The Silent Invasion: The Strategy and Mechanism of China's Information Warfare on Taiwanese National Identity

by

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For my dearest Taiwanese people

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ABSTRACT

The Silent Invasion: The Strategy and Mechanism of China's Information Warfare on Taiwanese

National Identity

by

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My master's thesis research aims to investigate the mechanism of information warfare conducted

by the Chinese Communist Party (CCP) towards Taiwan during the COVID-19 pandemic from

2020 to 2021. The study focuses on understanding the strategies employed by the CCP to

disseminate disinformation and manipulate public opinion regarding the COVID-19 vaccine

through social media platforms, particularly LINE, in Taiwan. By examining existing research

studies and analyses, this research uncovers the various tactics employed by the CCP, including

selective news, fake news, and mixed news¹, to infiltrate online communities and provoke social

panic, ultimately undermining public trust in the Taiwanese government.

This disinformation has had a dramatic impact on citizens' selection for vaccines.

According to Huang and Lo, the differences between individuals' choices were prominent and

highly related to their political preferences, especially the views toward the ruling party (DPP,

¹ Ya-Chi Tseng, "China's Cognitive Warfare Strategy and Taiwan's Countermeasures via in the Post Pandemic Era,"

Navy Professional Journal 56, no. 4 (August 1, 2022): pp. 121-135,

https://doi.org/10.6237/NPJ.202208 56(4).0008.

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the Green) and the biggest opposition party (KMT, the Blue).² Through the ideological prejudice implied in the disinformation, the rumors disvalued particular brands' vaccines (especially those made by Taiwanese companies or considered to have connections with the DPP officials).³ As a result, the debates regarding vaccine preference further enhanced political cleavage among Taiwanese society within online communities.⁴

The dissemination of deliberately misleading medical information fostered an atmosphere of distrust towards the Taiwanese government's vaccination policy. Even though the Taiwan Centers for Disease Control (Taiwan CDC) frequently disseminated Article 63 from the Communicable Disease Control Act through mass media⁵, the fabricated news was still shared via social media platforms like LINE and received considerable attention. The fabricated information at first had a profound negative impact on vaccination rates in Taiwan, and has since caused consequent problems for the Taiwanese COVID-19 policy and the citizens' trust in authority. The information warfare during the pandemic was intended to influence Taiwanese preferences and alter their sense of national identity. The elderly population in Taiwan who received education under the Party-state system compared almost everything between the Taiwanese government and the CCP. During the pandemic, the CCP tried to mobilize online propaganda to make Taiwanese citizens prefer the Chinese government and their policies to that of the Taiwanese government. The propaganda was specifically effective among social media users.⁶

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 $^{^2}$ 黄俊儒、羅尹悅 (Huang, C. J. & Lo, Y. Y.) ,〈那年,我們不打的疫苗-政黨屬性與我們的疫苗抉擇〉,《第 14屆台灣科技與社會研究學會年會暨研討會「萬力共生」》,2022,pp. 158-167。

³ Ibid, 161

⁴ Ibid. 162-165

⁵ "Persons who disseminate rumors or incorrect information concerning epidemic conditions of communicable diseases, resulting in damages to the public or others, shall be fined up to NT\$ 3,000,000." Communicable disease control act - chapter - laws & regulations database of the Republic of China (Taiwan), accessed November 22, 2022, https://law.moi.gov.tw/ENG/LawClass/LawParaDeatil.aspx?pcode=L0050001&bp=6.

⁶ Yao-Yuan Yeh, "The Strategic Deployments of China's Cognitive Warfare Under Xi Jinping," *Taiwan Strategists* 12 (December 1, 2021): pp. 1-18, e.g. 16-18.

The research also highlights the initial preference among some Taiwanese citizens for the CCP's zero-COVID policy and the subsequent chaos it caused when the government attempted to implement vaccination campaigns. The misinformation campaign by the CCP intensified pro zero-COVID sentiments and further diminished trust in the Taiwanese government. This enhanced the CCP's effectiveness in fostering distrust in vaccine deployment in Taiwan and strengthening Taiwanese citizens' preference for China's mass media control system over Taiwan's democratic system. While the outcomes of the misinformation strategy are known, the operational aspects of the campaign remain understudied. This research aims to fill this gap by providing an in-depth examination of the CCP-Taiwan COVID-19 misinformation campaign, elucidating its methods and contributing to the existing knowledge on disinformation campaigns.

I will utilize diverse text analysis techniques to explore engaging contexts within COVID-19 disinformation on the "LINE" social media app, employing Natural Language Processing (NLP) and Supervised Machine Learning. My hypothesis suggests that the CCP's information warfare strategy towards Taiwan aims to nurture echo chambers by manipulating the emotions of Taiwanese citizens through existing political cleavages. This is anticipated to result in heightened echo chambers, increased political polarization, and, consequently, greater public distrust in the Taiwan government. To uncover the intricacies of the CCP's information warfare towards Taiwan, I will (1) track back the original source of disinformation, (2) analyze the changes in the narrative of disinformation from the beginning to the peak of the COVID pandemic, and (3) examine the lifetime of disinformation. Employing Google searches, I will develop a code capable of automatically identifying similar sentences, keywords, and titles from posts on Chinese platforms like Weibo or WeChat. This code will also discern CCP's official discourse from Chinese government websites, which are prevalent sources of state-sanctioned

information. I will also look for nuances in Chinese language distinct from what Taiwanese would typically use when analyzing the content. While it may not offer absolute certainty about the authorship of posts, this method will serve to demonstrate the influence of China-related disinformation within the Taiwanese online community. Furthermore, the lifetime of news will be a critical factor in unraveling the intentions behind these disinformation campaigns. Through systematic observation, I will analyze the reposting patterns, revealing that the most reposted news may not necessarily be the most popular upon initial posting. For instance, the dissemination of news advising people to drink saltwater as the primary COVID preventive measure, rather than other government-suggested methods, was initially shared in early 2020. It gained traction with reposts in mid-2021, coinciding with the peak of the pandemic in Taiwan. This observation underscores the manipulative mechanism behind disinformation, strategically employed to create specific atmospheres and emotions during different phases of the pandemic. The overarching goal is to investigate how these tactics contribute to the amplification of conflicts between communities holding divergent political opinions.

