# Media Manipulation (In)visibility in Chinese Newspapers*

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A common premise in the contemporary literature on Chinese media is that state-manipulated news has become more difficult for Chinese readers to identify over the past thirty years. This increase in difficulty has paradoxically been driven by the incompleteness of media control in Reform Era China. With media commercialization, content placed by the state propaganda apparatus is now mixed alongside content written by newspapers themselves for commercial and editorial objectives (Stockmann, 2013). Further complicating matters, the tendency for propaganda authorities to copy the strategies and rhetoric of commercialized media (Brady, 2009; Lu and Pan, 2020) has rendered content produced by the state and content produced by newspapers similar in style and form. This ambiguity is especially likely for "soft propaganda," or propaganda aimed at "guiding public opinion"(舆论导向)[1] about a topic or event through subtle messaging and curation of information (Mattingly and Yao, 2021), as opposed to overt "hard propaganda," ideological content and news

[1]This buzzword became a particularly prominent slogan in Chinese media work after the Tiananmen Square Massacre in 1989. This slogan represents a shift from public opinion suppression in the Maoist period to public opinion "guidance" in the Reform Era. Propaganda work during this period moved away from solely promoting official meetings and discourse to reporting on events with high public demand, albeit within a framework and details shaped by propaganda objectives. See Chan (2007) for more details on the history of this term.

about top leaders (Huang, 2018, 2015).

Despite the difficulty in distinguishing state manipulated content from newspaper produced content, there is growing evidence that many Chinese citizens engage in information compensatory behaviors, suggesting widespread awareness of state media manipulation. A minority of Chinese citizens access censored information with VPNs or other technologies to bypass the great firewall,[2] but Chinese citizens also compensate with unverified domestic sources of information, including word-of-mouth, online blogs and individual "self media" authors on WeChat and QQNews public accounts (Zhu and Wang, 2021). These patterns in information compensation suggest widespread recognition of media manipulation by the state: latent demand for alternative sources of information implies widespread recognition of the informational deficiencies of domestic media. While Chinese citizens may generally recognize the existence of media manipulation, it is unclear whether they can distinguish between newspaper articles placed by the state and newspaper articles written by newspapers themselves in individual cases. Unpacking this distinction between generalized awareness of state media manipulation and case-specific discernment is crucial for understanding the causal mechanisms of state propaganda in China. Previous debates around whether state media manipulation has de-mobilization (Huang, 2015, 2018; Carter and Carter, 2021), persuasion (Kennedy, 2009; Mattingly and Yao, 2021), or backlash effects (Roberts, 2019, 2018; Gandhi and Li, 2019) cannot be adjudicated without addressing the prior question of whether Chinese citizens can identify what is and what is not state manipulated content.

This paper employs a pre-registered survey experiment to test mainland Chinese respondents' capacity to distinguish between newspaper articles placed by the state and those written by newspapers themselves.[3] Previous related work has focused on propaganda and

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[2]There is mixed evidence for this behavior. Chen and Yang (2019) find in a field experiment minimal latent demand for censored information, while Hobbs and Roberts (2018) find evidence that sudden access does indeed lead to information seeking behaviors for censored information. Regardless VPN users likely represent a small percentage of the population. Zhang (2020) estimates that about one in a hundred people in China uses VPNs to jump the firewall.

[3]This experiment was pre-registered on the Open Science Foundation archive. Please follow this anonymized link to the pre-registration: https://tinyurl.com/2rt6bra5.

misinformation discernment in democratic contexts, including individuals' capacity to identify misinformation or "fake news" (Pennycook and Rand, 2019; Pennycook et al., 2021; Pennycook and Rand, 2018; Batailler et al., 2021) as well as respondents' capacity to identify newspaper articles paid for by the Chinese government in U.S. newspapers (Dai and Luqiu, 2020). We focus on domestic Chinese audiences and their capacity to discern state planted material from articles written by newspapers themselves. We focus on a particular type of state media manipulation: scripting directives, internal instructions from state authorities to media organizations to either reprint exactly or loosely follow a proscribed script when reporting on a topic or event. In a repeated response design our respondents were shown five print newspaper articles previously published in a domestic Chinese newspaper. For each article, respondents were randomly assigned to read either an article written in compliance with a scripting directive or a defection written by a newspaper in defiance of those same instructions. These paired cases of compliant articles and defections offer a unique opportunity to compare respondents' evaluations of newspaper articles produced through different processes (state direction vs. independent reporting) but written in response to the same event. After reading each article, respondents were then asked whether they thought the publication of the article was influenced or guided by the state. If Chinese respondents have the capacity to distinguish between articles manipulated by the state and those produced by newspapers themselves, we would expect them to be more likely to label the compliant articles as "influenced or guided" versus the defecting articles.[4]

Our study also unpacks one potential motivation newspapers may have for defecting from propaganda instructions: gaining reader attention. In a separate experiment, we also tested respondents' interest in engaging with articles written in compliance with versus defiance of propaganda instructions. Newspapers may choose to ignore state instructions to reprint a

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[4]We developed this question through interviews with Chinese respondents and with a survey pre-test. We discuss below how we also gave respondents a description of what influence or guide could mean. Asking respondents directly whether they thought the article is "propaganda" is vague and may elicit response bias. We developed the wording of the question to be a neutral description of the way the state actually intervenes in the media environment.

proscribed manuscript if they believe that by defecting they will receive from their readers an "attentional dividend," an increase in attention and engagement above and beyond what they would receive by complying with state instructions (Waight, 2022).

We found evidence for Chinese respondents' ability to distinguish between articles placed by the state and articles places by newspapers themselves in individual instances of state manipulation. Across all article sets, respondents who read an article written in compliance with a propaganda directive were 7 percentage points more likely to label the article they read as influenced by the state than respondents who read an article written in defiance of a propaganda directive. We also tested for which signals respondents pay attention to when making their discernments. We used a multi-level treatment, randomly varying whether the compliant article included an attribution to Xinhua News Agency. As we discuss below, Xinhua News Agency attribution is a reliable (albeit imprecise) signal for whether an article was published in compliance with a propaganda directive rather than written by newspapers themselves. We found no difference in outcomes between respondents assigned to compliant articles with and without Xinhua attribution, indicating that respondents paid attention to content clues in the substance of documents rather than attribution signals of state manipulation in making their discernments.

## Incomplete Media Control and (In)visible Manipulation

The challenge that Chinese readers face in distinguishing between state manipulated material and newspaper produced material can be traced in part to the incompleteness of media control in post-reform China. Before the beginning of reform in 1978, all media, including the small number of newspapers in circulation, received their funding from the state (Lynch, 1999, p. 22). In the 1980s, media organizations began to receive more and more of their funding from commercial sources such as advertising rather than direct and indirect state subsidies. This transition was accompanied by a dramatic expansion in the number of

newspapers in China (Stockmann, 2013). The chart below summarizes this explosion in the number of print newspapers in China from 1978 to 2020.[5]

Expansion and Contraction of Newspapers in Reform Period, 1978–2020
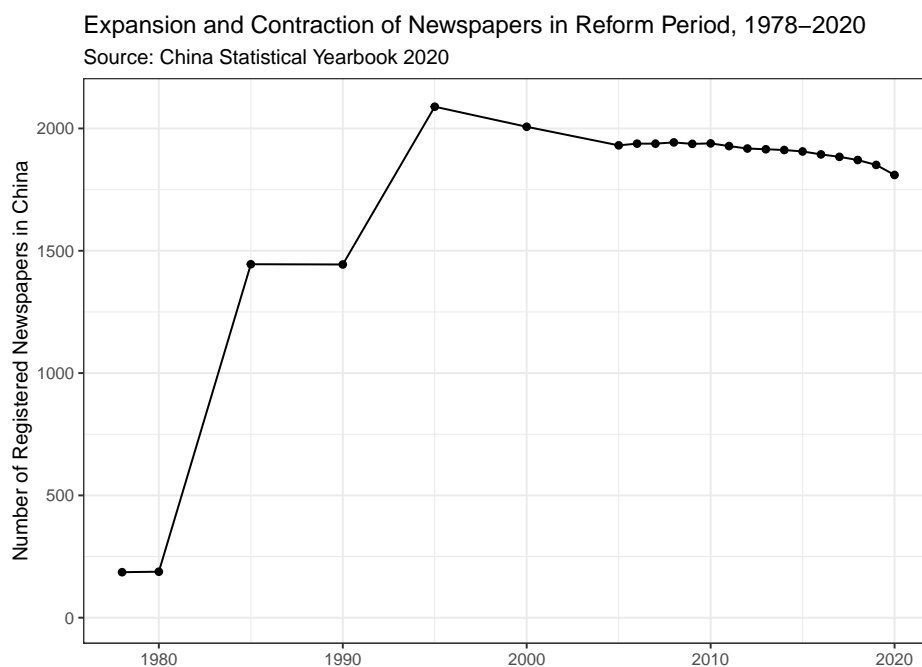Source: China Statistical Yearbook 2020



Figure 1: Count of Print Newspapers in China, 1978-2020

Much of this expansion was fueled by growth in semi-commercialized newspapers which were partly owned and managed outside the party state apparatus. The growth of these newspapers as well as the partial commercialization of older "party papers," mostly daily newspapers associated with provincial and city-level party committees as well as central bureaus, resulted in the mixing of content written by newspapers themselves for editorial and commercial objectives with content placed by the propaganda apparatus (Stockmann, 2013).

