	2	<b>m</b>	0
Japan	Embassy	@ChnEmbassy_jp	Apr 2014	74,961	782	8,346	0.58	2	<b></b>	0
Japan	Consul(ate)	@ChnConsul_osaka	Sep 2019	9,525	701	2,223	0.30	3		<b>②</b>
Japan	Consul(ate)	@ChnConsulateFuk	Apr 2020	1,236	312	344	0.41	3		
Japan	Consul(ate)	@ChnConsulateNgo	Feb 2020	1,669	284	548	0.53	5		
Japan	Consul(ate)	@ChnConsulateNgt	Mar 2020	1,481	104	593	0.34	3		

Kazakhstan         Embassy         @ChinaEmbKazakh         Sep 2019         2,225         370         432         0.81         4           Kenya         Embassy         @ChineseEmbKenya         Mar 2019         7,440         672         1,285         0.75         1           Korea, Republic of Consul(ate)         @jejuZLG         Oct 2019         1,038         44         33         0.27         24           Kuwait         Embassy         @ChinaEmbKuwait         Apr 2020         1,024         153         230         0.16         3           Lebanon         Staffer         @CaoyY_MFA         May 2018         7,806         18,627         12,252         0.66         7           Lebanon         Ambassador         @ChinaEmbLesotho         Feb 2020         8,848         1,028         1,784         0.56         7           Lesotho         Embassy         @ChinaEmbLesotho         Feb 2020         89         448         24         0.36         0           Lesotho         Staffer         @MGuoliang*         Apr 2020         629         26         5         0.00         0           Liberia         Embassy         @ChineseLiberia         Dec 2019         2,096         512         376 <th></th>	
Renya	
Korea. Republic of Republic of Republic of Republic of Ruwait         Consul(ate) DejejuZLG         Oct 2019 PigipuZLG         1,038 PigipuZLG         44 PigipuZLG         33 PigipuZLG         24 PigipuZLG         24 PigipuZLG         24 PigipuZLG         24 PigipuZLG         24 PigipuZLG         24 PigipuZLG         24 PigipuZLG         33 PigipuZLG         24 PigipuZLG         24 PigipuZLG         33 PigipuZLG         24 PigipuZLG         33 PigipuZLG         24 PigipuZLG         33 PigipuZLG         30 PigipuZLG         30 PigipuZLG         30 PigipuZLG         30 PigipuZLG         30 PigipuZLG         30 PigipuZLG         40 PigipuZLG         44 PigipuZLG         40 PigipuZLG         40 PigipuZLG         40 PigipuZLG         40 PigipuZLG         40 PigipuZLG         40 Pi	<b>©</b>
Korea   Republic of   Consul(ate)   @jejuZLG	<b>©</b>
Lebanon         Staffer         @CaoYi_MFA         May 2018         7,806         18,627         12,252         0.66         7           Lebanon         Ambassador         @ChinainLebanon         Feb 2020         8,848         1,028         1,784         0.56         7           Lesotho         Embassy         @ChinaEmbLesotho         Feb 2020         498         448         24         0.36         0           Lesotho         Ambassador         @Ambassadorlei         Mar 2020         629         26         5         0.00         0           Liberia         Embassy         @ChineseLiberia         Dec 2019         2,096         512         376         0.54         42           Malawi         Ambassador         @LibHongyang4         Feb 2018         1,829         360         1,111         0.44         11           Malawi         Embassy         @ChinaEmbassy_MW         Nov 2019         624         116         171         0.5         14           Maldives         Ambassador         @AmbassadorZhang         Jun 2019         13,763         433         6,364         0.59         1           Mali         Ambassador         @ChinaEmbasy         Aug 2018         2,485         66	<b>©</b>
Lebanon         Staffer         @CaoYi_MFA         May 2018         7,806         18,627         12,252         0.66         7           Lebanon         Ambassador         @ChinainLebanon         Feb 2020         8,848         1,028         1,784         0.56         7           Lesotho         Embassy         @ChinaEmbLesotho         Feb 2020         498         448         24         0.36         0           Lesotho         Ambassador         @Ambassadortei         Mar 2020         867         65         164         0.40         4           Lesotho         Staffer         @MGuoliang*         Apr 2020         629         26         5         0.00         0           Liberia         Embassy         @ChineseLiberia         Dec 2019         2,096         512         376         0.54         42           Malawi         Ambassador         @ChinaEmbassy_MW         Nov 2019         624         116         171         0.5         14           Maldiwes         Ambassador         @AmbassadorZhang         Jun 2019         13,763         433         6,364         0.59         1           Mali         Embassy         @ChinaEmbinMR         Aug 2018         2,485         66         <	<b>©</b>
Lesotho         Embassy         @ChinaEmblesotho         Feb 2020         498         448         24         0.36         0           Lesotho         Ambassador         @Ambassadorlei         Mar 2020         867         65         164         0.40         4           Lesotho         Staffer         @MGuoliang*         Apr 2020         629         26         5         0.00         0           Liberia         Embassy         @Chineseliberia         Dec 2019         2,096         512         376         0.54         42           Malawi         Ambassador         @LiuHongyang4         Feb 2018         1,829         360         1,111         0.44         11           Malawi         Embassy         @ChinaEmbassy_MW         Nov 2019         624         116         171         0.5         14           Malidi         Embassy         @Chinea_u_Mali         Aug 2019         13,763         433         6,364         0.59         1           Mali         Ambassador         @LiyingZHU1         Aug 2019         7,382         33         279         0.38         9           Malita         Ambassador         @ChinaEmbIMR         Sep 2019         1,995         9         18	<b>©</b>
Lesotho         Ambassador         @AmbassadorLei         Mar 2020         867         65         164         0.40         4           Lesotho         Staffer         @MGuoliang*         Apr 2020         629         26         5         0.00         0           Liberia         Embassy         @ChineseLiberia         Dec 2019         2,096         512         376         0.54         42           Malawi         Embassy         @ChineseLiberia         Dec 2019         2,096         512         376         0.54         42           Malawi         Embassy         @ChineseLiberia         Dec 2019         2,096         512         376         0.54         42           Malia         Ambassador         @LivinogLandia         Feb 2018         1,829         360         1,111         0.44         11           Maliawi         Embassy         @ChinaEmbassy_mW         Nov 2019         624         116         171         0.5         14           Malia         Ambassador         @AmbassadorZhang         Jun 2019         13,763         433         6,364         0.59         1           Mali         Ambassador         @LivingZHU1         Aug 2019         7,382         33         279<	<b>②</b>
Lesotho Staffer @MGuoliang* Apr 2020 629 26 5 0.00 0   Liberia Embassy @ChineseLiberia Dec 2019 2,096 512 376 0.54 42   Malawi Ambassador @LiuHongyang4 Feb 2018 1,829 360 1,1111 0.44 111   Malawi Embassy @ChinaEmbassy_MW Nov 2019 624 116 171 0.5 14   Maldives Ambassador @AmbassadorZhang Jun 2019 13,763 433 6,364 0.59 1   Mali Embassy @Chine_au_Mali Aug 2018 2,485 66 25 0.22 12   Mali Ambassador @LiujingZHU1 Aug 2019 7,382 33 279 0.38 9   Malta Ambassador @YDunhai* Jan 2021 4,416 140 985 0.44 3   Mauritania Embassy @ChinaEmbinMR Sep 2019 1,995 9 18 0.22 22   Namibia Ambassador @Amb_Yiming Sep 2019 10,603 135 489 0.38 13   Nepal Ambassador @PRCAmbNepal Jun 2019 51,611 76 4,911 0.50 4   Netherlands Embassy @ChinaEmbNL* Jun 2020 1,522 179 306 0.38 15   Netherlands Staffer @RibiaoChen Jan 2020 290 105 42 0.44 17   Netherlands Staffer @RibiaoChen Jan 2020 290 105 42 0.44 17   Netherlands Staffer @LiuyanCHN* Mar 2019 101 18 0   Netherlands Ambassador @ChinaAmbNL* Dec 2020 345 4 8 0.00 0   Nigeria Embassy @China_emb_ng Sep 2019 2,232 706 1,727 0.82 4   Pakistan Staffer @WangXianfeng8 May 2019 11,176 2,850 4,864 0.58 13   Pakistan Embassy @CathayPak Sep 2015 120,640 701 8,821 0.48 8    ■	