The significance of this research lies in its interdisciplinary approach, combining cybersecurity and policy analysis to uncover the logic and techniques of information warfare. By studying target selection and other aspects of the CCP's strategy, this research offers new perspectives and potential solutions to counter information warfare. Furthermore, the unique situation in Taiwan, with its rapidly evolving national identity, requires comprehensive analysis. The CCP's continuous attempts to shape individuals' national identities in Taiwan through the dissemination of fabricated news stories and comments on contentious political issues warrant further investigation. This research also sheds light on the influence of these tactics on language usage and cultural affinity between Taiwanese and Chinese citizens.

Finally, this research provides insights into how the Taiwanese government defended itself against the misinformation campaign, offering valuable lessons and potential solutions for addressing information warfare in the future. The study's findings contribute to the broader understanding of information warfare and its implications for democratic countries grappling with the balance between personal freedom and national security.

CHAPTER I

Introduction

My master's thesis research, "The Silent Invasion: The Strategy and Technique of China's Information Warfare on Taiwanese National Identity," endeavors to undertake a comprehensive examination of the mechanisms employed in the realm of information warfare originating from Chinese-based resources directed towards Taiwan. Focusing on the period encompassing the COVID-19 pandemic from 2020 to 2021, this study seeks to dissect the strategic maneuvers and operational techniques utilized in the dissemination of misinformation, rumors, and disinformation. Particularly noteworthy is the proliferation of such content through prominent social media platforms, notably "LINE," the ubiquitous messaging application in Taiwan. In May 2021, a surge in erroneous information surrounding the COVID-19 pandemic was observed, underscoring the salience of this issue and its potential impact on Taiwanese national identity.

The deliberate dissemination of misleading medical information during the COVID-19 pandemic cultivated an environment of distrust towards the policies of the Taiwan government.

Despite the frequent efforts of the Taiwan Centers for Disease Control (Taiwan CDC) to disseminate Article 63 from the Communicable Disease Control Act through mainstream media

channels⁷, fabricated news continued to proliferate on social media platforms such as LINE, garnering significant attention. Initially, this fabricated information significantly undermined vaccination rates in Taiwan and subsequently eroded trust in the government's COVID-19 policies among citizens. This orchestrated information warfare aimed to shape Taiwanese preferences and influence their national identity. Notably, the elderly population in Taiwan, educated under the Party-state system, often compared the Taiwanese government unfavorably to the Chinese Communist Party (CCP). Throughout the pandemic, the CCP utilized online propaganda efforts to sway Taiwanese citizens towards favoring Chinese government policies over those of Taiwan. These propaganda tactics proved particularly effective among users of social media platforms.⁸

At the onset of the pandemic, a segment of Taiwanese society exhibited a preference for the CCP's authoritarian zero-COVID policy. These individuals believed that Taiwan's democratic system hindered the enforcement of such stringent measures, viewing the zero-COVID policy as a shrewd and potentially more effective approach for societal management. This inclination towards the zero-COVID policy precipitated discord in Taiwan when the government endeavored to promote vaccination efforts. The dissemination of misinformation originating from China exacerbated these pro-zero-COVID sentiments, further eroding public trust in the Taiwanese government. Concurrently, it bolstered Taiwanese citizens' admiration for China's centralized mass media control system, fostering a sense of dissatisfaction with Taiwan's democratic governance structure among this demographic.9

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⁷ "Persons who disseminate rumors or incorrect information concerning epidemic conditions of communicable diseases, resulting in damages to the public or others, shall be fined up to NT\$ 3,000,000." Communicable disease control act - chapter - laws & regulations database of the Republic of China (Taiwan), accessed November 22, 2022, https://law.moj.gov.tw/ENG/LawClass/LawParaDeatil.aspx?pcode=L0050001&bp=6.

⁸ Yao-Yuan Yeh, "The Strategic Deployments of China's Cognitive Warfare Under Xi Jinping," *Taiwan Strategists* 12 (December 1, 2021): pp. 1-18, e.g. 16-18.

⁹ Ibid, 10-12.

According to a research study conducted by Ya-Chi Tseng, the CCP has been known to employ three distinct mechanisms of disinformation - selective news, fake news, and mixed news - with the aim of infiltrating online communities and sowing social panic while casting doubt on the Taiwanese government. This disinformation campaign has had a significant impact on individuals' vaccine preferences. Research by Huang and Lo reveals that the disparities in vaccine selection among individuals are prominently influenced by their political affiliations, particularly their attitudes towards the ruling Democratic Progressive Party (DPP, the Green) and the main opposition party, the Kuomintang (KMT, the Blue). Through the dissemination of ideologically biased disinformation, rumors have been circulated to devalue vaccines produced by specific brands, particularly those associated with Taiwanese companies or perceived to have connections with DPP officials. Consequently, the discourse surrounding vaccine preferences has intensified political divisions within Taiwanese society, particularly within online communities.

While the impacts of information warfare are well-documented, there remains a gap in understanding its operational intricacies and characteristics. This research endeavors to investigate the prevalence of disinformation in Taiwan's social media landscape and identify the likelihood of its origin from China. Specifically, my contribution entails analyzing the propaganda messages disseminated by the PRC to influence Taiwan. While it is challenging to ascertain the origin of disinformation with absolute certainty, my study enables me to formulate hypotheses based on an in-depth examination of the language employed in disinformation

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¹⁰ Ya-Chi Tseng, "China's Cognitive Warfare Strategy and Taiwan's Countermeasures via in the Post Pandemic Era," *Navy Professional Journal* 56, no. 4 (August 1, 2022): pp. 121-135, https://doi.org/10.6237/NPJ.202208_56(4).0008.

¹¹ 黃俊儒、羅尹悅 (Huang, C. J. & Lo, Y. Y.), 〈那年, 我們不打的疫苗-政黨屬性與我們的疫苗抉擇〉, 《第14屆台灣科技與社會研究學會年會暨研討會「萬力共生」》, 2022, pp. 158-167。
12 Ibid. 161

¹³ Ibid, 162-165

campaigns and the evolution of narrative patterns over time. Utilizing diverse text analysis techniques, including Natural Language Processing (NLP) and Supervised Machine Learning, I aim to uncover engaging contexts within the disinformation landscape. This analysis will entail an examination of the popularity and overlaps of keywords, titles, and content similarity across posts and their sources from platforms affiliated with China. Additionally, I will investigate the lifespan of disinformation across different periods of the pandemic. Of particular interest is the longevity of disinformation, which can serve as compelling evidence. The abnormal persistence of news suggests a greater reliance on disinformation. Genuine news typically doesn't resurface repeatedly, even a decade after its initial publication. This abnormal recurrence indicates manipulation and strategic reposting, implying a specific intention behind the dissemination of the information, especially when it aligns closely with the official narrative of the CCP, originates from China-affiliated sources, and is strategically reposted to manipulate emotions, sow division in public opinion, or discredit the Taiwan government and Western officials. By illuminating the operational dynamics and characteristics of information campaigns, this study aims to enrich our understanding of the methods and contribute to existing knowledge in the field.