This mixing of content occurred because even as commercial-driven content emerged, the propaganda apparatus maintained control over newspapers of all types. The Publicity Department of the Central Committee of the Chinese Communist Party or the Central Publicity Department (CPD) has the authority to issue instructions to newspapers on what

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[5]The data displayed in this chart comes from the 2020 China Statistical Yearbook (中国统计年鉴) online version. http://www.stats.gov.cn/tjsj/ndsj/2021/indexch.htm. Accessed January 26th, 2020.

content to print and what content to refrain from printing (Shambaugh, 2017). The CPD does this through a range of mechanisms, including setting general regulations for newspapers (Brady, 2009) and issuing one-off instructions on how to cover news related to a specific event. The CPD also maintains indirect control over newspapers by managing local propaganda departments who directly oversee papers at their level of governance.

In this experiment, we focused on one type of control mechanism: scripting directives. These directives are internal instructions from state propaganda authorities to newspapers to use a specified script. Articles written in compliance with such instructions are articles that follow directive instructions by forwarding or using a specified script. For example, consider the following directive.

> Concerning the Sichuan Jiuzhaigou earthquake, you must take Xinhua News Agency manuscripts as your standard, you are prohibited from using photos or videos which would incite panic, you must remove any harmful information.[6]

This directive was distributed to media organizations on August 8th, 2017, the same day as the Sichuan earthquake, and then leaked to *China Digital Times*.[7] A compliant article for this directive would be an article which published on the Jiuzhaigou earthquake with details and prose copied from a Xinhua News Agency article on the quake.

Incomplete media control occurs not only through media commercialization's circumscription of the content subject to state instructions, but also through the uneven effect of those instructions. Media defections from state instructions are one such mechanism that drives incomplete state media control in China. In the case of the scripting instructions that are the focus of this experiment, defections are articles that defy directive instructions by printing on the same story or event referenced in the directive but with content and prose developed and written by the newspaper itself. In the case of the example directive above, a

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[6]The original Chinese: "关于四川阿坝九寨沟地震一事，一切以新华社通稿为准，禁止使用引起恐慌照片及视频，及时关注网上舆论变化，删除有害信息。" https://chinadigitaltimes.net/chinese/565856.html. Link accessed December 12, 2021.

[7]*China Digital Times* is a a US-based bilingual media organization which regularly publishes leaks from Chinese government agencies. Despite no documentation on the directive date we know it was distributed on August 8th because the date CDT published the directive was the same date as the earthquake.

defiant article would be an article which published on the Jiuzhaigou earthquake with details and prose developed by the newspaper themselves. Incomplete media control has created significant ambiguity for Chinese citizens concerning what content is subject to state control, rendering defections challenging to distinguish from compliant articles.

## Discerning Propaganda

When considering the question of whether respondents can tell if an article was placed by the state or by newspapers themselves, it is insufficient to only ask respondents to evaluate a series of articles which were published through state manipulation. If sixty percent of respondents said that a given manipulated article was placed by the state, it could be that these respondents were better than chance at predicting whether an article is state manipulated, or it could be that the majority of these respondents think *all* articles are manipulated by the state. This later quantity of interest would speak to respondents' bias or "overall belief": do they tend to think that all articles are manipulated by the state? In order to test respondents' ability to *discern* manipulated articles from independent reports, we must compare the evaluations of respondents when they are exposed to manipulated articles versus independent reporting *on the same topic or event*.[8] The gap between respondents' evaluations when they are exposed to state manipulated articles versus newspaper produced reports gives us an estimate for respondents' ability to discern state manipulated material from material produced by newspapers themselves. Our first hypothesis is that Chinese respondents are more likely to identify articles written in compliance with propaganda directives as state manipulated content than articles written in defiance of those same directives.

While increasingly used in research on fake news reception (Pennycook and Rand, 2019; Batailler et al., 2021; Pennycook et al., 2021), the intellectual origins of the discernment framework are the psychological tradition of signal detection theory (Wickens, 2001). This

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[8]For a review of the difference between the bias and discernment traditions in fake news research, see Pennycook et al. (2021).

literature is concerned with individuals' capacity for distinguishing *signal* from *noise.* For example, can individuals identify the signal of a tone or beep from background white noise?[9] A related question from the signal detection perspective is which evidence a respondent pays attention to when discerning signal from noise. In the tone experiment, we could imagine varying the decibel of the tone respondents were exposed to and estimating differences in discernment at different levels of the tone. In manipulation discernment, we would want to know which pieces of evidence respondents pay attention to when distinguishing manipulated articles from newspaper produced articles. We focused on two pieces of evidence in particular. Respondents may potentially be able to discern manipulated articles from newspaper produced reports based on the manipulated articles' phrasings, framings, and choice of details to include. We called this evidence *content clues.* The Chinese state is highly attentive to linguistic details in their propaganda campaigns, placing great weight on the choice of specific slogans and framings (Yuan, 2021; Schoenhals, 1992). Previous exposure to these content clues in official media settings may afford respondents the ability to discern propaganda articles when these clues are present.

A second possibility is that respondents may attend more to *attribution clues.* As noted in the introduction, attributions to Xinhua News Agency are a reliable, albeit imprecise, signal that an article has been placed by the state propaganda apparatus for print newspaper articles. In a separate study of propaganda in print Chinese newspapers, we predicted 24.1% of 975,504 articles which referenced Xinhua News Agency (out of a total sample of 5,193,027 articles, 18.9%) to be propaganda articles. By contrast, we only predicted .8% of the articles that did not reference Xinhua News Agency to be propaganda articles.[10] While

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[9]In a classic signal detection experiment outlined by Wickens (2001), the respondent is made to listen to white noise with a set of earphones. The experimenter randomly adds a faint tone for some respondents. The respondent must then decide at the end of the listening period whether they heard the tone (pg. 3). This page number refers to the digital version of the book: https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780195092509.001.0001/acprof-9780195092509.

[10]In this paper, written with my collaborators Molly Roberts, Brandon Stewart, and Yin Yuan, we develop methods to automatically detect instances where print newspapers comply with scripting propaganda directives. (Roberts et al., 2022)

Xinhua attribution is a noisy signal, the common pairing of Xinhua attribution and state manipulation may afford Chinese respondents insight into the Chinese propaganda system that they can then use in their discernments. For example, they may notice that articles that have pro-state sentiments tend to include a Xinhua attribution, leading them to update their prior expectations and predict future Xinhua attributed articles to be propaganda articles. Our second hypothesis is that Chinese respondents are more likely to identify articles written in compliance with propaganda directives as manipulated content when they carry an attribution to Xinhua News Agency than when they carry no such attribution.

As noted in the introduction, we were also interested in whether respondents engage more with manipulated content versus newspaper produced content. Newspapers may be inclined to defect from propaganda instructions in order to increase their readership. If this is the case, we would expect that on average respondents are more interested in reading defections than articles written in compliance with propaganda directives. There is also reason to expect the relationship to go in the other direction. Previous research has demonstrated a high level of trust in Xinhua News Agency (Hill and Roberts, 2018). For reasons of credibility, we might expect higher interest in reading propaganda articles, especially propaganda articles with Xinhua attributions, than defections. Our non-directional third and fourth hypotheses were that we would see differences in engagement by whether the article was written in defiance of a propaganda directive, in compliance without an attribution, and in compliance with an attribution to Xinhua News Agency.

## Identifying Propaganda and Defections

We identify articles written in compliance and defiance of state manipulation by drawing on a set of leaked scripting propaganda directives. These directives, similar to the example directive included above, were collected and published by the US-based bilingual media organization *China Digital Times*.

We limited the set of leaked directives published by *China Digital Times* to directives issued by a central state bureau which explicitly instructed newspapers to forward articles from Xinhua News Agency. We limited the set in this manner because a selection of Xinhua scripts are published in the Xinhua Daily Telegraph. We were, thus, in the lucky position of being able to identify potential scripts that newspapers could have drawn on when complying with the terms of the directive. Xinhua scripting directives represent the majority of scripting directives we observed in the leaked sample. Of 228 directives which required newspapers to draw or forward a specified script, 130 (57%) specified Xinhua as a source. We further limited the set of directives to those that were issued after 2017[11] and for which we were able to identify at least one relevant script in the *Xinhua Daily Telegraph*.[12] This set included thirteen directives concerning eleven unique events or topics.[13]

We identified articles written in compliance with directives by finding print newspaper articles from a database of ninety-one newspapers which copied from one of the relevant Xinhua Daily Telegraph scripts. The majority of these ninety-one newspapers are "party papers," directly affiliated (主管) with a party or state organ, although some are more commercialized papers. We searched for potential matching articles by identifying articles that included at least one of a set of loose keywords for each directive in a window of ten days before to ten days after the directive leak date.[14] We then directly compared the article texts with the texts of Xinhua Daily Telegraph scripts linked to the directives by transforming the article texts and Xinhua texts into vectors of word tri-grams. Articles that had greater than .55 cosine similarity with a Xinhua script we estimated to be a copy of that script.

We attempted to identify defections in the set of nine directives for which we found at

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[11]We follow (Pennycook et al., 2021) in limiting our analysis to recent articles.

[12]We missed one directive that should have been included in the sample. This directive met these criteria. https://chinadigitaltimes.net/chinese/549508.html. Accessed December 10, 2021. This vagueness fo the text of this directive would have made it difficult to identify defections for, however. The directive read: "Concerning U.S.-China relations, you must use Xinhua News Agency manuscripts." Original Chinese: "有关中美关系的报道，必须采用新华社通稿。"

[13]In the analysis we merged two directive about the U.S. election into one.