Liberia Embassy @ChineseLiberia Dec 2019 2,096 512 376 0.54 42 Malawi Ambassador @LiuHongyang4 Feb 2018 1,829 360 1,111 0.44 111 Malawi Embassy @ChinaEmbassy_MW Nov 2019 624 116 171 0.5 14 Maldives Ambassador @AmbassadorZhang Jun 2019 13,763 433 6,364 0.59 1 Mali Embassy @Chine_au_Mali Aug 2018 2,485 66 25 0.22 12 Mali Ambassador @LiujingZHU1 Aug 2019 7,382 33 279 0.38 9 Malta Ambassador @YDunhai* Jan 2021 4,416 140 985 0.44 3 Mauritania Embassy @ChinaEmbinMR Sep 2019 1,995 9 18 0.22 22 Namibia Ambassador @Amb_Yiming Sep 2019 10,603 135 489 0.38 13 Nepal Ambassador @PRCAmbNepal Jun 2019 51,611 76 4,911 0.50 4 Netherlands Embassy @ChinaEmbNL* Jun 2020 1,522 179 306 0.38 15 Netherlands Staffer @RibiaoChen Jan 2020 290 105 42 0.44 17 Netherlands Ambassador @PRCAmbNL Nov 2019 4,055 45 179 0.35 12 Netherlands Staffer @LiuYanCHN* Mar 2019 101 18 0 Netherlands Ambassador @ChinaEmbNL* Dec 2020 345 4 8 0.00 0 Nigeria Embassy @ChinaEmbNL* Dec 2020 345 4 8 0.00 0 Nigeria Embassy @ChinaEmbnyL* Dec 2020 345 4 8 0.00 0 Nigeria Embassy @China_emb_ng Sep 2019 2,232 706 1,727 0.82 4 Pakistan Staffer @Zhang_heqing* May 2020 17,196 20,096 33,861 0.81 13 Pakistan Embassy @CathayPak Sep 2015 120,640 701 8,821 0.48 8	
Malawi         Ambassador         @LiuHongyang4         Feb 2018         1,829         360         1,111         0.44         11           Malawi         Embassy         @ChinaEmbassy_MW         Nov 2019         624         116         171         0.5         14           Mali         Embassy         @Chine_au_Mali         Aug 2018         2,485         66         25         0.22         12           Mali         Ambassador         @LiyingZHU1         Aug 2019         7,382         33         279         0.38         9           Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42	
Malawi         Embassy         @ChinaEmbassy_MW         Nov 2019         624         116         171         0.5         14           Maldives         Ambassador         @AmbassadorZhang         Jun 2019         13,763         433         6,364         0.59         1           Mali         Embassy         @Chine_au_Mali         Aug 2018         2,485         66         25         0.22         12           Mali         Ambassador         @LiyingZHU1         Aug 2019         7,382         33         279         0.38         9           Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Staffer         @RibiaoChen         Jan 2020         1,522         179         306 <td><b>©</b></td>	<b>©</b>
Maldives         Ambassador         @AmbassadorZhang         Jun 2019         13,763         433         6,364         0.59         1           Mali         Embassy         @Chine_au_Mali         Aug 2018         2,485         66         25         0.22         12           Mali         Ambassador         @LiyingZHU1         Aug 2019         7,382         33         279         0.38         9           Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42 <td></td>	
Mali         Embassy         @Chine_au_Mali         Aug 2018         2,485         66         25         0.22         12           Mali         Ambassador         @LiyingZHU1         Aug 2019         7,382         33         279         0.38         9           Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179	
Mali         Ambassador         @LiyingZHU1         Aug 2019         7,382         33         279         0.38         9           Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0	
Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -         -           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706	
Malta         Ambassador         @YDunhai*         Jan 2021         4,416         140         985         0.44         3           Mauritania         Embassy         @ChinaEmbinMR         Sep 2019         1,995         9         18         0.22         22           Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -         -           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706	
Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -           Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @libijian2         Jan 2020         17,196         20,096         33,861	
Namibia         Ambassador         @Amb_Yiming         Sep 2019         10,603         135         489         0.38         13           Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -           Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33	
Nepal         Ambassador         @PRCAmbNepal         Jun 2019         51,611         76         4,911         0.50         4           Netherlands         Embassy         @ChinaEmbNL*         Jun 2020         1,522         179         306         0.38         15           Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -           Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Staffer         @wangXianfeng8         May 2019         11,176         2,850	<b>©</b>
Netherlands         Staffer         @RibiaoChen         Jan 2020         290         105         42         0.44         17           Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -           Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	<b>©</b>
Netherlands         Ambassador         @PRCAmbNL         Nov 2019         4,055         45         179         0.35         12           Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -           Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         \$\bmathrm{\textit{m}}	<b>©</b>
Netherlands         Staffer         @LiuYanCHN*         Mar 2019         101         18         0         -         -           Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	
Netherlands         Ambassador         @ChinaAmbNL*         Dec 2020         345         4         8         0.00         0           Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	<b>©</b>
Nigeria         Embassy         @china_emb_ng         Sep 2019         2,232         706         1,727         0.82         4           Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	
Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	
Pakistan         Staffer         @zhang_heqing*         May 2020         33,610         21,475         10,275         0.66         14           Pakistan         Consul(ate)         @libijian2         Jan 2020         17,196         20,096         33,861         0.81         13           Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	
Pakistan         Staffer         @WangXianfeng8         May 2019         11,176         2,850         4,864         0.58         13           Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	
Pakistan         Embassy         @CathayPak         Sep 2015         120,640         701         8,821         0.48         8	
Pakistan         Ambassador         @AmbNong*         Oct 2020         28,521         88         561         0.53         2	
Pakistan Staffer @YichuSong* Apr 2020 166 57 0	
Pakistan         Staffer         @GuWenliang*         Feb 2020         964         32         37         0.03         5	
Pakistan Staffer @zgzspirit* Feb 2017 136 7 0	
Panama         Ambassador         @weiasecas         Nov 2017         16,721         4,409         5,919         0.69         2	
Panama         Staffer         @WangJianPaco         Oct 2018         10,133         821         2,578         0.59         2	
Panama         Staffer         @China_Panama*         May 2019         3,210         572         416         0.63         0	
Panama         Staffer         @juliojiangwei         Oct 2017         8,293         147         803         0.14         2	
Panama         Staffer         @LiuChan14790671         Jan 2019         650         8         45         0.15         0	
Panama         Staffer         @liuboleo2         Mar 2018         2,378         5         26         0.00         4	