Significance

This research will provide three significant contributions to political science research on information warfare. First, it will employ a combination of information analysis and political science research methods to elucidate the characteristics of end-to-end encrypted online social

communities. Specifically, the study will investigate how news gains higher attention or becomes more appealing over time within these platforms. This approach holds promise for generating valuable insights into cybersecurity and policy analysis. While political science literature acknowledges the existence of cognitive warfare and its impact on national identity, there remains a dearth of scholarly inquiry into the mechanisms of this warfare and the dissemination of fake news on end-to-end encrypted platforms. To address this gap, the research will employ various text analysis techniques, including Natural Language Processing and Supervised Machine Learning, to uncover the CCP's policy and operational logic in conducting information warfare. By scrutinizing critical elements such as target selection and cultivation, this study aims to provide a fresh perspective and offer potential solutions to combat disinformation.

Second, the unique situation in Taiwan has not received comprehensive analysis in political science, making a full examination of the Taiwanese situation a significant missing piece in the puzzle of China's external propaganda strategy. Taiwanese national identity has become fluid, prompting active actions from the Chinese government. While China's approach to controlling discourse and tarnishing the target country's reputation has been observed, the CCP's continued attempts to reconstruct individuals' national identities in Taiwan merit further study. The reposting of fabricated news stories and comments on contentious political issues serves to create identity cleavage among Taiwanese citizens and influence their language usage and cultural affinity with China.¹⁴

Finally, the general understanding of disinformation mechanisms and characteristics can be applied to research on information security and policymaking internationally. As a democratic nation, Taiwan faces the challenge of balancing personal freedom with national security. By studying the case of Taiwan, this research anticipates to investigate "the effectiveness of

¹⁴ 劉致昕 (Liu, Chih-Hsin),〈台灣被檢舉的假消息三成來自中國〉,《商業周刊》, 2017, pp. 82-83。

interventions to counter propaganda and disinformation; and finally, how shifting technologies—most notably artificial intelligence (AI)—will affect propaganda's future."

(Rosenfeld and Wallace 2024) Studying Taiwan and its outcomes can contribute to broader research on the applications and solutions of information warfare, aiding in the development of effective strategies in this evolving landscape.

Argument And Hypotheses

Within the context of the pandemic, the propagation of unsettling information and rumors through the LINE platform elicits considerable suspicion regarding its provenance. I hypothesize that much of this disinformation originates from both official Chinese administrative bodies and Chinese non-state actors. I substantiate this hypothesis by an examination of prevailing official discourses interwoven within these communications. I also hypothesize that these endeavors are deliberate attempts to manipulate emotions, exacerbating prevailing political divisions within affected populations. I show this manipulation through a careful analysis of the discourse, syntax, and symbols in the messages.

Literature Review

Rumors, Misinformation, and Disinformation

The attention of global leaders has been drawn to the pervasive impact of misleading information disseminated by ambitious authoritarian regimes, notably China and Russia, over the past decade (Juan et al., 2017). Amidst ongoing debates and analyses on the topic, the definitions of "fake news" or "misleading contexts" vary depending on the research focus and scholars' core concerns.

Rumors, as defined by Sunstein, are "claims of fact about people, groups, events, or institutions that lack evidence to support their veracity, yet gain credibility through social transmission (Sunstein 2014; Berinsky 2015)." They represent a form of misinformation characterized by two key features: a lack of specific evidence and reliance on widespread social transmission for influence. Despite their potential to spread falsehoods, rumors "offer an intriguing avenue for studying political misinformation, particularly those that can be debunked with incontrovertible facts (Berinsky 2015)."

While there is concern about citizens' lack of political knowledge, a more significant challenge for establishing effective mass participation in a democratic system is the widespread prevalence of misinformation (Kuklinski et al. 2000). The terms "misinformation" and "disinformation" are commonly used in research on fake news (Anastasiades et al. 2021). Some scholars consider fake news as "a new type of political rumor in social media" (Tu 2018), while others focus on online rumor transmission with ideological asymmetries (DeVerna et al. 2022). Current studies emphasize the intended goals of fabricated information, marking the distinction between "misinformation" and "disinformation" (Huang and Lo 2022; Wang et al. 2019; Fallis 2015; Wardle and Derakhshan 2017), which is the primary focus of this research. The motives behind generating, packaging, and delivering false "facts" to the target audience differentiate "misinformation" from "disinformation." Therefore, this paper will primarily examine the

dissemination of "disinformation," as it aims to analyze the purposes and strategies behind deliberate misinformation, whereas "misinformation" is often spread without specific intention or consciousness. Meanwhile, I will use the terms "misleading information," "wrong information," or "misleading contexts" to refer to the cluster of rumors, misinformation, and disinformation. This approach acknowledges the difficulty in discerning the intention behind misleading content, as it may not always be possible to find sufficient evidence to prove intent.

China's Information Warfare toward Taiwan

The strategic deployments of China's information warfare to manipulate global public opinions, especially in the US, its most prominent enemy; and in Taiwan, its political invasion priority, have been more profound during Xi Jinping's service. (Yeh 2021) However, the CCP's purposes and approaches to mobilizing disinformation and the destinations for each object are different (Huang and Liu 2022; Juan et al. 2017), highlighting the most significant difference between the case of Taiwan and the US. While China has been actively appealing for the "return" of Taiwanese citizens (Tseng 2022), it showed no interest in convincing the US people to "become Chinese." By disseminating the propaganda toward the Western, the CCP officials not only endeavor to "create a China-welcoming, or perhaps China-friendly, information environment globally" but to "alter how democratic citizens think about the democratic system and its practices." (Yeh 2021) Since the purposes are different, in this paper, the author will focus on disinformation toward the public in Taiwan.