[14]In the vast majority of cases directives are leaked to CDT immediately after they are released internally to media organizations: 95% of directives were leaked within ten days of when the event targeted by the directive occurred.

least one matched compliant article. Propaganda defections were much more challenging to identify than compliant articles, as not copying from one of the Xinhua Daily Telegraph scripts that we observed is an insufficient indicator of defiance (as there may be Xinhua scripts which we did not observe that an article could have copied from). We identified potential defections as articles which 1) had minimal textual overlap with any of the Xinhua scripts or any other newspaper article in the database[15] and 2) did not cite Xinhua News Agency. We then read through these potential defections until we identified an article or articles that discussed the same content or event targeted by the directive. In order to identify true cases of defections, in which newspapers reported based on their own collection of information, we further limited potential defections to articles which mentioned specific details and events. We then confirmed that these articles were indeed based on newspapers' own reporting by searching for other articles that reported on these specific details in the commercial WiseNews database. True defections are articles which were the first to report on these specific details or events and did not reprint copy from elsewhere.

One important caveat to the identification of defection in this experiment is that event-specific propaganda directives are marginal to other mechanisms by which the Chinese propaganda apparatus intervenes in the media sphere, such as journalist training and socialization (Repnikova, 2017; Brady, 2009) and general standing orders for newspapers to cover events or topics in a specific way. This means that when newspapers defy scripting instructions and include their own copy and information, we cannot say that they are publishing fully independently. We can conclude, however, that such defecting articles are not subject to the same strict degree of influence and control as articles written in compliance with state-issued scripting directives.

The schematic below summarizes this process of identifying compliant and defecting articles for each directive.