Papua New			Feb 2020	2,863	347	115	0.48	10		<b>©</b>
Guinea	Embassy	@ChineseEmb_PNG								
Peru	Embassy	@ChinaEmbPeru	Feb 2020	7,298	163	3,347	0.22	1		<b>②</b>
Philippines	Embassy	@Chinaembmanila	Feb 2017	12,743	1,420	1,267	0.55	12		
Poland	Embassy	@ChinaEmbPoland	Jul 2019	3,142	904	1,661	0.81	2		
Poland	Ambassador	@AmbLiuGuangYuan	Mar 2020	5,418	614	6,418	0.85	2		<b>②</b>
Qatar	Ambassador	@AmbZhouJian	Feb 2020	1,672	2,323	1,481	0.60	10		
Russian Federation	Embassy	@ChineseEmbinRus	Feb 2020	2,052	130	115	0.33	10	<b>f</b>	0
Samoa	Embassy	@chinaandsamoa	Sep 2019	2,317	39	32	0.24	22		<b>②</b>
Saudi Arabia	Ambassador	@AmbChenWeiQing	Jul 2019	47,215	576	38,245	0.35	4		0
Saudi Arabia	Embassy	@ChinaEmbKSA	Jul 2019	9,173	425	914	0.50	3		<b>②</b>
Serbia	Ambassador	@AmbChenBo	Mar 2020	10,107	90	4,502	0.57	34		
Serbia	Embassy	@EmbChina_RS*	May 2020	1,331	50	89	0.42	13		
Slovakia	Embassy	@ChinaEmbSVK	Feb 2020	2,141	225	58	0.25	28		<b>②</b>
Slovenia	Embassy	@ChinaEmSlovenia	Dec 2017	2,357	317	13	0.08	15		
Somalia	Embassy	@ChineseSomalia	Jun 2019	5,109	531	924	0.36	4		
Somalia	Ambassador	@AmbSomQinJian*	May 2020	3,327	73	599	0.28	3		
South Africa	Staffer	@indurban1	Nov 2019	2,242	7,932	5,415	0.75	20		
South Africa	Consul(ate)	@CGCHINA_CPT	Mar 2020	3,251	7,698	3,998	0.71	17		
South Africa	Consul(ate)	@ChnConsulateJhb	Oct 2019	336	747	35	0.41	3		
South Africa	Ambassador	@AmbCHENXiaodong*	Sep 2019	13,140	640	1,142	0.63	5		
Spain	Embassy	@ChinaEmbEsp	Sep 2019	26,719	979	6,268	0.44	1		0
Spain	Consul(ate)	@ConsulChinaBcn	Feb 2020	1,719	291	210	0.57	12		<b>②</b>
Spain	Staffer	@YaoFei9	Mar 2018	2,293	1	12	0.17	25		
Sri Lanka	Embassy	@ChinaEmbSL	Mar 2020	8,073	654	3,067	0.49	2		<b>②</b>
Suriname	Ambassador	@AmbLiuQuan	Sep 2019	10,703	4,620	6,358	0.74	21		0
Switzerland	Staffer	@Dr_ZhaoQinghua	Feb 2020	1,980	238	122	0.42	24		<b>②</b>
Syrian Arab Republic	Ambassador	@AmbFengBiao*	Mar 2020	5,079	1	1	0.00	0		
Tanzania, United Republic of	Embassy	@ChineseEmbTZ	Dec 2019	8,343	274	2,137	0.65	2		0
Tonga	Embassy	@embassy_chinese	Nov 2019	913	1	0	-	-		
Trinidad and Tobago	Ambassador	@AmbFangQiu*	Oct 2020	323	68	56	0.35	7		
Trinidad and Tobago	Embassy	@ChineseEmbinTT*	May 2020	115	17	8	0.20	0		
Turkey	Embassy	@ChinaEmbTurkey	Oct 2015	28,230	710	1,761	0.62	1		<b>②</b>
Turkey	Consul(ate)	@chinaconsulist*	Feb 2020	6,204	182	318	0.54	2		
Uganda	Embassy	@ChineseEmb_Uga	Jan 2018	5,437	917	1,543	0.53	3		0
Uganda	Staffer	@FangYi85320692	Jan 2018	778	80	80	0.49	2		
Uganda	Staffer	@chenhuixin	May 2010	176	51	5	0.00	20		
Uganda	Ambassador	@ChinaAmbUganda	Mar 2018	1,813	14	87	0.29	5		0
Ukraine	Embassy	@China_Ukraine_	Mar 2020	250	50	2	0.00	0		