According to Ya-chi Tseng, the CCP government employs three types of disinformation mechanisms in the cognitive warfare in Taiwan: fake news, selective news, and mixed news, to infiltrate the online community and provoke social panic and identity cleavage (126). As fake

news refers to information composed of artificial data (Tu 2018), malicious (Huang and Liu 2022) and ideological content (DeVerna et al. 2022), selective news is often formed by information separated into fragments (Huang and Liu 2022). The content of selective news is not necessarily incorrect but was selected or edited to serve specific attempts. Finally, mixed news is a combination of the first two types. All the disinformation is operated to (1) evoke conflict within the internal of the enemy (in this table, it refers to Taiwan), (2) maintain stability within the Chinese society and (3) manipulate worldwide public opinion. (see Table 1)

Table 1, Analysis of CCP's Cognitive Warfare Information Operation Forms

Operational Phases	Operational Targets	Operational Levels	Message Forms	Means of Operation	Purposes of Operation
Peacetime	Enemy Populace Domestic Populace International Community	National Strategy Military Strategy Battlefield Tactics	1. Selective Dissemination of True Information 2. Fake Information	Dominating Public Opinion Internet Penetration	1. Creating Enemy Contradictions And Opposition 2. Maintaining Domestic Stability 3. Seeking International Support
Wartime	Enemy Elites Battlefield Forces Enemy Populace		3. Mixture of True and Fake Information	Cognitive Interference Cybersecurity Attack Online Platforms Infiltration	1. Commander's Erroneous Decision-Making 2. Creating Psychological Pressure On The Battlefield 3. Anti-War Sentiment Among The Citizens

Source: Lin, Ya-Ying (林疋愔), 2021, "Cognitive Warfare Operational Strategies of the CCP and Taiwan's Response Measures", National Defense Magazine (《國防雜誌》), Table 1.

表1 中共認知戰訊息操作形式分析 操作手段 訊息形式

操作階段 操作對象 操作層次 操作目的 敵方群眾 1.製造敵方矛盾對立。 主導輿論 平時 國內群眾 2.維持國內穩定。 網路滲透 3.爭取國際輿論支持。 國家戰略 1.選擇性傳播真實訊息。 國際社會 軍事戰略 2.假訊息。 敵方菁英 戰役戰術 3. 真假混和訊息。 ●認知干擾 1.指揮官錯誤決策。 ●電戰攻擊 戰時 戰場部隊 2.製造戰場心理壓力。 網路滲透 3.民眾反戰。 敵方群眾

Source: 林疋愔 (Lin, Ya-Ying), 2021, 〈中共認知戰操作策略與我國因應作為〉, 《國防 雜誌》,表1。

Misleading information on Taiwanese social media is often attributed to the CCP government. However, research indicates that some sources originate from non-state actors known as "astroturf." Astroturfing involves organizations disseminating messages through fake "grassroots" sources, mimicking genuine individual opinions and making them challenging to distinguish from authentic grassroots messages (Miller, 2020). Han's study on the "Fifty-Cent Army" reveals how the authoritarian state mobilizes agents to anonymously participate in online discussions and generate seemingly spontaneous pro-regime commentary. Nonetheless, it's crucial to acknowledge that the intentions of these individual actors may diverge from the government's agenda. This research will illustrate examples of China-based astroturfing disinformation backfiring on platforms like WeChat and Weibo, creating difficulties for the Chinese government in dispelling rumors and officially declaring them fake to prevent panic.

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¹⁵ Blake Miller, "Automated Detection of Chinese Government Astroturfers Using Network and Social Metadata," SSRN, February 17, 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2738325.

According to the creator of the "CoFacts LINE fact-checking bot" (真的假的LINE bot), developed to engage with users in combating fake news from reliable and scientifically proven sources, Taiwanese citizens tend to repost two categories of fabricated news stories.¹⁶

The first category revolves around health-related topics, often perceived as informative and useful. While these health-related essays may not explicitly convey an aggressive political identity message, their primary aim is to build readers' trust in the platform and, significantly, shape their language usage habits. Prolonged exposure to this content allows the audience, immersed in the simplified Chinese environment, to become familiar with distinct characters and grammar within sentences, fostering cultural closeness between Taiwanese audiences and Chinese citizens. Besides the LINE chat groups, the Facebook fan group "Look here for health tips" (養生妙招看這裡) has garnered over 110,000 followers, 17 despite being a platform for disseminating a significant amount of inaccurate information. The website hosting the group, as well as the language and visuals featured on it, are predominantly sourced from China, with a considerable number of articles also being shared through the Line group. 18

The second category of reposted fabricated news stories involves comments on contentious political issues, such as pension reform (年金改革),¹⁹ aiming to undermine trust between individuals and the government while providing a platform for emotional expression. In Taiwan, identity cleavages are most apparent in such debates, with audiences expressing aggressive comments based on contrasting party preferences. The emotional comments, often coupled with intentional misinterpretations of the ruling party's policy, fuel irrational

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¹⁶ Ibid

¹⁷ Ibid

¹⁸ Ibio

¹⁹ 劉致昕 (Liu, Chih-Hsin),〈台灣被檢舉的假消息三成來自中國〉,《商業周刊》, 2017, pp. 82-83。

conversations and, crucially, draw comparisons with China's policy. CoFacts analysis reveals that approximately 20-30% of these stories originated from Chinese social media platforms like WeChat or websites using simplified Chinese characters.²⁰

Blue or Green: Political Polarization Through Echo Chamber effects in Taiwan

The CCP's ideal outcome of cognitive warfare is identity cleavage (Tseng 2022) within the communities with conflicting party preferences in Taiwan (Huang and Lo 2022; Yeh 2021). The complicated history of democratic development in Taiwan has formed an ideological confrontation environment since the 1990s (Tu 2018; Achen and Wang 2017; Wang 2008). Though the new parties have risen and attracted a considerable amount of voters after 2004 (Tu 2018; Achen and Wang 2017; Wu 2013), only Kuomintang (KMT), as known as "the blue," and the Democratic Progressive Party (DPP), "the green," are competitive enough to prevail the Presidential election. (Achen and Wang 2017; Wu 2013; Wang 2008) As a result, the newborn parties gradually chose to unify with either KMT or DPP to various extents to share political dividends (Tu 2018; Hsiao 2014). The party's priority in participating in the alliance is always ideology, which turns out to formulate the "Pan Blue" and "Pan Green" camps (Tu 2018; Achen and Wang 2017). This political phenomenon not only results in a new voting strategy (Achen and Wang 2017) but accelerates political polarization in society (Tu 2018). Furthermore, gathered by the big-data analysis system, individuals with similar opinions have experienced unprecedented senses of belonging and meanwhile, exclusivity (Yu 2011), resulting in overwhelming echo chamber effects (Tu 2018; Liu 2017) among social media. The polarized political preferences

²⁰ Ibid

and the hostile and distrusted online communities (Liu 2017) provide an ideal environment for disinformation to penetrate (Lin 2021; Tu 2018).