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[15]Measured as articles having less than .1 trigram cosine similarity. As with compliant articles, we also limited the search for defections to articles that were published with a ten day window of the CDT leak date and included one keyword from a set of loose keywords in the text of the article.
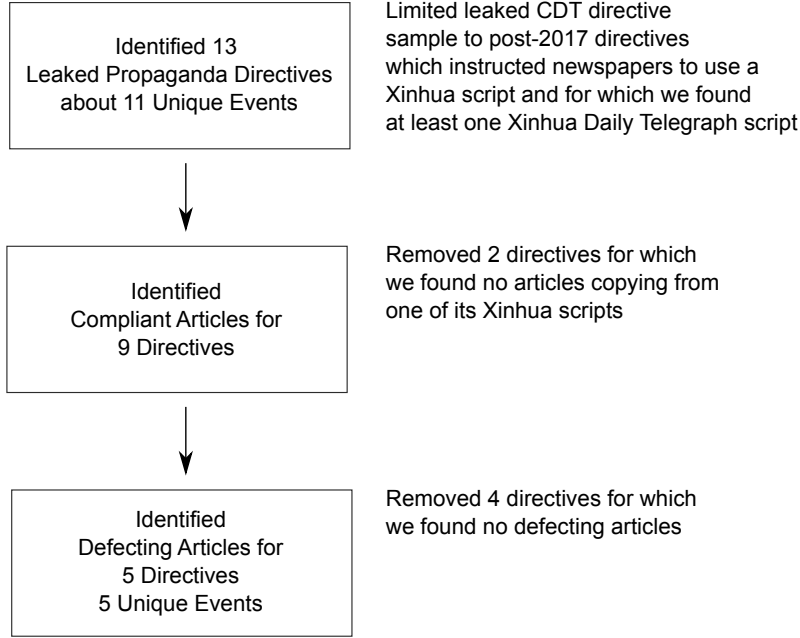
```
┌─────────────────────────┐      Limited leaked CDT directive
│      Identified 13      │      sample to post-2017 directives
│ Leaked Propaganda Directives │  which instructed newspapers to use a
│  about 11 Unique Events │      Xinhua script and for which we found
└─────────────────────────┘      at least one Xinhua Daily Telegraph script
            │
            ▼
┌─────────────────────────┐      Removed 2 directives for which
│       Identified        │      we found no articles copying from
│  Compliant Articles for │      one of its Xinhua scripts
│      9 Directives       │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐      Removed 4 directives for which
│       Identified        │      we found no defecting articles
│  Defecting Articles for │
│       5 Directives      │
│      5 Unique Events    │
└─────────────────────────┘
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Figure 2: Process of Identifying Compliant and Defecting Articles for Experiment Texts

Through this process[16] we identified defections and compliant articles for five of the thirteen directives. In some cases we identified multiple defections per directive. In these cases we chose the defection and compliant article which were substantively the closest in order to reduce heterogeneity between paired articles.

The table below summarizes for each directive the title of the newspaper article and the level of commercialization for the newspaper each defecting and complying article was originally published in. We also include the original Chinese and English translations of all experimental texts as well as all survey questions in the Appendix. We do not include newspaper names in order to protect defecting newspapers from exposure.[17]

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[16]There were two exceptions for this process. For one directive about media coverage of foreign coronavirus aid, rather than using an article from a newspaper which republished a Xinhua script we used the script published by Xinhua Daily Telegraph itself. In a second case for the article written in compliance with the U.S. election directive, we used an article published on China Youth Daily Web (中国青年网) rather than an article published in the database of ninety-one newspapers. We confirmed that this article copied exactly from the Xinhua Web article which it cited by identifying the version of this Xinhua web article published on the People's Daily web app (人民日报APP) after we were unable to access the original Xinhua web article. In both cases we used these articles for the compliant condition because we wanted to choose a compliant article closest in subject matter to the defection for these directives.

[17]Researchers can apply directly to the corresponding author for the newspaper names. Party papers, typically provincial or city dailies (日报) or papers associated with state bureaus (机关报) are typically supervised by the party committee at their level of government. These papers are thus the closest to the

| Propaganda Directive | Compliant Article Title | Compliant Article Newspaper Type | Defection Title | Defection Newspaper Type |
|---|---|---|---|---|
| Beijing Daxing Fire (2017): Concerning the Beijing Daxing Xihongmen fire disaster, uniformly use Xinhua News Agency manuscripts, do not use any photos or videos that incite panic. | Never Let This Tragedy Repeat Itself | Party Paper | Businesses Infiltrate Private Residences, Owners Worry About Hidden Safety Dangers | Semi-Official |
| Jiuzhaigou Earthquake (2017): Concerning the Sichuan, Aba, Jiuzhaigou earthquake, all reports must take Xinhua News Agency manuscripts as their standard, it is prohibited to use any videos or images which incite panic, immediately pay attention to changes in online discourse, delete harmful information. | The Light in the Tent—A Reporter's Notes from Their Night in Jiuzhaigou Zhangzha Village | Party Paper | Surviving Girl: Father Smashed Car Window and Passed Me Out | Spin-Off |
| US Election (2020): Concerning the American presidential election, all media platforms must strictly report according to the unified plan. Related reports must take as Xinhua and other manuscripts as their basis, no unauthorized forwarding of foreign media, no follow up reports.... | Election Day for 2020 U.S. General Election Officially Commences, Record Number of Early Votes | Public Paper | Voting Officially Begins for US Presidential Election | Spin-Off |

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|---|---|---|---|---|
| Coronavirus Foreign Aid (2020): : Concerning the situation of foreign contributions to our epidemic control, please follow the approach of the Ministry of Foreign Affairs and manuscripts from the Xinhua News Agency, do not make comparisons, do not provide interpretations, do not hype, avoid forming the mistaken impression that our epidemic control is reliant on foreign donations. | Ministry of Foreign Affairs: China Will Always Remember Japan's Heartwarming Act | Party Paper (Xinhua Daily Telegraph) | Shangqiu Students Studying Abroad in Ukraine Fight the "Epidemic" with the Motherland | Party Paper |
| Baoshang Bank Takeover (2019): Concerning the takeover of Baoshang Bank, Xinhua News Agency will broadcast news manuscripts and answer questions from reporters using the authoritative information provided by he People's Bank and the Insurance Regulatory Commission. If you report [on this incident] you must use Xinhua News Agency manuscripts, without prior arrangements do not interview, do not report, do not provide opinions, and do not engage in any other self-directed actions. | Answering Reporters' Questions Concerning the Baoshang Bank Question | Spin-Off | Dong Ximiao: The Takeover of Baoshang Bank Highlights The Principles of Legalization and Marketization | Party Paper |

Table 1: Compliant Articles and Defections Used in Experimental Conditions

We made every effort to make the experimental texts analogous across the compliant and defecting conditions. We standardized across directives and conditions by showing respondents only the title and first three sentences of each text. This was done at the cost potentially underestimating any effects, as for some articles respondents may have needed to read the full text to discern whether the article was state manipulated or not.

There are three features of this set of articles and directives that circumscribe our findings. First, this set of directives was not a random sample of all propaganda directives. These directives were all leaked and then published by *China Digital Times*. These directives tend to disproportionately cover more sensational and "emotive" stories, such as the Jiuzhaigou

earthquake.[19]

Second, more of our compliant texts than our defection texts were published by party newspapers. Three out of five of the compliant articles were published by an official party paper. The other two compliant articles were published by a public paper and a commercial spin-off paper, respectively. By contrast, three out of five of the defecting articles were published by a commercial, spin-off, or semi-official paper. The last two were published by party papers. It would have been preferable if we could have held constant publishing newspaper commercialization across control and experimental conditions, as commercial newspapers' style of writing may be different from official papers. The fact that a majority of the defections were published in commercial papers reflects the reality of the media environment in China: we are more likely to observe newspapers which have greater commercial incentives taking a risk by defecting from a propaganda directive than we are to observe the same behavior for official papers. There were two features of our experimental design that ameliorated this concern. First, we reduced some between article heterogeneity by harmonizing article texts to all be the same length. Second, we did not tell respondents the name of the newspaper whose article they were reading. Instead, respondents were told at the start of the experiment that they were going to read articles published in city and provincial daily newspapers (all official papers). We included this prompt to standardize respondent expectations concerning the sources of the newspaper articles.

A final concern was that there was some variation in the texts of the directives themselves. Directives one (Beijing fire) and five (Baoshang bank) told newspapers to "use" Xinhua manuscripts. Directives two (earthquake) and three (US election) used a looser standard: take Xinhua (or, in the case of the US election directive, other sources) as the "basis" or "standard." Directive four used a looser standard still: newspapers are instructed to "follow the approach/grasp" Xinhua manuscripts and the voice of the Ministry of Foreign Affairs.[20]

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[19]CDT has noticed this pattern themselves. Meeting with Sam Wade, CDT, December 2, 2021.

[20]The original Chinese for these directives was (one) "一律采用新华社通稿," (two) "一切以新华社通稿为准," (three) "相关报道以新华等规范稿源为主", (four) '请依据外交部对外口径和新华社通稿把握", (five) "一律使用新华社稿". The full text for these all directives is included in the Appendix.

Despite these differences in instructions, our compliant articles are standardized across the five sets because the first few sentences (i.e. the texts respondents were shown) copied exactly from (or, in the case of the COVID directive, were a reprint of) the Xinhua Daily Telegraph scripts. We standardized our defecting articles across all five articles by adopting a stringent definition of defection: the articles had to include details and information which were unique to or published first in that article.[21] We also conducted a sensitivity test, discussed below, concerning whether our results were sensitive to the directives included.