United Arab			Dec 2010	1 077	220	46	0.10	0		
Emirates	Consul(ate)	@CGPRCinDubai	Dec 2019	1,377	228	46	0.16	9		0
United Kingdom	Staffer	@MahuiChina	Oct 2019	4,973	2,837	5,342	0.71	16	血	
United Kingdom	Ambassador	@AmbLiuXiaoMing	Oct 2019	109,477	2,395	43,009	0.84	25	血	0
United Kingdom	Embassy	@ChineseEmbinUK	Nov 2019	25,767	842	3,611	0.63	13	血	<b>②</b>
United			Feb 2020	1,033	82	12	0.17	8		
Kingdom United	Consul(ate)	@chinacgedi*	Mar 2020	695	3	0		_		1
Kingdom United	Consul(ate)	@CCGBelfast*	Jan 2020	764	1	2	0.00	0		
Kingdom United	Consul(ate)	@CGMeifangZhang							_	
States United	Embassy	@ChineseEmbinUS	Jun 2019	83,675	1,153	14,825	0.43	12	▥	0
States	Consul(ate)	@ConsulateSan	Mar 2020	999	674	4	0.25	25		
United States	Consul(ate)	@ChinaConsulate	Feb 2017	3,476	281	257	0.64	12		0
United States	Consul(ate)	@WDonghua	Mar 2020	211	218	0	-	-		
United States	Ambassador	@AmbCuiTiankai	Jun 2019	113,259	132	4,185	0.52	8	血	0
United			Nov 2019	3,322	60	139	0.50	21		<b>©</b>
States Venezuela,	Staffer	@CGZhangPingLA								
Bolivarian Republic of	Ambassador	@Li_Baorong	Aug 2016	9,454	6,982	20,059	0.61	9	血	
Venezuela, Bolivarian			Sep 2019	4,599	486	292	0.27	12		
Republic of	Embassy	@Emb_ChinaVen	00p 2010	1,000	100		0.21	12		<u> </u>
Yemen	Embassy	@ChineseEmbtoYEM	Sep 2019	24,247	311	7,138	0.48	6		0
Zimbabwe	Embassy	@ChineseZimbabwe	Sep 2018	7,928	694	2,157	0.64	3		
Zimbabwe	Ambassador	@China_Amb_Zim	Apr 2019	11,317	424	868	0.35	2		0
Zimbabwe	Staffer	@zhaobaogang2011	Sep 2015	3,681	359	647	0.16	1		
Zimbabwe	Consul(ate)	@salahzhang*	Oct 2011	306	189	88	0.41	7		<u> </u>
Beijing/Int. Organiz.	Beijing/MFA	@zlj517	May 2010	880,976	4,076	98,786	0.59	6		0
Beijing/Int. Organiz.	Ambassador	@Ambassador_Liu	Oct 2019	5,711	2,115	292	0.39	9	血	0
Beijing/Int. Organiz.	Beijing/MFA	@SpokespersonCHN	Oct 2019	791,062	2,036	171,651	0.75	9	血	0
Beijing/Int. Organiz.	Embassy	@ChinaMissionGva	May 2015	3,089	1,730	981	0.68	7		0
Beijing/Int.			Jan 2020	27,321	1,729	11,930	0.73	10	血	0
Organiz. Beijing/Int.	Embassy	@China2ASEAN	Oct 2019	253,596	1,716	48,161	0.74	9	<u></u>	<b>©</b>
Organiz. Beijing/Int.	Beijing/MFA	@MFA_China							<u>m</u>	
Organiz. Beijing/Int.	Beijing/MFA	@chinascio	Sep 2015	45,148	1,656	4,640	0.62	11		
Organiz.	Embassy	@Chinamission2un	Apr 2015	55,579	1,585	9,564	0.66	8	<b>m</b>	<b>©</b>
Beijing/Int. Organiz.	Embassy	@ChinaEUMission	Sep 2013	19,713	1,056	3,616	0.61	7	血	0
Beijing/Int. Organiz.	Embassy	@CHN_UN_NY*	May 2020	1,012	1,021	260	0.50	7		
Organiz.										1

Beijing/Int. Organiz.	Ambassador	@ChinaAmbUN	Feb 2020	6,972	737	3,864	0.62	8	血	
Beijing/Int. Organiz.	Embassy	@ChinaMissionVie	Oct 2019	3,335	385	284	0.37	11		<b>©</b>
Beijing/Int. Organiz.	Beijing/MFA	@WuPeng_MFAChina*	Sep 2020	4,717	384	1,316	0.69	2		
Beijing/Int. Organiz.	Ambassador	@Amb_LiSong	Jun 2020	1,681	364	368	0.51	12		0
Beijing/Int. Organiz.	Beijing/MFA	@FuCong17	Jun 2020	5,034	215	1,115	0.51	9		<b>②</b>
Beijing/Int. Organiz.	Beijing/MFA	@cidcaofficial	Mar 2020	5,920	203	151	0.34	3		
Beijing/Int. Organiz.	Ambassador	@Amb_ChenXu	Dec 2019	5,503	190	667	0.59	8		0
Beijing/Int. Organiz.	Embassy	@China_OPCW*	Jun 2020	859	92	23	0.37	4		0
Beijing/Int. Organiz.	Beijing/MFA	@SpokespersonHZM	Apr 2020	7,401	75	616	0.38	6	血	

Table 4: State-Backed Media Accounts on Twitter between the 9th of June 2020 and 23rd of February 2021

Table 4. State-Dackt			· · · · · · · · · · · · · · · · · · ·				'	
Handle	Language	Created	Followers	Total Tweets	Total Retweets	Suspended RTs (in%)		Verified
@CGTNOfficial	en	Jan 2013	13,620,048	35,075	335,745	5	血	<b>©</b>
@globaltimesnews	en	Jun 2009	1,879,152	32,367	398,392	8	血	<b>②</b>
@XHNews	en	Feb 2012	12,484,409	21,488	322,983	5	血	<b>©</b>
@ChinaDaily	en	Nov 2009	4,314,006	21,024	264,482	7	血	<b>©</b>
@cgtnarabic	ar	Dec 2016	687,833	20,396	45,623	5	血	<b>©</b>
@cgtnamerica	en	Jun 2012	287,681	14,398	56,662	3	血	<b>©</b>
@XHIndonesia	id	Jul 2015	65,010	9,742	2,531	2	血	<b>©</b>
@PDChina	en	May 2011	6,982,273	9,597	314,733	5	血	<b>©</b>
@Echinanews	en	Jul 2011	640,528	8,954	28,527	7	血	<b>©</b>
@cgtnafrica	en	Jun 2012	145,303	8,305	15,329	9	血	<b>©</b>
@cgtnenespanol	es	Aug 2016	595,920	8,090	49,498	5	血	<b>©</b>
@CGTNFrancais	fr	Aug 2013	1,019,523	7,652	11,445	5	血	<b>©</b>
@CCTV_Plus	en	Jan 2015	28,591	6,820	3,993	11	血	<b>Ø</b>
@cgtnrussian	ru	Oct 2016	90,992	6,812	30,177	3	血	<b>©</b>
@XHespanol	es	Jul 2012	117,444	6,036	35,638	4	血	<b>Ø</b>
@CRIjpn*	jp	Feb 2015	20,866	5,662	16,540	2	血	<b>Ø</b>
@CGTNEurope	en	Dec 2016	10,814	5,261	13,817	5	血	<b>Ø</b>
@XHJapanese	jp	Mar 2015	59,491	4,714	30,638	1	血	<b>©</b>
@chinaorgcn	en	May 2010	1,103,211	4,706	12,222	22	血	<b>Ø</b>
@ChinaPlusNews	en	Apr 2009	759,215	4,408	9,391	6	血	<b>©</b>
@XHChineNouvelle	fr	Jul 2014	17,388	4,340	986	4	血	<b>Ø</b>
@XHTurkey	tu	Aug 2015	12,137	4,097	2,904	1	血	<b>Ø</b>
@XHMyanmar	mm	Feb 2015	13,222	3,959	293	0	血	<b>Ø</b>
@GlobalTimesBiz	en	Feb 2016	12,976	3,557	1,584	6	血	<u></u>
@xinhua_hindi*	hi	Jul 2015	4,362	3,293	119	1	血	
@criarabic*	ar	Apr 2013	18,651	3,185	694	20		<b>Ø</b>
@BeijingReview	en	Jun 2009	96,973	3,075	3,387	11	血	<b>Ø</b>
@CCTV	en	Jul 2009	1,034,411	2,837	12,424	9	血	<b>Ø</b>
@XHportugues	ро	Sep 2015	13,350	2,783	2,870	2	血	<b>Ø</b>
@XHRomania	ro	Jul 2015	5,422	2,771	210	5	血	<b>Ø</b>
@CCTVAsiaPacific*	en	Jun 2019	4,834	2,366	1,725	8	血	<b>Ø</b>
@SixthTone	en	Feb 2016	76,638	2,277	6,639	2	血	<b>Ø</b>