Disinformation of Vaccine During COVID-19 Pandemic

Based on Liu's argument, the Chinese authorities manipulate public opinion through the online community in three steps (2017). First, the CCP government cultivates cyber warriors (Yeh 2021; Liu 2017) in Taiwan by (1) purchasing memberships on influential platforms (Liu used the "PTT" as an example in this report), (2) acquiring social media accounts from Taiwanese people and (3) investing in Taiwanese Key Opinion Leaders (KOLs) (82). Secondly, the Chinese authorities disseminate the manufactured content to the platforms they have "farmed (82)." Finally, after the news spread, the CCP officials remain monitoring and mobilizing the cyber warriors to convey the implied narrative and values (Yeh 2021; Liu 2017).

While recent studies on Taiwan's situation under the CCP's information invasion have emphasized political and ideological impacts (Tseng 2022; Lin 2021; Yeh 2021; Tu 2018), the disseminating channels were not constructed directly toward the political field (Liu 2017). In fact, most of the widespread disinformation penetrated through (1) medical and health-related reports and (2) controversial social issues (mainly social welfare-related) (Wang et al. 2019; Liu 2017). Forwarding news contains health knowledge contributes to establishing trust, and gossiping with others who hold similar values allows emotions to be vented (Liu 2017). On the other hand, the accumulated trust within one's echo chamber also leads to blind and difficulties in distinguishing questionable content (Huang and Lo 2023; Tseng 2022). Furthermore, Huang and Liu's studies on Taiwanese citizens' attitudes toward vaccines revealed that political preference, rather than education level or specialization in school, influenced the individuals'

willingness to receive injections and, uniquely observed in Taiwan's case, the choice of vaccine types (see Fig. 1.) (2022, 6).

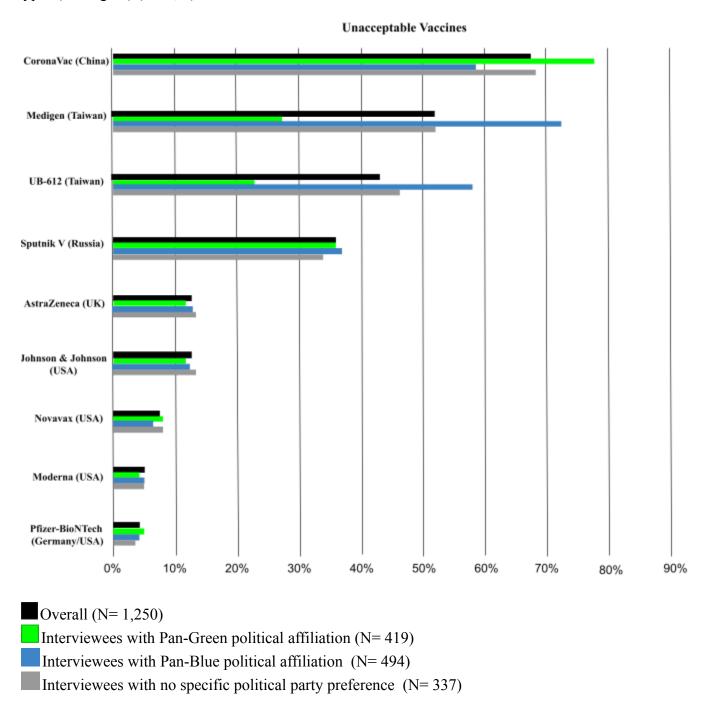


Figure 1: Political Affiliation and Vaccine Preferences (Multiple Choice)

Fig. 1. The unacceptable brands of vaccine

Source: Huang, C. J., & Lo, Y. Y. (黃俊儒、羅尹悅), 2022, "The Vaccine We Didn't Get That Year - Political Affiliation and Our Vaccine Choices", Proceedings of the 14th Annual Conference and Symposium of the Taiwan Association for Science, Technology, and Society, "Coexistence of Diverse Forces" (《第14屆台灣科技與社會研究學會年會暨研討會「萬力共生」》), Figure 1.

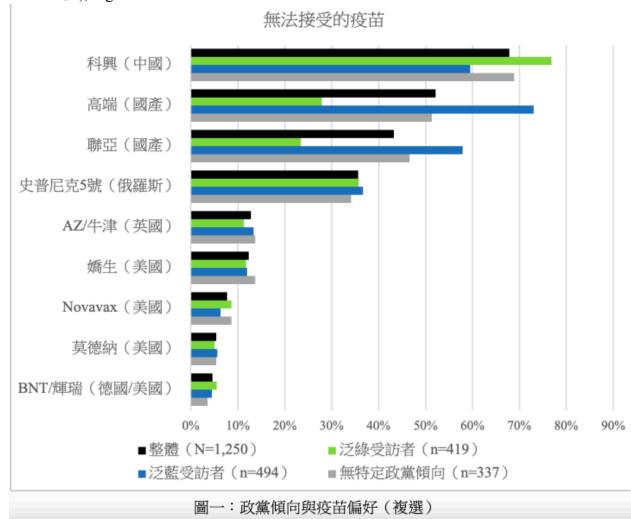


Fig. 1. The unacceptable brands of vaccine Source: 黃俊儒、羅尹悅 (Huang, C. J. & Lo, Y. Y.), 2022, 〈那年, 我們不打的疫苗-政黨屬性與我們的疫苗抉擇〉, 《第14屆台灣科技與社會研究學會年會暨研討會「萬力共生」》, 圖一。

They also observed the prominent distrust and dissatisfaction of the pandemic policies among opposition supporters toward the ruling party, demonstrating a thoroughly different result from the opposite (see Fig. 2.) (2023, 161).