## Survey Design and Methods

We recruited 2,066 subjects for this survey experiment from Qualtrics Panel. Qualtrics Panel recruits subjects from a variety of different sources, including social media, loyalty programs, email lists, and other sources. We used quota sampling so that our panel would be more representative than a convenience sample of the urban and town population of China who are between the ages of 18 and 64. We developed quotas based on the 2010 Chinese Census, calculating the joint distribution by age (18-29, 30-44, 45-64), gender (male, female), and education (high school or less, college or greater). We focused on the urban and town adult population rather than the national population because it was easier for

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[21]It is still possible that the defecting article for the COVID case could have been published following the "voice" of Xinhua or the Ministry of Foreign Affairs if the word "voice" (口径) was meant to signify standpoint (thus allowing newspapers to collect their own information as long as they followed a specific standpoint). The word "voice", however, is commonly used in propaganda directives and often meant to signify strictly reprint. For example, during the Hong Kong protests in 2019 the following directive was leaked to China Digital Times: "All websites, all new media: adopt a unified voice, push [news] about Hong Kong in pop-up windows, take this language as standard: "Hong Kong 24 Hours — What Happened on the 16th? Quick Read. Click to Examine Details." Implement within 30 minutes, [send] screen shots for feedback." In this example we see that voice is used to mean "exactly copy." With this context we have reasonable evidence to conclude that the COVID directive's meaning was to ask newspapers to reprint the standpoint of the original Xinhua articles by copying their textx, although the alternative interpretation cannot be ruled out. The original Chinese of the directive quoted above reads "各地网站、新媒体：统一口径，弹窗推送本条涉港报道，推送语以此为准："香港24小时—香港８月１６日发生了什么？一文速览。点击查看详情。"30分钟内落实，均截屏反馈。" https://chinadigitaltimes.net/chinese/615767.html. Accessed April 16, 2022. The final defecting article for the Baoshang bank takeover was also a unique case in that it was more of an opinion article that a newspaper report. We still considered this article to be a defection in that it defied instructions to reprint according to Xinhua manuscripts and not "offer opinions."

Qualtrics to recruit subjects from this population to fill all twelve joint quota cells.[22] After consenting to the study, respondents were told that they would be asked to read and evaluate a series of newspaper articles previously published in provincial and city newspapers in China. Respondents were also given a verbal encouragement to carefully read each article and honestly answer all questions. This type of encouragement has previously been shown to encourage compliance in experimental designs (Prior et al., 2015).

Respondents were randomly assigned to one of two experiments. In all randomizations we used the joint quota cells to block by age, gender, and education. In both experiments respondents were asked to sequentially read the titles and 2-3 selected sentences from five newspaper articles. For each article, respondents were randomly assigned to read either an article written in defiance of a scripting directive, an article written in compliance with a scripting directive without a Xinhua News Agency attribution in its text, or an article written in compliance with a scripting directive with a Xinhua New Agency attribution in its text. To ensure treatment compliance, we required respondents to spend thirty seconds reading the text and answering the questions for each article.[23] The article order was randomized separately for each respondent.

After reading each title and article, respondents in the first experiment were asked whether they thought the publication process of the article was guided or influenced by the state. We used the following text:

> Do you think the government guided or influenced the publication of this article? Guiding and influence could include, but is not limited to, requiring newspapers to forward information or manuscripts put out by the government, prohibiting independent reporting, interviewing, or forwarding non-official sources, etc.[24]

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[22]We developed quotas based on the 2010 Chinese Census, accessed from the EPS China Statistics English version. In the Chinese language sex and gender are both referred to as 性别。The Chinese equivalent of the sex/gender distinction is 生物性别 (biological sex) versus 社会性别 (social sex). It is most common in Chinese survey settings to use the term 性别, which encapsulates both meanings, so we use that term here.

[23]We included a countdown timer for this thirty second period so that respondents would know how long they had to wait before proceeding.

[24]The Chinese version is: "您觉得这篇文章是在政府的主导或影响下发表的吗？政府的主导或影响包括但不限于要求转载政府发布的信息或通稿, 限制独立采访报道或转载非官方媒体等。

The possible answers to this question were yes or no. We used this question because it was the most neutral description we could identify for the process by which the state intervenes in the media environment with scripting directives.[25] The word "influence" (影响) has a neutral meaning in Chinese, while the word guide (主导) has a positive meaning, associated with the state's own description and justification for its "thought work" (Chan, 2007). It was important to avoid negative connotations with this question, as we found in a pre-test that respondents interpreted words which carried a negative meaning such as "interfere" (干预) as asking whether the news was intentionally false.

Our second consideration in developing this question wording was to cleanly distinguish between articles written in compliance with scripting directives and articles written in defiance of scripting directives (which may have nonetheless received state influence through, for example, journalist socialization). The question asks respondents whether the *publication* of the article was influenced by the government, not whether the article received any influence at all. The examples we gave in the question of guiding and influence furthermore discussed ways the state could have required or prohibited the publication of information in the specified article. The publication of the defecting articles was not influenced by the state, as the newspapers defied scripting instructions and instead collected and published their own information.

After reading each title and article, respondents in the second experiment were asked whether they were interested in reading the rest of the article. We used the following text: "Are you interested in reading the rest of the article?" and used a discrete quantitative slider scale from zero to ten, where zero was labeled with no interest and ten was labeled as very interested. The starting point of the slider was randomized for each respondent.

We also included two validations. After every article, respondents were asked whether they had previously read the article. At the conclusion of both experiments we also included an attention check. Respondents were shown four events or topics (earthquake, flood, bank-

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[25]We asked a version of this question to sixteen interview subjects and also tested two different versions of this question in a pre-test of this survey.

ing, epidemic) and asked which event or topic was not discussed in any of the article texts. Respondents who correctly chose "flood" passed the attention check. We did not use these validations to exclude respondents, but we do report both the attention pass rate and the percent of respondents who were previously exposed to the article in the results below.[26]

Each of these steps are summarized in the following experiment schematic.

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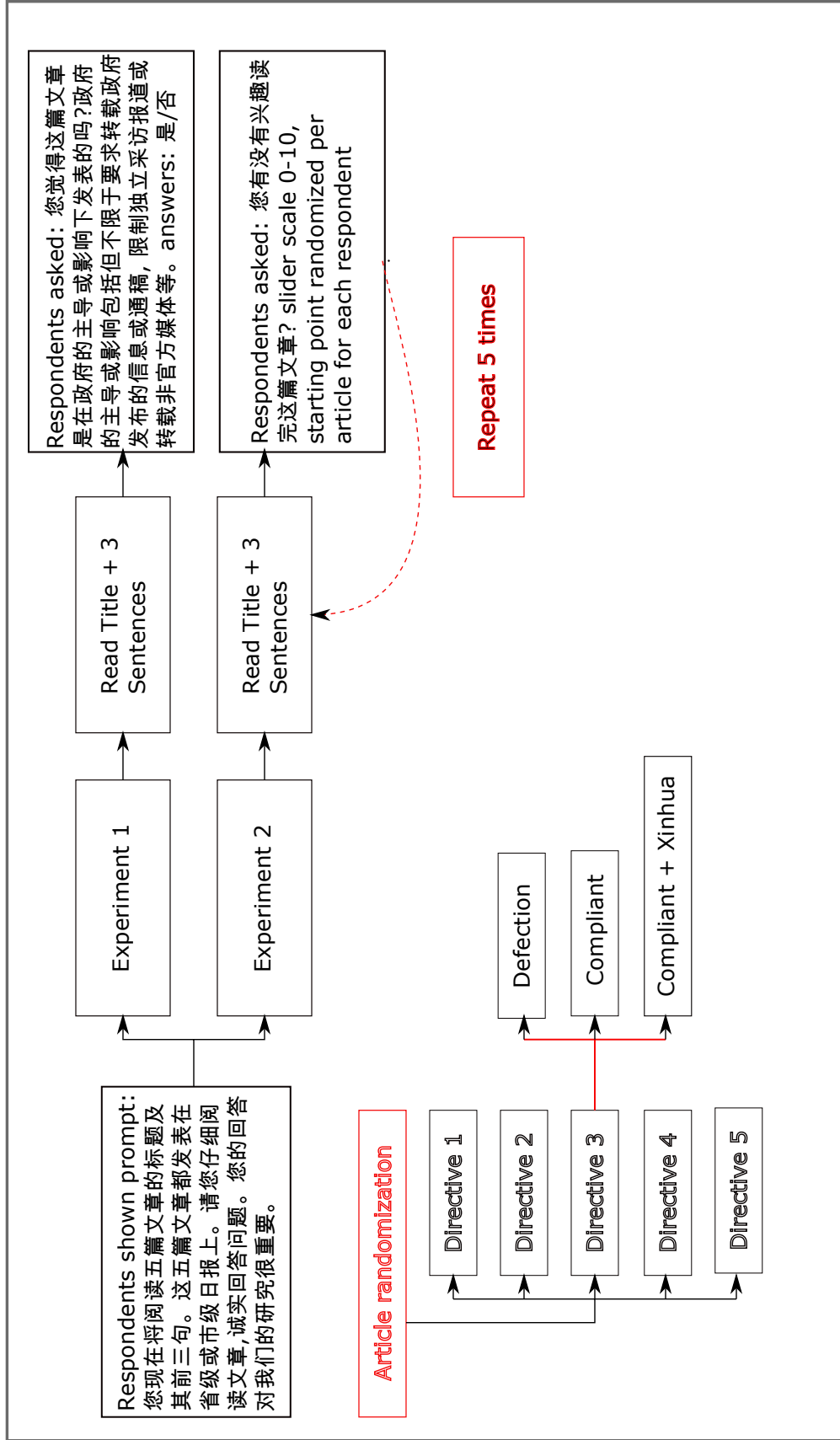[26]We don't exclude respondents in order to avoid post-treatment bias.

Figure 3: Experimental Flow

As shown in the schematic, respondents were first shown the prompt telling them they would be asked to read the titles and first few sentences from a series of articles published in city and daily newspapers. The prompt also encouraged respondents to carefully read each article. Respondents were then randomized into experiment one or two and repeated the experiment task five times. The specific questions asked of respondents in experiment one versus two are included in the right side of the schematic. Finally, the bottom part of the schematic summarizes the within-experiment article randomization process. For each experiment respondents were asked to read an article from each of the leaked directives. The order of the directives was randomized. For each directive, respondents were assigned to read either a defection, a compliant article, or a compliant article with Xinhua attribution.

In both experiments, each respondent completed the reading and evaluation task for five articles or rounds. In the analysis we pool repeated responses from the same individuals across different rounds. Respondent-rounds were excluded if the respondent did not answer the main question of interest (either the influence or interest question). If a respondent did not complete any rounds, they were excluded entirely from the analysis. We did not undertake any imputation.[27] Pooling across rounds gave us an effective sample size of 4,897 for experiment one and 5,104 for experiment two.

Our estimand for all four hypotheses was the average treatment effect for the two different treatment conditions (compliant article, compliant article with Xinhua attribution) versus the control (defection). We analyzed the two experiments separately. Because we used block randomization, the difference in means estimator is a biased estimator for the average treatment effect.[28] We used instead an OLS model with the covariate adjustment proposed by Lin (2013). The coefficient on the treatment variable for this estimator can be interpreted as the weighted difference in means across all blocks (Lin et al., 2016).

Following Lin (2013), we created a set of quota block-article indicator variables $z_b$. For

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[27]Qualtrics automatically excludes respondents that they determine to be a bot (non-human). Besides Qualtrics' bot checks, no checks will be performed to determine eligibility for inclusion besides that the subject completed the survey.

[28]See Gerber and Green (2012) for a discussion on the analysis of block randomized designs.