@XHNorthAmerica	en	Dec 2016	37,396	2,260	793	2	m	
@peopledailyJP	jp	May 2011	34,512					<b>O</b>
@ChinaDailyAsia	-	Apr 2011	27,879			7	<u> </u>	<b>©</b>
,	en		·				<u> </u>	<b>©</b>
@french_renmin	fr	Aug 2011	85,340	-		6	<u> </u>	<b>②</b>
@PuebloEnLnea	es	Dec 2012	148,742				<u> </u>	<b>②</b>
@CGTNBusiness*	en	Nov 2019	596	1,896		15	<b>1</b>	<b>©</b>
@PeopleArabic	ar	Dec 2012	131,022	1,830	1,028	2	血	<b>©</b>
@Xinhualtalia	it	Nov 2015	6,946	1,755	244	1	血	<b>©</b>
@XHdeutsch	de	Sep 2015	5,901	1,734	105	2	血	0
@XinhuaUrdu*	ur	May 2020	2,050	1,605	1,611	4	Ħ	
@CDAfricaNews	en	Aug 2016	1,485	1,592	1,338	26	血	
@rus_renminwang	ru	Feb 2012	34,104	1,520	2,794	2	血	0
@CDHKedition*	en	May 2020	2,626	1,470	3,052	11	血	0
@CGTNSports*	en	Dec 2016	695	1,425	181	5		
@XHscitech	en	Jun 2016	101,078	1,406	5,260	2	血	0
@CGTNGlobalBiz*	en	May 2017	4,101	1,302	504	6	血	
@CGTN_Culture*	en	Oct 2019	815	1,254	560	5	<b></b>	0
@XHSports	en	May 2016	850,102	1,186	13,632	20	血	0
@CGTNTech*	en	Dec 2018	535	1,138	207	5	血	0
@GtOpinion	en	Mar 2016	3,534	933	1,824	8	血	
@ChinaDailyWorld*	en	May 2020	872	853	284	14	血	0
@RenminDeutsch	de	May 2014	27,167	810	374	2	血	0
@PDOAUS	en	May 2013	14,674	621	13	8	血	
@GlobalWatchCGTN*	en	May 2018	1,675	486	106	8	血	
@XinhuaTravel*	en	Feb 2019	692,563	463	18,977	6	血	0
@CGTNbiz_arabic*	ar	Dec 2019	3,287	463	576	1		
@CGTNSportsScene*	en	May 2017	1,634	386	188	1		
@CGTNGraphics*	en	Dec 2019	329	386	75	4	<b>m</b>	0
@GlobalTimesLife*	en	Apr 2016	1,892	254	2,762	2	血	0
@CGTNStories*	en	Nov 2019	1,362	240	40	0		
@PeoplesDaily5	en	Jan 2019	318	159	30	3		
@CriFrancais*	fr	Jan 2016	75,916	156	41	0	血	0
@PDChinaLife*	en	Aug 2019	1,527,585	146	10,347	18	血	<b>©</b>
@ChinaDaily_Life*	en	May 2020	545	138	262	8	血	<b>©</b>
@PDChinaHK*	en	Jun 2020	1,130	126	6	0	血	<b>©</b>
			l .		l			-

@CNTVFrancais	fr	Jan 2013	1,658	111	18	6	血	0
@CGTNTravel*	en	Dec 2018	520	110	33	6		
@cctvenespanol	es	Jan 2013	15,816	98	68	0	Î	0
@ChinaDailyUSA*	en	Sep 2018	1,055	92	38	8	Î	0
@PDChinaBusiness*	en	Aug 2019	927,835	87	751	20	Î	0
@CDchinawatch*	en	May 2020	496	48	151	7	Î	
@cctvarabic*	ar	Jul 2012	6,599	39	17	0	血	0
@CGTNFood*	en	Oct 2019	73	29	2	0	血	0
@FullFrameCGTN	en	Mar 2014	1,223	25	55	0	Î	0
@chinadailyrus*	ru	Apr 2020	464	14	3	33		
@chinafrance*	fr	Dec 2010	24,213	14	8	25		
@ChinaDailyEU	en	May 2011	10,728	4	14	7	血	0
@CGTNDCproducers*	en	Mar 2016	478	4	0	-	血	
@GlobalTimesRus	ru	Nov 2017	2,647	1	3	0	血	<b>②</b>

Table 5: Diplomat Accounts on Facebook between the 9th of June 2020 and 23rd of February 2021

Country	Page Handle	Followers	N Posts	Reactions	Comments	Shares	Verified
Afghanistan	ChineseEmbassyinAfghanistanDari	1,130	58	423	28	4	
Angola	ChinaEmbAngola	1,023	81	498	22	70	
Australia	ChinainAus	1,213	955	14,836	37,299	801	
Australia	Consulate-General-of-the-Peoples- Republic-of-China-in-Christchurch	241	163	330	6	25	0
Bangladesh	chinaembd	164,788	552	400,590	40,922	18,277	<b>©</b>
Barbados	ChineseEmbassyinBB	295	459	971	7	88	
Beijing/Int. Organiz.	chinascio	4,694	1,154	20,467	1,219	3,807	
Beijing/Int. Organiz.	MFA.CHN	18,388	820	54,020	17,625	6,835	0
Beijing/Int. Organiz.	spoxwangwenbin	9,736	488	51,697	9,202	6,213	<b>②</b>
Beijing/Int. Organiz.	ChinaEUMission	4,202	105	872	55	241	
Belgium	ChinainBelgium	2,383	209	2,852	100	474	
Bosnia and Herzegovina	cnembbh	1,052	172	1,818	48	138	<b>②</b>
Botswana	bw.chineseembassy	19,292	361	23,516	2,349	1,945	
Brunei Darussalam	Chinaembbn	287	794	420	8	54	
Bulgaria	chineseembassyinbulgaria	790	439	5,035	463	587	
Côte d'Ivoire	AMBASSADEDECHINEENCOTEDIVOIRE	1,987	140	1,608	196	404	
Cambodia	ChineseEmbassyCambodia	60,537	167	39,317	2,126	5,916	
Cameroon	AmbChineCmr	1,030	311	680	36	53	
Chad	ambchinetchad	6,609	850	7,252	572	720	
Colombia	chinaembajada	1,330	68	1,331	182	282	
Costa Rica	EmbajadaChinaCostaRica	24,465	797	28,156	6,433	6,300	<b>©</b>
Cyprus	ChineseEmbassyCyprus	3,147	194	4,508	192	324	
Czech Republic	chinaembassy.cz	30,392	676	81,664	7,759	10,204	
Egypt	ChineseEmbinEgypt	23,030	304	182,280	9,201	6,275	
El Salvador	EmbajadaChinaSV	40,722	271	37,142	4,902	3,983	
Estonia	chineseembassyinestonia	104	173	474	24	12	
France	AmbassadeChine	13,447	841	32,804	6,127	7,634	<b>②</b>
Gambia	chinaembgm	3,514	288	1,006	177	135	
Grenada	Embassy-of-the-Peoples-Republic-of-China-in-Grenada	569	265	722	29	126	
Guyana	ChineseEmbassyinGuyana	858	200	1,625	151	674	
Hungary	ChinaEmbHungary	1,258	705	4,729	132	461	
Iceland	Chinalnlceland	177	62	375	11	30	<b>©</b>
Indonesia	ChineseEmbassyinIndonesia	4,702	478	31,277	2,436	5,938	
Iraq	ChineseconsulateErbil	121,310	343	75,125	4,475	2,055	<b>©</b>
Iraq	chineseembassyiniraq1	58,568	290	107,751	16,514	6,848	
Israel	ChineseEmbassyinIsrael	733	114	556	74	58	
Italy	chineseembassyitaly	179,054	524	121,846	9,992	17,589	0
Jordan	Chinaemb.Jordan	1,081	251	2,468	198	130	<b>②</b>
Kazakhstan	ChinaEmbKazakhstan	282	120	289	12	70	