Figure 2: Differential Evaluation of Government Anti-Epidemic Actions Based on Political Party Affiliation

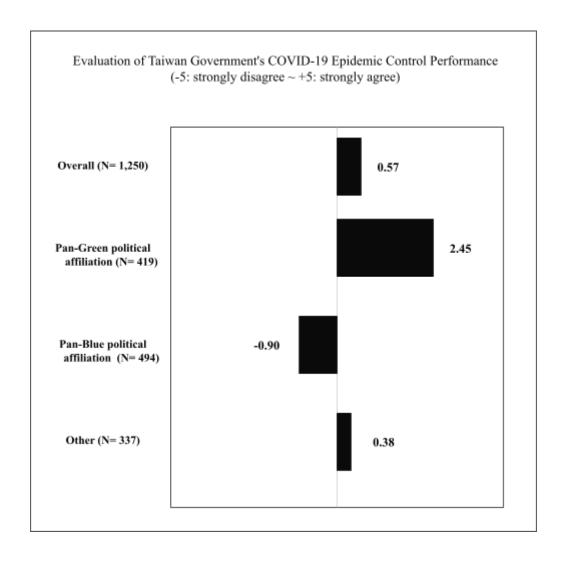
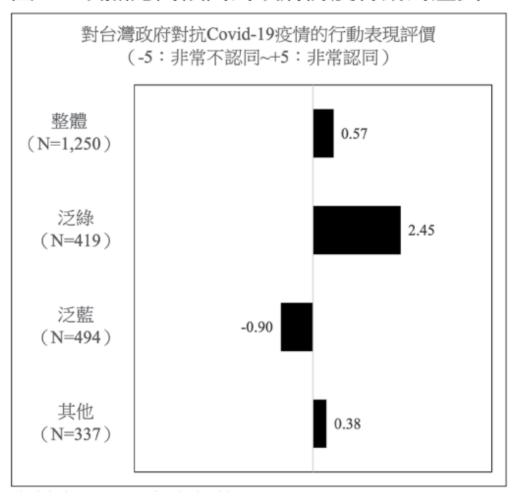


圖 1: 政黨認同傾向對政府防疫行動的差異



Source: 黃俊儒、羅尹悅 (Huang, C. J. & Lo, Y. Y.), 2023, 〈當科學知識遇上意識形態?民 眾對於COVID-19 疫情訊息的態度與認知〉, 《傳播研究與實踐》, 圖一。

Huang and Lo then argued that the effectiveness of the officials' afterward warning of fake news was limited. Though we know the strategies and results of information warfare, the targeting process remains understudied. My research aims to analyze the potential targets of disinformation and the motivation of the forwarding audiences.

Goals and Objectives:

The focal question of this research is to understand how the CCP employed controversial narratives within LINE message groups to conduct information warfare toward Taiwan, influencing national identity within Taiwanese society throughout the COVID-19 pandemic from 2020 to 2021. By posing the question in this way, I am focusing on the CCP's information warfare methodology and strategy, as well as their motivation or influence. This research considers the methods and techniques the CCP employed to mobilize information warfare toward Taiwan and how that news penetrated Taiwanese society in order to better understand how this disinformation campaign operated. In the case of Taiwan, I argue, the point of the application of the CCP's reunification policy was identity cleavage. The motivation behind this information warfare was to instill distrust in the Taiwan government and encourage individuals to consume more disinformation, fostering the creation of additional echo chambers.²¹

The CCP took three steps to mobilize public opinion through the online community.

First, the CCP government invested in companies or influential Key Opinion Leaders (KOLs) in Taiwan²² to produce, disseminate and reproduce fake news about COVID-19 to defame the Taiwanese government and Taiwan-made vaccines.²³ After the news spread, the CCP authorities then collected the data and targeted the convinced audience for a better echo chamber effect.²⁴ The fear and panic of these people's ignorance enhanced the power of the fake news. The disinformation continuously stimulated criticism and conflict between political party supporters in Taiwan, and reduced Taiwanese confidence in their government.²⁵

²¹ Ya-Chi Tseng, "China's Cognitive Warfare Strategy and Taiwan's Countermeasures via in the Post Pandemic Era," *Navy Professional Journal* 56, no. 4 (August 1, 2022): pp. 121-135, https://doi.org/10.6237/NPJ.202208 56(4).0008.

²² 劉致昕 (Liu, Chih-Hsin),〈台灣被檢舉的假消息三成來自中國〉,《商業周刊》, 2017, pp. 82-83。

²³ 黄俊儒、羅尹悅 (Huang, C. J. & Lo, Y. Y.),〈那年,我們不打的疫苗-政黨屬性與我們的疫苗抉擇〉,《第14屆台灣科技與社會研究學會年會暨研討會「萬力共生」》,2022, pp. 158-167。

²⁴ Ibid

²⁵ Ibid

My paper will analyze the practical methods used in the second process, the specific targeting of vulnerable audience members, to reveal the logic and technique behind audience selectivity in cognitive warfare. Additionally, I will discuss the CCP's external propaganda strategy toward Taiwanese identity and how it took control of the discourse on social media.

CHAPTER II

Research Method

In pursuit of comprehending the intricate dynamics of disconcerting information emanating from Chinese sources, this research adopts a two-tiered investigative approach: 1. comprehensive analysis of mechanisms and characteristics of chinese-sourced disinformation and 2. methodologies to discern rumors, misinformation, and disinformation from China.

Methodologically, the study utilizes text analysis techniques to explore COVID-19-related disinformation on the "LINE" social media app. It employs Natural Language Processing (NLP) and Supervised Machine Learning to uncover patterns and contexts in the content. Additionally, the research utilizes the "Cofacts" database²⁶ to examine the prevalence and connections of keywords, titles, and content similarity within posts reported by its users. This database allows for an in-depth exploration of dissemination patterns and thematic overlaps in Chinese-sourced disinformation through the observation on the post searching counts, reporting frequencies, and the lifespan of the post.

Cofacts is an information checking platform that operates through crowd collaboration and a chatbot, enabling careful review and discussion of messages of unknown credibility by the public. The chatbot provides 24/7 responses to users' inquiries, while the platform displays all

²⁶ "What Is Cofacts," What is cofacts, accessed February 20, 2024, https://en.cofacts.tw/about.

collected information transparently. Notably, Cofacts is a citizen-driven initiative without political affiliations, striving to amplify diverse voices and promote accessibility. By fostering crowd collaboration and open contributions, Cofacts facilitates fact-checking and encourages exposure to varied perspectives, thereby reducing barriers to engaging with differing viewpoints (Cofacts 2020). This database offers a unique resource for my research for several reasons. First, LINE, a widely used end-to-end encrypted chatting app in Taiwan, presents challenges for scholars conducting research due to the anonymity of message senders. Cofacts, however, aggregates and records all posts reported by LINE users, allowing for analysis of popularity trends, revisions, and repostings over time. This feature enables a deeper examination of differences between similar posts and the underlying intentions behind them.

Subsequently, I will focus on analyzing the mechanisms and characteristics of chinese-sourced disinformation. This phase aims to uncover the underlying processes and traits within the dissemination of such information. Through a systematic approach, the research will investigate the mechanisms and characteristics of Chinese-sourced disinformation. It will analyze the evolution of disinformation narratives over time, trace the origins of the sources, and examine the lifespan of specific instances of disinformation.