example, one indicator variable $z_1$ gives all responses the value one for the first article if respondents were in the quota block age 18-29, female, high school or less education. All other respondents were given the value of zero for this variable. We then calculate the weight for each quota-article block, where the weight $\bar{z}_b$ is defined as the total number of responses in block $z_b$ divided by the total number of responses in the experiment. We then regress for all individuals $i$ the outcome $Y_i$ on the treatment vector $T_i$, all block-article indicator variables $z_{b,i}$, and the set of all interactions between the treatment vector and the block-article indicator variables minus the block weights $T_i(z_{b,i} - \bar{z}_b)$. We used heteroskedastic-robust standard errors, clustered by individual, to account for variance deflation due to repeated observations across individuals.[29] Across the four hypotheses we used the .05 criteria for rejecting the null hypothesis but corrected for multiple comparisons by using the Benjamini-Hochberg procedure (Benjamini and Hochberg, 1995).[30]

# Results

The figure below shows the results for hypotheses one through four. We found that respondents were more likely to identify an article written in compliance with a scripting directive as a state manipulated article. We also found, however, no difference between compliant articles by whether they carry a Xinhua News Agency attribution. We also found no difference in engagement with articles by treatment level.

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[29]We used the R package estimatr (Blair et al., 2021).

[30]We applied this procedure by first ordering our four p values in increasing order p(1), p(2), p(3), p(4), We then found the largest k such that p(i) is less than or equal to $\frac{\alpha \times k}{m}$. In this case $\alpha$ is equal to .05 and m (the number of hypotheses) is equal to four. We called this k $k*$. We then rejected the null hypothesis for all $H_k$ for $k \leq k*$. 4. $\frac{\alpha \times k*}{m}$ became our new threshold. We then used this new threshold to compute the confidence intervals for all quantities of interest.
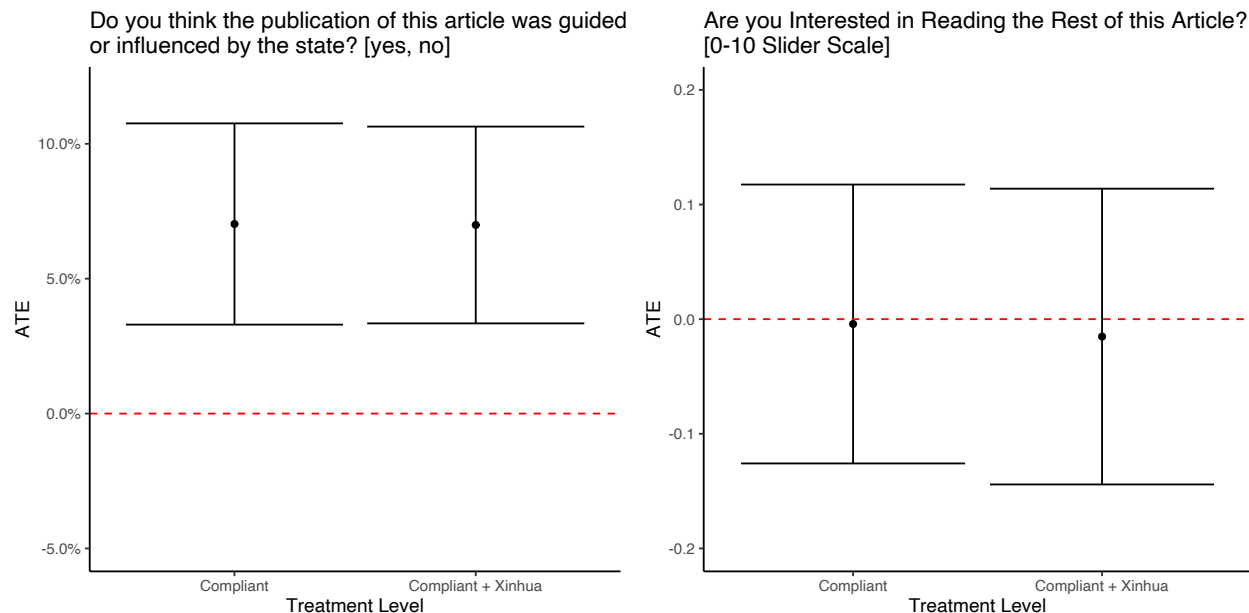
Figure 4: Average Treatment Effects for Hypotheses 1-4

The left figure shows that respondents in the compliant article condition were 7.03 percent points more likely to say "yes" to the question of whether the publication of the article was guided or influenced by the state. The estimated percentage point difference for respondents assigned to read a compliant article with Xinhua attribution was 6.99. This suggests respondents were basing their discernment on content clues in the articles rather than Xinhua attributions. These findings suggest respondents are politically sophisticated and attune to minute differences in style and content between manipulated and non-manipulated content. Respondents are not, however, attune to signals related to the propaganda apparatus itself (namely syndication of Xinhua).

The right figure shows almost no observable difference for respondents in the different treatment conditions versus the control by whether they are interested in reading the rest of the article. The point estimates were both less than .02 on a 10-point scale. This lack of difference in interest is not due to a general lack of interest in reading the articles. Respondents on average across all articles gave the articles approximately an 8 out of 10 in interest in finishing the article. While respondents have the capacity to distinguish between manip-

ulated and newspaper produced content, this didn't translate to differences in engagement. Respondents maintained a high level of interest in articles both written in compliance and defiance with scripting directives.

While respondents have some capacity to discern between compliant articles and defections, their overall bias for this set of articles was to assume the articles were manipulated by the state. The plot below shows the point estimates for the percent of respondents who thought the article they read was influenced or guided by the state by treatment condition.
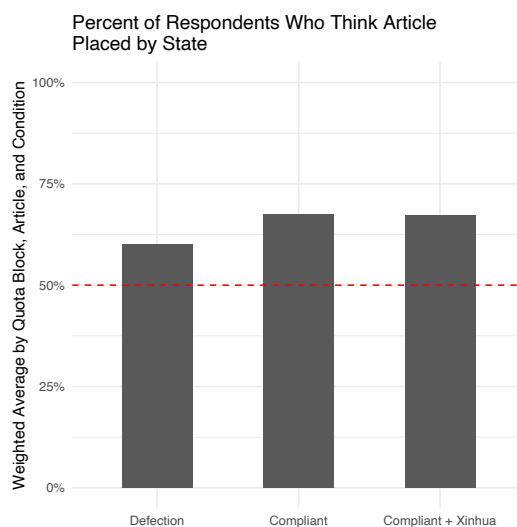


Figure 5: Perception of State Influence by Respondents in Each Condition

We found that 60.2% of respondents who read a defection thought that it had been influenced by the state, versus 67.5% in the complaint article condition and 67.2% in the compliant article with Xinhua attribution condition. The red line is drawn at 50% to show that respondents were *worse* than chance at identifying articles written by newspapers themselves (rather than manipulated by the state).

There are several caveats in order for interpreting 60% as the overall rate of bias, however. First, our findings regarding bias are specific to news about topics covered in these directives, in this case sudden disasters (2), the COVID-19 pandemic, US news, and financial regulation. Assuming that Chinese respondents may be more likely to label hard propaganda topics such as top leader news (Huang, 2018) as influenced by the state, we may actually *underestimate*

the rate of bias with this sample of directives and articles. Second, all respondents were shown the prompt telling them they were to read articles published in provincial and city daily newspapers. These papers are "party papers" and popularly understood to be more tightly controlled by the state than other newspapers in China (Stockmann, 2010). Our conclusions about bias should be understood in the context of inferences about this type of newspaper. Future research could experimentally manipulate this prompt in order to get a more robust estimate for respondents' overall level of bias.

As described above, we performed several robustness checks required by our pre-analysis plan. We found that our respondents passed our attention check at a high rate. In this study, 91.2% and 91.9% of respondents in experiment one and two, respectively, passed the attention check, correctly selecting "flood" as the event that was not discussed in any of the article texts. We did find that the majority of our respondents had previously read the experiment text. Across all respondent-rounds, 50% of respondents in experiment one reported previously seeing the article versus 53.2% of respondents in experiment two. We found that these rates didn't vary much by article set, but they did vary slightly by treatment condition. In experiment one, 47.2% of respondents assigned to a defection had previously seen the article, versus 49.2% of respondents in treatment one and 50.5% of respondents in treatment two. Similarly, in experiment two, 51.4% of respondents assigned to a defection had previously seen the article, versus 52.2% of respondents in treatment one and 56.1% of respondents in treatment two. These patterns are likely driven by our reliance on a set of leaked propaganda directives. As discussed above, leaks typically happen for emotionally charged or important events, so they are also likely to be events for which there is wide readership.

Finally, we performed two more robustness check which were not outlined in our pre-analysis plan. We found that a few treatment arms (quota-article interactions) included fewer than 5 respondents. Following Lin et al. (2016), we interacted respondents' quota block and article value separately with the treatment vector. This adjustment made no

meaningful difference to the standard errors or point estimates. Second, in response to a helpful suggestion by a conference reviewer, we removed the COVID directive and its articles and responses from the analysis because of concerns that its instructions were much looser than the other directives (and, thus, the defection we identified was not comparable to the other defections). In this restricted analysis the significance of the results still held for the influence experiment, although the effect size diminished by two percentage points.

# Conclusion

Our results showed that Chinese respondents do have the political sophistication to discern state manipulated material from independent reporting in Chinese newspapers based on content clues alone. Respondents are not attuned, however, to traces of the organization of the propaganda apparatus, namely Xinhua attributions. These results concerning which clues respondents pay attention to paint a tempered picture of Chinese respondents' capacity to distinguish propaganda from newspapers' own reporting. On the one hand, respondents on average clearly had some sense what a propaganda article reads like and were able to make these distinctions on a limited basis by reading just the title and a few sentences of each article. On the other hand, respondents didn't have any differences in discernment by a much more reliable signal of an article being manipulated by the state: attributions to Xinhua News Agency.

The political sophistication of Chinese respondents may help us understand our more preliminary results concerning respondents' overall level of bias, i.e. overall level of belief concerning how much manipulation there is within Chinese media. Respondents' political sophistication may lead them to overestimate how much state manipulation occurs in Chinese media. The uncertainty engendered by the incomplete control of media in China may lead respondents to be overly sensitive to content signals of state manipulation, paradoxically rendering them less able to identify true cases of independent reporting. Placed

alongside our finding that respondents had no differences in engagement with defections versus propaganda articles, these results suggest newspapers have little to gain by defecting from propaganda instructions and suggest a demand-side hypothesis to explain the decline in independent reporting in China over the past ten years (Beach, 2018; Lei, 2017). Greater political sophistication on the part of Chinese readers may actually make the propaganda apparatus more effective at obfuscating distinct sources of information in the public sphere.

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# A  Chinese Version of Survey

## A.1  Demographics for Quota Sampling

请您不要在开放式问题的回复中加入任何个人通讯信息，列如您的姓名，电话号码或地址。

个人背景

- 请问您的年龄多大?
    - 17岁以下
    - 18-29岁
    - 30-44岁
    - 45-64岁
    - 65岁以上

- 请问您的性别是什么?
    - 男
    - 女

- 请问您的教育背景如何?
    - 高中或以下
    - 大学或以上(包括大专)

- 您住在城镇还是乡村?
    - 城镇
    - 乡村

- 请问您居住在哪个省?

您现在将阅读五篇文章的标题及其前三句。这五篇文章都发表在省级或市级日报上。请您仔细阅读文章，诚实回答问题。您的回答对我们的研究很重要。

## A.2  Experiment

Respondents will be randomized into either experiment 1 or experiment 2