Kenya	Chinese-Embassy-in-Kenya	20,497	430	7,029	1,803	710	
Kiribati	Embassy-of-The-Peoples-Republic-of- China-in-Kiribati	2,558	59	5,982	563	1,237	
Latvia	EmbassyofChinainLatvia	383	547	630	8	75	
Lebanon	ChinainLebanon	3,596	168	11,193	812	1,350	
Macedonia, the Former Yugoslav Republic of	chinaembassynmk	3,523	478	8,170	451	384	
Malawi	ChineseEmbassyinMalawi	554	16	27	1	5	
Malaysia	chinaembmyCN	62,897	490	195,049	10,890	18,485	
Malaysia	chinaembmy	66,236	468	169,943	14,128	25,910	0
Mali	AmbChineMali	2,110	23	926	118	101	
Myanmar	paukphawfriendship	196,191	170	133,555	73,448	30,830	
Namibia	ChineseEmbassyinNamibia	3,375	181	370	85	41	
Nepal	ChinaEmbNepal	7,126	96	15,981	1,535	1,209	
Netherlands	chinaembnl	41,868	166	16,121	553	404	
New Zealand	ChineseEmbassyInNZ	1,267	71	793	567	129	
Niger	AmbChineNiamey	1,898	126	1,422	176	272	<b>©</b>
Nigeria	ChineseEmbassyInNigeria	994	418	2,168	217	1,390	
Norway	ChinalnNorway	3,694	275	9,056	2,292	437	<b>©</b>
Pakistan	Chinese-Embassy-in-Pakistan	5,504	40	943	246	151	
Papua New Guinea	ChineseEmbPNG	746	148	609	43	277	<b>©</b>
Philippines	ChinaEmbassyManila	121,325	1,305	186,225	23,772	26,587	-
Philippines	AmbHuangXilian	11,564	83	20,588	5,594	3,308	
Poland	ChinaEmbPoland	737	435	2,019	65	52	
Romania	AmbasadaChineiinRomania	17,849	1,785	48,019	3,128	3,555	0
Samoa	chinaandsamoa	217	1	5	5	1	
Sierra Leone	Chinese-Embassy-in-Sierra-Leone	11,390	68	41,545	1,129	424	
Singapore	Chinaemb.SG	92,143	255	32,465	2,968	5,216	
Slovenia	ChinaEmbSVK	718	465	2,014	46	219	
South Africa	ChinainJoburg	894	423	171	30	30	
South Africa	chinainsa	6,595	344	1,619	416	352	
South Sudan	chinaemb.ss	4,020	162	2,230	303	167	
Sudan	ChineseEmbassyinSudan	7,905	5,147	18,686	1,706	1,146	
Tanzania, United Republic of	tz.chineseembassy	3,588	34	368	48	39	
Thailand	ChineseEmbassyinBangkok	56,885	121	35,219	2,487	4,260	
Timor-Leste	EmbassyofChinainTimorLeste	8,972	620	13,748	484	4,539	<b>②</b>
Tonga	Embassy-of-the-Peoples-Republic-of-China-in-the-Kingdom-of-Tonga	952	43	234	10	17	
Tunisia	AmbassadedeChineenTunisie	24,320	234	11,984	2,018	3,552	<b>©</b>
Turkey	ChinaEmbTurkey	4,432	156	20,465	2,991	1,018	<b>②</b>
Uganda	Chinese.Emb.Uga	1,130	413	1,491	216	183	
United Kingdom	ChineseEmbinUK	4,798	67	1,107	2,433	124	
-		82,528	683	18,034	714	2,356	<b>②</b>

United States	ChineseEmbassyinUS	12,645	474	15,568	4,490	3,121	0
United States	ChineseConsulateLA	407	329	487	35	101	0
United States	ChinaConsulateCHGO	534	262	350	57	86	0
Viet Nam	ChineseEmbassyinHanoi	27,756	458	60,246	21,016	2,868	0
Yemen	chineseembtoyemen	1,849	62	2,943	466	384	0

Table 6: State-Backed Media Accounts on Facebook between the 9th of June 2020 and 23rd of February 2021

Page Handle	Language	Followers	N Posts	Reactions	Comments	Shares	GOV Lab	Verified
ChinaGlobalTVNetwork	en	115,072,931	25,832	149,970,716	2,186,539	2,342,347	血	<b>©</b>
XinhuaNewsAgency	en	89,085,586	21,056	29,394,288	745,779	577,773	血	<b>②</b>
cgtnamerica	en	1,545,291	12,579	825,200	77,999	267,097	血	0
globaltimesnews	en	61,900,088	9,469	13,009,465	567,159	505,514	血	<b>©</b>
chinadaily	en	104,070,079		28,891,751	614,720	1,508,326	<b>m</b>	0
cgtnafrica	en	4,655,290	8,917	1,182,979	58,013	73,197	<b>m</b>	0
echinanews	en	1,393,939	8,865	749,507	8,752	22,149		0
CCTVAPOfficial	en	324,248	8,820	212,507	2,936	17,909		0
chinaplusamerica	en	3,153,358	8,409	3,466,577	1,530,595	948,057	<b>m</b>	<b>Ø</b>
							<u> </u>	<b>Ø</b>
PeoplesDaily	en	86,262,441	8,323	26,577,472	523,413	1,234,301	<u> </u>	0
cgtnenespanol	es	16,905,860	8,125	1,949,548	149,538	255,519		
CMGShqip	al	1,114,546	7,789	81,931	2,038	4,678		0
cgtnarabic	ar	15,487,977	7,451	4,234,191	208,445	333,525	血	
CGTNFrancais	fr	20,414,073	7,376	5,364,336	72,605	89,269		0
chinaplussa	en	789,233	7,338	159,731	37,467	17,689	<b>1</b>	<b>©</b>
cgtnrussian	ru	1,039,247	7,201	723,549	196,701	85,618		0
xinhuahindinews	hi	170,416	6,796	29,427	155	154		
XH.NewsAgency	en	88,741,242	6,575	578,458	26,510	35,336	<u> </u>	0
crihausaradio	ha	1,039,028	6,561	315,364	34,421	22,153		
Xinhua9	?	88,741,658	6,023	1,414,217	128,819	146,475		<b>©</b>
japanese.cri	јр	2,158,819	5,840	263,696	1,917	2,419		
persian.cri.cn	ре	799,685	5,762	1,013,327	16,845	13,544		
criarabic1	ar	2,772,497	5,669	148,470	4,215	3,807	_	
chinaplusnews	en	25,585,455	5,599	3,140,432	61,584	240,840	<u> </u>	0
cinskyrozhlas.cri	CZ	905,476	5,543	293,198	1,030	2,346		<u> </u>
chinadailyhkedition	en	451,536	5,155	325,599	24,495	96,563		<b>©</b>
xnswahili	SW	88,719,980	5,049	1,133,366	30,567	12,503	血	<b>②</b>
cgtneuropeofficial	en	1,682,329	4,816	2,251,220	312,543	464,016		0
cctvcom	en	49,796,057	4,719	8,742,434	77,616	296,298	血	<b>©</b>
XinhuaChineNouvelle	fr	88,750,090	4,694	2,897,238	35,447	42,569	<b>m</b>	0
Criltaliano	it	379,745	4,569	314,726	12,004	44,314		
ChinaABC	ba	4,718,305	4,566	2,269,489	223,683	121,489		0
criespanol	es	3,696,013	4,414	3,401,302	190,485	675,737		<b>©</b>
cri.portugues	pt	837,375	4,405	219,159	9,773	15,996		1.0
CGTNGlobalBusiness	en	98,554	4,223	33,384	207	1,000	<b>m</b>	
crihungarian	hu	75,724	4,159	19,227	1,094	2,785		
XHTurkey	tu	88,695,002	4,105	60,301	2,605	7,978		0