Finally, utilizing R programming and an online Plagiarism Checker, the study will identify similar sentences, keywords, and titles from posts on Chinese platforms such as Weibo or WeChat. This comprehensive analysis seeks to provide insights into the strategies and tactics employed by Chinese sources in disseminating disinformation and shaping public opinion.

In the following section, I will introduce the purposes of each research phase and the logic of my code design.

Data and Methods: Implementation, Logic, and Code Design

My study scrutinizes titles and contextual aspects of COVID-19 disinformation from the pandemic's onset to the present, focusing on engaging contexts within disinformation on LINE. Using the R programming language, I will identify and compare frequently used keywords in the top 100 online news during three distinct COVID-19 periods, sourcing data from reports to the CoFacts database by chatbot users.

Organizing the pandemic period from January 2020 to June 2021 into three distinct phases—beginning, peak, and post-administration of the first vaccine dose, including subsequent doses—each spanning six months, my research involves a systematic examination of the overlap, transformation, and resurgence of specific topics, titles, and contexts within these periods. The objective is to furnish empirical evidence substantiating the hypothesis and provide insights into potential political emotions among Taiwanese citizens, considering the persistent effects of authoritarian legacies and ethnic identities.

Utilizing R programming and an online Plagiarism Checker, I will identify similar sentences, keywords, and titles from posts on Chinese platforms such as Weibo or WeChat. This method will also help distinguish the official discourse of the CCP from content originating from Chinese government websites, which are prominent sources of state-sanctioned information. I will also look for nuances in Chinese language distinct from what Taiwanese would typically use when analyzing the content. While it may not offer absolute certainty about the authorship of posts, this method will serve to demonstrate the influence of China-related disinformation within the Taiwanese online community.

Finally, I will analyze the lifespan of specific instances of disinformation, examining cases of reposting, revision, or repurposing of content after the original source has waned in popularity. Through systematic observation, I will analyze the reposting patterns, revealing that the most reposted news may not necessarily be the most popular upon initial posting. The lifetime of news and the overlaps of narratives will be the critical factors in unraveling the intentions behind these disinformation campaigns. For instance, the dissemination of news advising people to drink saltwater as the primary COVID preventive measure, rather than other government-suggested methods, was initially shared in early 2020. It gained traction with reposts in mid-2021, coinciding with the peak of the pandemic in Taiwan. This observation underscores the manipulative mechanism behind disinformation, strategically employed to create specific atmospheres and emotions during different phases of the pandemic.

Following this, the results from the timeline research will be integrated with the analysis of keywords related to the pandemic, vaccines, and critiques from Chinese resources regarding other countries' behaviors during various pandemic situations. Additionally, the analysis identifies contexts that include provoking historical/ethnic hatred toward certain countries. This comprehensive approach aims to understand the dynamics of COVID-19 disinformation on LINE and its implications for political attitudes in Taiwan.

Code Design: Analyze The changes in the narrative of disinformation from the beginning to the peak

Step One: Filtering Out Repetitive Words and Patterns

I designed the code with a specific goal in mind: to explore the evolving narrative surrounding disinformation throughout different stages of the COVID-19 pandemic. My aim was to examine how this narrative changed from the beginning of the pandemic to its peak by analyzing commonly used keywords and titles in news articles collected from LINE users and archived in the Cofacts database. However, because I didn't know what the keywords and special patterns were beforehand, I was essentially searching for "nothing" within the posts. To address this challenge, I developed the code with filters to systematically identify recurring patterns across the top 100 news articles from each of the three time periods: January 2020 to June 2020, July 2020 to December 2020, and January 2021 to June 2021. Recognizing the complexities of Chinese characters and their ability to convey various meanings depending on context, I implemented a rigorous approach in the code. For example, we will have a list starting from "並 與,""並與家,""並與家人,""並與家人朋"......to "並與家人朋友和大家分享這一點請大家 注意世." By instructing the code to analyze word combinations ranging from two to twenty words, I aimed to reduce the risk of inadvertently capturing misleading "key words" resulting from incorrect sentence segmentation. The outcomes will be stored as a dataframe file, serving as a comprehensive "dictionary" database against which I will compare the results of the subsequent stage.

Step Two: Text Mining Analysis of Top 100 News Articles: Uncovering Narrative Patterns and Keyword Frequencies

Following the previous step, I will proceed with a text mining analysis to identify the most frequently occurring words within the context of the top 100 reported news articles across the three periods.

In the previous stage, the initial code filtered out repetitive patterns and organized them into a dataframe, encompassing character combinations ranging from 2 to 20 characters. After exporting this data to a dataframe, I can explore thematic trends spanning from 2-word keywords to 20-word sentences. By comparing similar or identical results, I can discern narrative patterns. Moreover, since posts may be reposted or revised before reposting, the code was programmed to preserve characters from each result. This ensures that similar or identical posts are treated as distinct results, enabling me to observe repeated posts and track narrative changes over time.

In this stage, the new code will iterate through the entire content of the news and calculate word frequencies without imposing a word limit. The results will be printed into a dataframe and compared with the previous "dictionary" to eliminate meaningless words and misinterpreted patterns. Following this comparison, a new word list containing the keywords will be generated.

Step Three: Keyword Frequency Analysis and Data Visualization in Text Mining

Following the previous step, I will utilize a new code to search for the keywords from the dataframe created in step 2 within the dictionary dataframe. This code will calculate the frequency of appearance for each keyword that has occurred at least twice within the content. Finally, I will store the keywords along with the number of times they appeared in a text file.

Additionally, I will employ the code below to analyze the ranking of the keywords and generate a bar chart and a word cloud for data visualization.

Tracking Back The Original Source Of Disinformation:

To track back the original source of disinformation on Taiwanese social media, I will adopt an analytical approach. In this stage, I will scrutinize the origins of the content, with a particular emphasis on identifying primary sources and channels linked to China-based platforms or sources. This process will unfold in three distinct stages. First, I will employ the online application Plagiarism Checker to verify the originality of the posts. Subsequently, I will collate news with similar or edited content to facilitate the identification of patterns. Finally, I will translate these news items into simplified Chinese and conduct searches on Google.