### A.2.1 Experiment 1

In each round, respondents will be asked to read one article from each of the five sets of articles below. Each article in each set will have an equal chance of being selected (1/3). After reading each article, they will be asked the following two questions:

- 您觉得这篇文章是在政府的主导或影响下发表的吗？政府的主导或影响包括但不限于要求转载政府发布的信息或通稿, 限制独立采访报道或转载非官方媒体等。

  – 是
  – 否

- 您对上面的回答是否确定?

  – Slider scale: 0 (不确定)——10（十分确定）[slider start position randomized per trial]

- 您以前看过这篇文章吗?

  – 看过
  – 没看过

After the final round, respondents will be asked the following attention check question. Only one of the four topics will be correct. The order of the responses will be randomized per participant.

- 在您刚才读完的五篇文章当中，没有讨论到哪个事件或话题?

  – 银行业
  – 地震
  – 疫情
  – 水灾

After completing all five tasks, respondents will be asked this following question:

- 您如何理解刚才这个问题："您觉得这篇文章是在政府的主导或影响下发表的吗？"

### A.2.2 Experiment 2

In each round, respondents will be asked to read one article from the five sets of articles below. Each article in each set will have an equal chance of being selected (1/3). After reading each article, they will be asked the following two questions:

- 您有没有兴趣读完这篇文章?

  – Slider scale: 0 (没有兴趣)——10（很有兴趣）[slider start position randomized per trial]

- 您以前看过这篇文章吗?

    - 看过
    - 没看过

After the final round, respondents will be asked the following attention check question. Only one of the four topics will be correct. The order of the responses will be randomized per participant.

- 在您刚才读完的五篇文章当中，没有讨论到哪个事件或话题?

    - 银行业
    - 地震
    - 疫情
    - 水灾

## A.3 Article Texts

- Directive 1 (respondents will not see the texts of any leaked propaganda directive, we have included them here for record keeping): 关于北京大兴西红门镇新建村火灾一事，一律采用新华社通稿，不要使用引起恐慌的照片及视频。

    - Control (Defection) [respondents will not see this or other treatment level labels]:
        * 标题: 商家混入民宅业主担心安全隐患
        * 11月18日晚发生重大火灾事故的北京大兴区西红门镇建筑是典型的集生产经营、仓储、住人等于一体的"三合一"、"多合一"建筑。为深刻吸取教训，相关部门已迅速开展安全隐患排查工作，严控施工现场火情和安全问题的发生。近日，记者走访发现北京多处住宅区存在不同程度的民宅商用的情况，个别住宅楼内出现占用通道经营行为....

    - Treatment 1 (Compliance):
        * 标题: "绝不让悲剧重演"
        * 11月18日晚，北京市大兴区西红门镇新建二村发生重大火灾事故，造成19人死亡，8人受伤。记者26日进入火灾事故现场，所见之处触目惊心，令人警醒。火灾发生后，北京市立即部署安全隐患大排查大清理大整治专项行动....

    - Treatment 2 (Compliance + Attribution):
        * 标题: "绝不让悲剧重演"
        * 据新华社北京11月26日电11月18日晚，北京市大兴区西红门镇新建二村发生重大火灾事故，造成19人死亡，8人受伤。新华社记者26日进入火灾事故现场，所见之处触目惊心，令人警醒。火灾发生后，北京市立即部署安全隐患大排查大清理大整治专项行动....

- Directive 2: 关于四川阿坝九寨沟地震一事，一切以新华社通稿为准，禁止使用引起恐慌照片及视频，及时关注网上舆论变化，删除有害信息。

- Control (Defection):
  * 标题: 幸存女孩: 爸爸砸车窗把我递出去
  * 12 岁的女孩小吕至今仍然坚信, 被石头压在车里动弹不得的妈妈, 砸碎玻璃把自己递出来后、被留在九寨沟122 林场的爸爸仍在治疗。说起姨妹和姨妹夫, 湖北武汉的万先生忍不住红了眼眶: ""万幸的是, 现在小吕能够安然无恙。""当时我们在九寨千古情看完表演, 在回酒店的路上地震了....

- Treatment 1 (Compliance):
  * 标题: 帐篷里的灯光——记者夜宿九寨沟漳扎村侧记
  * 入夜, 62岁的扒他小心翼翼地将电灯拧到灯座上, 打开开关, 整座帐篷立马被灯光温暖了起来。九寨沟7.0级地震后, 漳扎村二队在震后第三天晚上恢复了供电, 安置点50多顶帐篷透出灯光, 像点点繁星, 映亮了川西高原的夜。这是地震后, 扒他和漳扎村二队的200多名村民, 在帐篷中度过的第二个晚上....

- Treatment 2 (Compliance + Attribution):
  * 标题: 帐篷里的灯光——记者夜宿九寨沟漳扎村侧记
  * 新华社四川九寨沟8月13日电入夜, 62岁的扒他小心翼翼地将电灯拧到灯座上, 打开开关, 整座帐篷立马被灯光温暖了起来。九寨沟7.0级地震后, 漳扎村二队在震后第三天晚上恢复了供电, 安置点50多顶帐篷透出灯光, 像点点繁星, 映亮了川西高原的夜。这是地震后, 扒他和漳扎村二队的200多名村民, 在帐篷中度过的第二个晚上....

- Directive 3: 关于美国总统大选, 各媒体平台需严格按照统一安排的报道。相关报道以新华等规范稿源为主, 不得擅自转载外媒、不得跟进报导。媒体评论提法要符合我发言人就相关情况的表态, 不得激化过激情绪、防止舆论炒热走偏。网络互动平台注意严防反美、抵制美国等煽动性、行动性信息。

  - Control (Defection):
    * 标题: 美国大选选举日投票正式开始
    * 当地时间11月3日, 美国迎来四年一度的大选, 谋求连任的现任总统、共和党总统候选人特朗普和民主党总统候选人、前副总统拜登角逐白宫。迪克斯维尔山口村是美国新罕布什尔州一个只有12名居民的村庄, 由于这里比其他地方早几个小时, 这使得这里成为媒体和观察人士的首选地点。当地选民在午夜钟声敲响时投票, 从而拉开了2020年美国总统选举日的帷幕....

  - Treatment 1 (Compliance):
    * 标题: 2020年美大选选举日投票正式开始提前投票数创纪录
    * 2020年美国大选选举日投票3日开始, 全美预计将有数千万名选民前往投票站, 投票选出下一任美国总统、数百名国会议员及部分地方官员。美国东部时间3日零时 (北京时间3日13时) 刚过, 新罕布什尔州两个小镇的近30名选民按照传统率先投票, 并当场开票。不过, 全美绝大多数投票站都在早晨开放, 并将持续开放至3日晚间....

  - Treatment 2 (Compliance + Attribution):

* 标题: 2020年美大选选举日投票正式开始提前投票数创纪录

* 新华社华盛顿11月3日电2020年美国大选选举日投票3日开始，全美预计将有数千万名选民前往投票站，投票选出下一任美国总统、数百名国会议员及部分地方官员。美国东部时间3日零时（北京时间3日13时）刚过，新罕布什尔州两个小镇的近30名选民按照传统率先投票，并当场开票。不过，全美绝大多数投票站都在早晨开放，并将持续开放至3日晚间....

- Directive 4: 关于外方为我抗击疫情捐助物资情况，请依据外交部对外口径和新华社通稿把握，不对比、不解读、不炒作，避免形成我抗疫依靠外方捐助的错误印象。

  - Control (Defection):

    * 标题: 在乌克兰商丘籍留学生与祖国一同战"疫"

    * 乌克兰时间2月3日上午10时许，办理完最后的手续，吴晗将与同学一起采购的8000只一般医用口罩送上了前往祖国的旅程。这些口罩从乌克兰第二大城市敖德萨发往其首都基辅并登机，经阿塞拜疆首都巴库转机后飞往上海入关。经过近9000公里的跋涉，其中的6000只口罩预计在2月10日至12日抵达商丘....

  - Treatment 1 (Compliance):

    * 标题:外交部：日本暖心举动，中方铭记在心

    * 外交部发言人华春莹4日在网上例行记者会上说，病毒无情人有情，中方注意到了日本人民温暖人心的举动，对包括日本在内的其他国家人民给予中国的同情、理解和支持表示衷心感谢，铭记在心。很多日本网友近日不约而同聚拢到中国驻日本使馆社交媒体账户评论区，给武汉加油、给中国打气。华春莹说，此次新型冠状病毒感染的肺炎疫情发生以来，无论是日本政府还是社会各界，都给予了中国很多同情、理解和支持....

  - Treatment 2 (Compliance + Attribution):

    * 标题: 外交部：日本暖心举动，中方铭记在心

    * 新华社北京2月4日电外交部发言人华春莹4日在网上例行记者会上说，病毒无情人有情，中方注意到了日本人民温暖人心的举动，对包括日本在内的其他国家人民给予中国的同情、理解和支持表示衷心感谢，铭记在心。很多日本网友近日不约而同聚拢到中国驻日本使馆社交媒体账户评论区，给武汉加油、给中国打气。华春莹说，此次新型冠状病毒感染的肺炎疫情发生以来，无论是日本政府还是社会各界，都给予了中国很多同情、理解和支持....

- Directive 5: "关于包商银行被接管"事，新华社将根据人民银行和银保监会的权威信息播发新闻通稿和答记者问，如报道，一律使用新华社稿，未经安排一律不采访、不报道、不评论、不搞自选动作。

  - Control (Defection):

    * 标题:【中经大咖上头条】董希淼: 接管包商银行彰显法治化市场化原则

    * 本次接管包商银行，体现了法治化、市场化原则，对我国银行业长远发展和金融风险防范具有多方面重要意义。对少数高风险金融机构实施接管甚

至退出，发挥"优胜劣汰"作用，有助于优化银行业竞争环境，提高银行业发展质量，进而更好地服务实体经济和广大客户。5月24日，央行、银保监会发布公告：鉴于包商银行出现严重信用风险，银保监会决定对包商银行实行接管，为期一年，并委托中国建设银行托管包商银行业务。

- Treatment 1 (Compliance):
  * 标题：就接管包商银行问题答记者问
  * 中国人民银行、中国银行保险监督管理委员会新闻发言人就接管包商银行问题答记者问。一、包商银行被接管后的处置原则是什么？一是全面依法依规开展接管工作....

- Treatment 2 (Compliance + Attribution):
  * 标题：就接管包商银行问题答记者问
  * 新华社北京5月26日电中国人民银行、中国银行保险监督管理委员会新闻发言人就接管包商银行问题答记者问。一、包商银行被接管后的处置原则是什么？一是全面依法依规开展接管工作....

# B    English Version of Survey

## B.1    Demographics for Quota Sampling

Please do not include any personal contact information in any open answer questions, such as your name, telephone, or address.

Individual Background

- What is your age?

  - 17 or less
  - 18-29
  - 30-44
  - 45-64
  - 65 or older

- What is your sex?

  - Male
  - Female

- What is your educational background?

  - High school or less
  - College or more (including technical/specialized college)

- Do you live in an urban or rural area?

  - Urban

– Rural

- Which province do you live in?

You will be asked to read the title and first three sentences of five articles. All of these articles were published in provincial or city-level daily newspapers. Please carefully read the articles and sincerely answer the questions, your responses are very important for our research.

## B.2   Experiment

Respondents will be randomized into either experiment 1 or experiment 2

### B.2.1   Experiment 1

In each round, respondents will be asked to read one article from each of the five sets of articles below. Each article in each set will have an equal chance of being selected (1/3). After reading each article, they will be asked the following two questions:

- Do you think the publication of this article was guided or influenced by the government? Government guiding or influence includes (but is not limited to) requiring [newspapers] to forward government-issued information or manuscripts, prohibiting independent reporting or interviewing, or prohibiting [newspapers] from forwarding non-official sources.

  – Yes

  – No

- How certain are you about your response?

  – Slider scale: 0 (Uncertain)——10 （Very Certain） [slider start position randomized per trial]

- Have you previously seen this article?

  – Yes

  – No

After the final round, respondents will be asked the following attention check question. Only one of the four topics will be correct. The order of the responses will be randomized per participant.

- In the four articles which you recently read, which topic or event was not discussed?

  – Banking

  – Earthquake

  – Epidemic

– Flood

After completing all five tasks, respondents will be asked this following question:

Please do not include any personal contact information in any open answer questions, such as your name, telephone, or address.

- You were asked the question "do you think the publication process of this article was influenced or guided by the government?" From your perspective, what does this question mean?

### B.2.2 Experiment 2

In each round, respondents will be asked to read one article from the five sets of articles below. Each article in each set will have an equal chance of being selected (1/3). After reading each article, they will be asked the following two questions:

- Are you interested in reading the rest of this article?

  – Slider scale: 0 (No interest)———10（Very interested）[slider start position randomized per trial]

- Have you previously seen this article?

  – Yes
  – No

After the final round, respondents will be asked the following attention check question. Only one of the four topics will be correct. The order of the responses will be randomized per participant.

- In the four articles which you recently read, which topic or event was not discussed?

  – Banking
  – Earthquake
  – Epidemic
  – Flood

## B.3 Article Texts

- Directive 1 (respondents will not see the texts of any leaked propaganda directive, we have included them here for record keeping): Concerning the Beijing Daxing Xihongmen fire disaster, uniformly use Xinhua News Agency manuscripts, do not use any photos or videos that incite panic.

  – Control (Defection) [respondents will not see this or other treatment level labels]:

* Title: Businesses Infiltrate Private Residences, Owners Worry About Hidden Safety Dangers
* The building from the November 18th Beijing Daxing Xihongmen fire disaster is a classic "3 in one", building that integrates production, operation, storage and housing [into one building]. In order to learn the lessons deeply, relevant [government] departments have quickly begun work investigating hidden safety dangers in order to the occurrence of fire and safety problems at construction sites. Today, this reporter visited and found that many Beijing residential areas have different degrees of commercial use of residential buildings, certain residential buildings have blocked corridors from commercial use...

- Treatment 1 (Compliance):
  * Title: Never Let This Tragedy Repeat Itself
  * On the evening of November 18th there was an accidental fire in Beijing city Daxing area Xihongmen town, result in 19 deaths and 8 injured. This reporter on the 26th entered the scene of the fire, what I saw was shocking and alarming. After the fire disaster Beijing city immediately deployed a special operation to investigate hidden hazards, clean up, and rectify [the scene].

- Treatment 2 (Compliance + Attribution):
  * Title: Never Let This Tragedy Repeat Itself