WeAreChinaVideos	en	12,980,264	4,011	3,475,963	62,125	97,650	血	
criviet	vi	1,910,970	3,999	125,037	9,089	8,255		
crihindiservice	hi	3,574,205	3,964	490,434	36,495	11,804		
CRIGerman	de	767,583	3,934	22,223	1,232	1,929		
NewsContent.CCTVPLUS	en	640,623	3,797	765,283	12,949	47,176		<b>②</b>
cdroundtable	en	35,348	3,699	874	37	104		
crisrpski	sr	409,441	3,662	85,785	6,546	6,031		
CRI.Bulgarian	bu	438,589	3,537	109,816	3,516	13,511		
chinaxinhuanewskorean	kr	88,700,677	3,521	9,533	852	742	血	0
Radio-Chine-Internationale	fr	2,646,665	3,225	264,800	7,293	11,660		
chinaorgen	en	34,072,298	2,937	3,103,941	34,844	38,675	血	<b>②</b>
BJReview	en	692,594	2,915	119,522	1,226	2,117	血	
xinhua.romania	ro	88,701,998	2,861	75,529	2,429	10,316		0
PDappofficial	en	586,173	2,802	172,256	2,415	8,409		
renminwangkorea	ko	90,080	2,799	13,036	519	885		
criromanian	ro	409,282	2,613	59,036	2,570	8,082		
CRIFILIPINOSERVICE	ph	1,000,955	2,572	140,409	2,705	3,111		
moscowpeople	ru	315,368	2,500	737,382	16,855	238,178		
ChinaorgcnArabic	ar	34,096,292	2,470	223,083	4,670	5,963		<b>②</b>
PortuguesePeople	pt	1,282,192	2,448	124,302	3,554	7,124		
InvestinginChina	en	4,532,001	2,439	344,509	3,918	1,422		
criesperanto	ер	8,911	2,252	17,975	1,538	3,894		
korean.cri	ko	4,318	2,244	279	23	47		
Puebloenlinea	es	1,768,575	2,228	107,115	2,868	11,265		
sixthtone	en	497,228	2,146	75,835	7,870	15,741		<b>②</b>
jinminmou	jp	151,911	2,118	29,706	908	2,799		
Beijing-Information	fr	1,210,831	2,052	486,925	3,188	8,362		
XHNorthAmerica	en	387,161	1,999	121,570	49,105	7,376	<u> </u>	
cctvcom.ar	ar	49,376,206	1,932	339,764	12,028	13,663	<b>1</b>	0
cctvcom.fr	fr	49,318,805	1,901	211,656	1,839	10,336	血	<b>②</b>
BJRundschau	de	89,546	1,870	79,002	1,749	5,188		
peoplearabic	ar	3,294,633	1,860	212,152	6,098	7,615		
cctvrussian	ru	49,313,157	1,797	138,002	2,326	38,153	血	<b>②</b>
cctvenespanol	es	49,330,034	1,785	297,326	7,776	57,618	血	0
ChinaorgcnRussian	ru	34,028,648	1,734	158,924	5,382	19,869		0
cctvmongol	mo	55,591	1,703	13,216	1,608	2,346	血	
chinadailyglobalweekly	en	9,645	1,686	1,022	385	428		
XinhuaSciTech	en	27,347,416	1,385	8,162,758	63,681	116,565	血	0
CGTNRediscoveringChina	en	55,076	1,292	24,715	86	623	血	
CGTNSportsScene	en	830	1,270	1,758	42	409		
ChinaorgcnFrench	fr	34,033,040	1,175	171,129	1,696	3,194		0
xhsports	en	30,217,941	1,151	6,740,926	38,033	32,875	血	0

germanchinaorgcn	de	34,028,606	1,022	55,065	3,065	2,907		<b>②</b>
ChinaDailyTravel	en	3,766,108	963	293,763	6,779	18,060	血	0
chinaorgcnjp	jp	34,021,939	943	42,705	498	799		0
ChinaDailySciTech	en	7,398,273	807	999,201	16,710	118,364	血	0
XinhuaTravel	en	23,792,280	789	9,491,726	58,647	301,896	血	0
ChinesischeVolkszeitungOnline	de	164,200	750	81,944	15,918	15,115		
cgtntravelogue	en	52,372	748	128,040	438	1,527	血	
icon.cgtn	en	604	740	875	21	207		
crossover.icon.CGTN	en	11,834	702	167	9	11		
PDOAUS	en	639,461	627	44,205	412	1,005		
XinhuaUK	en	266,128	589	4,260	129	414	血	
FlyOverChina	en	21,666,452	526	5,123,155	41,889	174,645	血	<b>©</b>
cgtnclosertochina	en	70,702	335	257	36	36	血	
cctvnewsapp	en	215,587	250	399	22	59		
globaltimeslife	en	15,458	173	54	2	28		
cgtnassignmentasia	en	66,000	16	50	8	8		