  * According to Xinhua News Agency Beijing office, on the evening of November 18th there was an accidental fire in Beijing city Daxing area Xihongmen town, result in 19 deaths and 8 injured. This reporter on the 26th entered the scene of the fire, what I saw was shocking and alarming. After the fire disaster Beijing city immediately deployed a special operation to investigate hidden hazards, clean up, and rectify [the scene].

- Directive 2: Concerning the Sichuan, Aba, Jiuzhaigou earthquake, all reports must take Xinhua News Agency manuscripts as their standard, it is prohibited to use any videos or images which incite panic, immediately pay attention to changes in online discourse, delete harmful information.

  - Control (Defection):
    * Title: Surviving Girl: Father Smashed Car Window and Passed Me Out
    * 12 year-old girl Xiaolu until today still believes, while her mother was crushed by a stone and couldn't move, she broke the glass and passed [Xiao Lu] out, her father remains in Jiuzhaigou 122 Forest Farm being treated. [The father's] sister-in-law and brother-in-law spoke, Mr. Wang from Wuhan, Hubei couldn't help but reddening his eyes [while saying]: "Fortunately, Xiaolu is now safe and sound." "At the time we were watching the performance at Jiuzhaigou Eternal Love, on the road back to the hotel the earthquake occurred...."
  - Treatment 1 (Compliance):

* Title: The Light in the Tent—A Reporter's Notes from Their Night in Jiuzhaigou Zhangzha Village
* Once night began, 62-year-old Bata carefully screwed the electric light onto the lamp holder, turning on the switch, the tent was immediately warmed by the light. After the magnitude 7 Jiuzhaigou earthquake occurred, the Zhangzha village second squadron resumed electricity on the third night, [now] more than 50 tents have lights shining like little stars in the settlement, illuminating the night of the western Sichuan plateau. Bata and the 200 villagers from the second squadron passed their second night int the tents.

- Treatment 2 (Compliance + Attribution):
    * Title: The Light in the Tent—A Reporter's Notes from Their Night in Jiuzhaigou Zhangzha Village
    * Xinhua News Agency Sichuan Jiuzhaigou August 13th. Once night began, 62-year-old Bata carefully screwed the electric light onto the lamp holder, turning on the switch, the tent was immediately warmed by the light. After the magnitude 7 Jiuzhaigou earthquake occurred, the Zhangzha village second squadron resumed electricity on the third night, [now] more than 50 tents have lights shining like little stars in the settlement, illuminating the night of the western Sichuan plateau. Bata and the 200 villagers from the second squadron passed their second night int the tents.

• Directive 3: Concerning the American presidential election, all media platforms must strictly report according to the unified plan. Related reports must take as Xinhua and other manuscripts as their basis, no unauthorized forwarding of foreign media, no follow up reports. The formulation of media opinion pieces must accord with the stance from spokespersons, don't inflame excessive emotions, prevent public opinion from stirring up and going astray. Internet and interactive platforms must take precautions against anti-American, Boycott US and other inflammatory information.

- Control (Defection):
    * Title: Voting Officially Begins for US Presidential Election
    * Local time on November 3rd, the United States users the once every for years general election, the current president is seeking re-election, Republican nominee Trump and Democratic nominee former Vice President Biden compete for the White House. Dixville Notch is a village with only 12 residents in New Hampshire, because it is few hours earlier here than other places, this makes it a preferred location for media and other observers. Local voters at the toll of midnight cast their votes, thus kicking of the 2020 US presidential election day.
- Treatment 1 (Compliance):
    * Title: Election Day for 2020 U.S. General Election Officially Commences, Record Number of Early Votes
    * Election day for the 2020 U.S. General Election has begun, tens of millions of US voters are expected to head to the polls and elect the next U.S. president,

hundred of members of congress, and some local officials. Right after midnight eastern U.S. time on the 3rd (Beijing time November 3rd 1pm) nearly 30 voters in two small New Hampshire towns voted first on the spot according to tradition. Nevertheless most voting stations in the United States will open in the morning and stay open until evening on the 3rd.

- Treatment 2 (Compliance + Attribution):
  * Title: Election Day for 2020 U.S. General Election Officially Commences, Record Number of Early Votes
  * Xinhua News Agency Washington November 3rd. Election day for the 2020 U.S. General Election has begun, tens of millions of US voters are expected to head to the polls and elect the next U.S. president, hundred of members of congress, and some local officials. Right after midnight eastern U.S. time on the 3rd (Beijing time November 3rd 1pm) nearly 30 voters in two small New Hampshire towns voted first on the spot according to tradition. Nevertheless most voting stations in the United States will open in the morning and stay open until evening on the 3rd.

• Directive 4: Concerning the situation of foreign contributions to our epidemic control, please follow the approach of the Ministry of Foreign Affairs and manuscripts from the Xinhua News Agency, do not make comparisons, do not provide interpretations, do not hype, avoid forming the mistaken impression that our epidemic control is reliant on foreign donations.

- Control (Defection):
  * Title: Shangqiu Students Studying Abroad in Ukraine Fight the "Epidemic" with the Motherland
  * Ukraine time February 3rd, 10am, after completing the final procedures, Wu Han and their classmates together sent 8000 surgical masks they had purchased on their journey to the motherland. These masks will be sent from Ukraine's second largest city Odessa to Kiev and loaded on a plane, and will arrive in Shanghai after passing through Azerbaijan's capital Baku. After a trip of nearly 9000 miles, 6000 of the masks are expected to arrived in Shangqiu between 10th and the 12th.

- Treatment 1 (Compliance):
  * Title: Ministry of Foreign Affairs: China Will Always Remember Japan's Heartwarming Act
  * At a regular online meeting with reporters Ministry of Foreign Affairs spokesperson Hua Chunying said that the viruses are heartless, people are kind; China is paying attention to the heart warming act of the Japanese people, including the sympathy given to China by people from other countries living in Japan, for their understanding and support we give thanks, and will always remember. Many Japanese netizens have recently gathered in the comment section of the Chinese embassy in Japan's social media accounts; they have

encouraged Wuhan and China. Hua Chunying said, since the outbreak of the novel coronavirus, not only the Japanese government but also all sectors have given China much sympathy, understanding, and support. . . .

  – Treatment 2 (Compliance + Attribution):

    ∗ Title: Ministry of Foreign Affairs: China Will Always Remember Japan's Heartwarming Act

    ∗ Xinhua News Agency Beijing February 4th. At a regular online meeting with reporters Ministry of Foreign Affairs spokesperson Hua Chunying said that the viruses are heartless, people are kind; China is paying attention to the heart warming act of the Japanese people, including the sympathy given to China by people from other countries living in Japan, for their understanding and support we give thanks, and will always remember. Many Japanese netizens have recently gathered in the comment section of the Chinese embassy in Japan's social media accounts; they have encouraged Wuhan and China. Hua Chunying said, since the outbreak of the novel coronavirus, not only the Japanese government but also all sectors have given China much sympathy, understanding, and support. . . .

• Directive 5: Concerning the takeover of Baoshang Bank, Xinhua News Agency will broadcast news manuscripts and answer questions from reporters using the authoritative information provided by he People's Bank and the Insurance Regulatory Commission. If you report [on this incident] you must use Xinhua News Agency manuscripts, without prior arrangements do not interview, do not report, do not provide opinions, and do not engage in any other self-directed actions.

  – Control (Defection):

    ∗ Title: [Zhongjing Big Coffee Headlines] Dong Ximiao: The Takeover of Baoshang Bank Highlights The Principles of Legalization and Marketization

    ∗ This takeover of Baoshang Yinghang embodies the principles of legalization and marketization, it has important significance to the long-term development of our country's banking system and financial risk safeguards. Taking over or even removing a small minority of high risk financial structures, giving free rein to the "survival of the fittest", this will help optimize the competitiveness of the banking industry, it will even to better serve the economy and customers. On May 24th, the Central Bank, Insurance Regulatory Commission published the following announcement: considering the serious credit risks that have emerged at Baoshang Bank, the Insurance Regulatory Commission will takeover Baoshang Bank for one year, and it will entrust the China Development Bank to take care of the business of Baoshang Bank...

  – Treatment 1 (Compliance):

    ∗ Title: Answering Reporters' Questions Concerning the Baoshang Bank Question

    ∗ Spokespersons for the People's Bank of China and the China Banking and Insurance Regulatory Commission answered reporters questions concerning

the takeover of Baoshang bank. First, what is the principle for how will Baoshang Bank be dealt with after being take over? The first is to carry out the takeover work in accordance with all laws and regulations. . . .

– Treatment 2 (Compliance + Attribution):

    ∗ Title: Answering Reporters' Questions Concerning the Baoshang Bank Question

    ∗ Xinhua News Agency Beijing May 26th. Spokespersons for the People's Bank of China and the China Banking and Insurance Regulatory Commission answered reporters questions concerning the takeover of Baoshang bank. First, what is the principle for how will Baoshang Bank be dealt with after being take over? The first is to carry out the takeover work in accordance with all laws and regulations. . . .