#### A.2 Engagement with Diplomat and State Media Content on Facebook and Twitter

Table 7: Engagement Statistics per Platform and Account Type

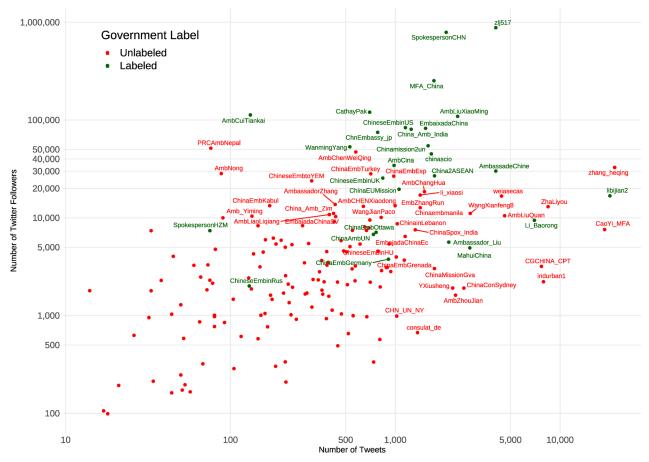
Account Type	Platform	Accounts	Total Posts	Likes	Replies	Shares
Diplomat Accounts	Twitter	189	<b>201,382</b> (111,023 of which RTs)	<b>4,479,407</b> (50)	<b>684,539</b> (8)	<b>1,084,270</b> (12)
Diplomat Accounts	Facebook	84	34,041	<b>2,461,127</b> (72)	<b>365,867</b> (11)	<b>262,882</b> (8)
State-Backed Media (English)	Twitter	49	<b>209,194</b> (14,134 of which RTs)	<b>8,240,191</b> (42)	<b>1,545,502</b> (8)	<b>2,595,147</b> (13)
State-Backed Media (Other Language)	Twitter	33	110,093 (806 of which RTs)	<b>596,650</b> (6)	<b>30,241</b> (0)	<b>313,573</b> (3)
State-Backed Media (English)	Facebook	44	200,811	<b>308,708,804</b> (1537)	<b>7,258,145</b> (36)	<b>9,634,242</b> (48)
State-Backed Media (Other Language)	Facebook	51	189,568	<b>31,069,352</b> (164)	<b>1,489,220</b> (8)	<b>2.413.639</b> (13)
TOTAL SUM		449	945,089	355,555,531	11,373,514	16,303,753

Source: Authors' calculations based on diplomat retweets collected between the 9<sup>th</sup> of June and 23<sup>rd</sup> of February 2021. Note: Average likes, replies, and shares per post are denoted in parentheses. Retweets cannot generate likes or other engagement themselves and are therefore excluded from the average calculations. The average number of likes, replies and shares per post are shown in parentheses.

#### A.3 Supporting Figures

Figure 10 supplements the account labeling analyses and shows that there is a relationship between activity (x-axis), number of followers (y-axis) and labeling status, but that there are also many inconsistent accounts in between.

Figure 10: Government-Affiliation Labeling Status on Twitter by Follower Count and Activity (log scale)



Source: Authors' calculations based on diplomat retweets collected between the 9th of June 2020 and 23rd of February 2021. Note: X-axis and y-axis in logarithmic scale. Labeling Status recorded on the 1st of March 2021.

Figure 11 shows 8 example days on which the user @Xiaojin05484077 retweeted the PRC ambassador to the UK multiple times with just seconds in between retweets. The little labels above the retweet points denote the number of seconds between two retweets. For example, on 29 June, this user retweeted the PRC ambassador 32 times in just 107 seconds, with the time intervals between consecutive retweets ranging between 1 and 11 seconds.

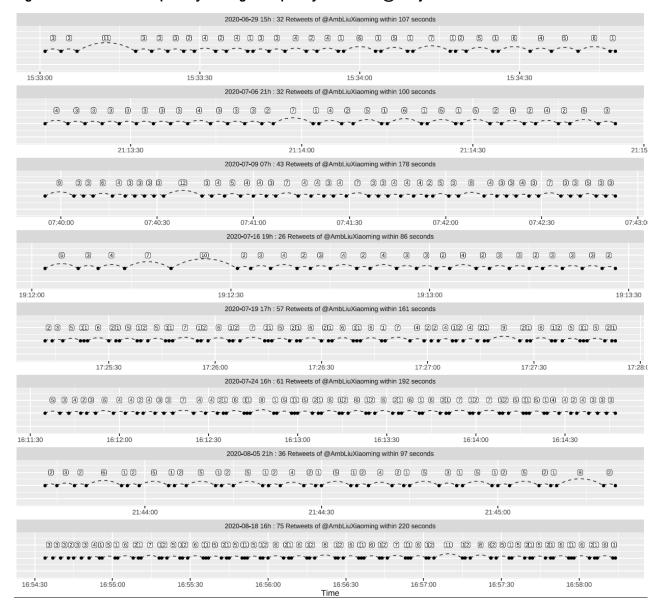


Figure 11: Selected Example Days of High-Frequency Retweeter @Xiaojin05484077.

Source: Authors' calculations based on diplomat retweets collected between the 9<sup>th</sup> of June 2020 and 31<sup>st</sup> of January 2021. Note: Selected days where high retweet rates occurred. The little labels show the number of seconds between consecutive retweets. Figure 12 shows the median time that the 1% of most active accounts wait between two consecutive retweets. As the zoomed in panel on the bottom of the figure shows, many accounts tweet with very little latency.

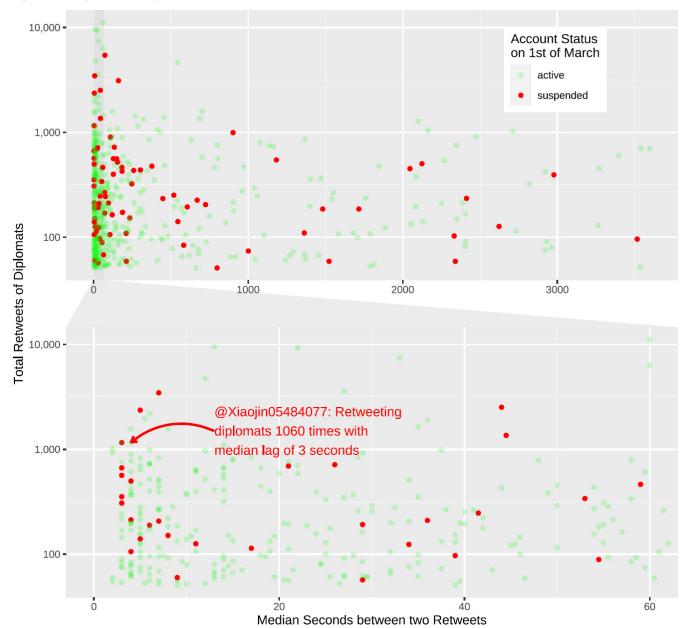


Figure 12: High-Frequency Retweeters

Source: Authors' calculations based on diplomat retweets collected between the 9th of June 2020 and 31st of January 2021 Note: Accounts with median lag time between retweets above one hour excluded for better readability. This graph includes the top 1% of the most active accounts. The y-axis denotes the by total amount of tweets (log-scale) and the x-axis shows the median lag between consecutive tweets.

Figure 13 shows the 20 PRC diplomats who received the most retweets from subsequently suspended accounts.

Figure 13: Total Number of Retweets by Subsequently Suspended Accounts

Source: Authors' calculations based on diplomat retweets collected between the 9th of June 2020 and 31st of January 2021. Note: This figure displays the accounts with the 20 highest levels of retweets. Accounts suspended as of the 1st of March 2021.





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