If overlaps emerge between the posts and China-based sources, with the latter appearing earlier, it will signal that these news items were not authored by Taiwanese individuals and possess a strong connection to China. Moreover, the identification of sentences, commands, or keywords sourced from the Chinese Communist Party's (CCP) official documents or policies will serve as evidence that these news items were disseminated by the CCP administration or related organizations. In instances where similar writing is observed in both Taiwanese and Chinese posts, but their posting occurred in close proximity, it will indicate a connection between the news; however, definitive assertions regarding dissemination from China cannot be made without knowledge of the original online appearance.

Examine The Lifetime Of Particular Disinformation:

Normally, news items are written, gain popularity (or not), and then gradually fade into obscurity, with little chance of resurfacing a year later without a valid reason. However, during my investigation into the dissemination of disinformation, particularly on LINE, I observed a fascinating phenomenon: posts that had been written and published previously could reappear and garner even more attention than before. Furthermore, these "resurrected" posts often underwent revisions, adjustments, or were combined with new information before reemerging. This phenomenon indicates that the lifespan of these posts reflects the intentions of their creators to manipulate public opinion on social media.

In earlier stages, I extracted keywords and repetitive terms from the content of these news items and traced their original sources. In this stage, I will investigate the lifetime of these posts. Since the Cofacts chatbot gathers news from LINE based on user reports and its database is fully accessible to the public, I intend to utilize it to analyze the lifespan of specific news items suspected of being manipulated for certain purposes.

CHAPTER III

Results

Analysis Of Mechanisms And Characteristics Of Chinese-Sourced Disinformation:

By filtering the keywords and titles within the datasets, I discovered significant changes in the keywords and topics of the news articles during different stages of the pandemic.

In the beginning of the pandemic, the most frequently occurring words were "Coronavirus (冠狀病毒)," "wash your hands (洗手)," "the US," "the immune system (免疫系統)," and "Taiwan." The word "Coronavirus (冠狀病毒)" appeared with a frequency of 3,700 times, while "wash your hands (洗手)" and "the US" appeared 3,200 times each, and "the immune system (免疫系統)" appeared 3,000 times.

Most Frequent Words From Jan to June 2020

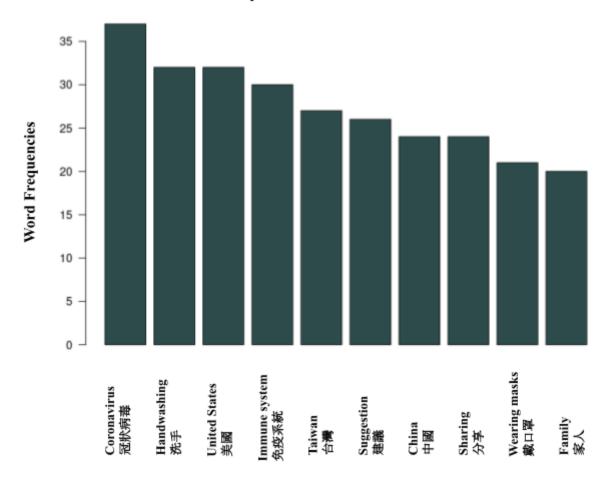


Fig. 3. Word frequencies from January 2020 to June 2020. Each point represents a frequency of 100 occurrences.

During the initial period, the focal points and keywords revolved around preventive measures and personal health care advice. Notable keywords included "wearing mask (戴口罩)," "drink hot water (喝熱水) or salt water (鹽水)," "maintain good digestion (保持腸胃順暢)," "stop wearing jewelry (暫停戴首飾)," and "reduce entering public spaces (減少進入公共場所)." Upon examining the original posts, it became apparent that the majority of the news articles contained information about self-care methods, unscientific remedies, warnings about the deteriorating situation, and "instructions from medical authorities." During this period, there was

a noticeable emphasis on explaining how the virus infects the human body. Mentions of the coronavirus (sometimes referred to as "the Wuhan virus" during that time) were widespread, and news articles attempted to provide explanations, either from a "scientific perspective" as purported by medical authorities (who often did not exist or did not make such statements) or based on traditional Chinese medicine knowledge, which easily captured attention. Moreover, the pandemic evoked memories of the Taiwanese people's nightmare from the previous SARS experience, when the WTO refused to include Taiwan as a member, leading to desperation among Taiwanese citizens. Comparisons between SARS and the COVID virus raised public awareness. In fact, one piece of disinformation claimed that the COVID virus belongs to the SARI family (the same family as SARS), triggering panic and public discussions among Taiwanese citizens. This particular case underwent numerous revisions and reposts later on, which I will address further in the next stage of analysis. Additionally, by combining this research with statistics from Cofacts, it is evident that calls for people to share the news to "save lives" or "protect family and friends" within the articles generally contributed to the widespread dissemination of these articles.

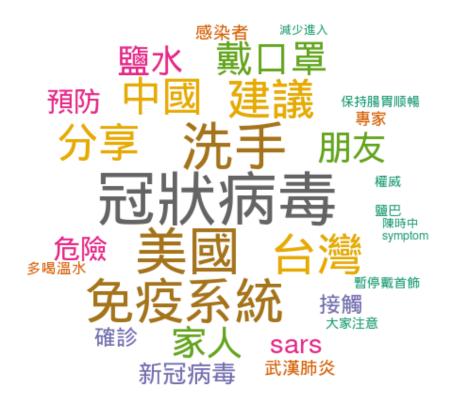


Fig. 4. A word cloud demonstrating the keywords and their frequencies from January 2020 to June 2020

From July to December 2020, as the pandemic ravaged countries worldwide, Taiwan remained relatively safe and under control. However, during this period, rumors about conspiracy theories from foreign countries, particularly the US and Japan, spread widely on LINE. The most prominent word during this period was "the US," with a frequency of 7,800 times. Interestingly, "Biden (拜登)" ranked eighth during this time, with 4,200 occurrences. News concerning the US and the Biden administration primarily focused on criticism of the US government's delayed response to the pandemic and subsequent policies. These reports also

featured perspectives from Chinese individuals living in the US, ranging from medical professionals to international students and the American Born Chinese (ABCs), who shared the latest information or expressed desperate pleas within the broader Chinese community. Additionally, the news purported to be from medical authorities, such as Dr. Lu (呂博士) and Dr. Jiang (江守山), continued to encourage the public to consume hot and saltwater or consume large amounts of vitamin C to "cure" COVID-19. Some reports mentioned authorities with significant titles like "the chair of the hospital (院長)" or "the expert (專家)," which garnered considerable attention. However, most of these "experts" denied releasing such information, a fact I will elaborate on with evidence from the investigation into the original sources of the news.

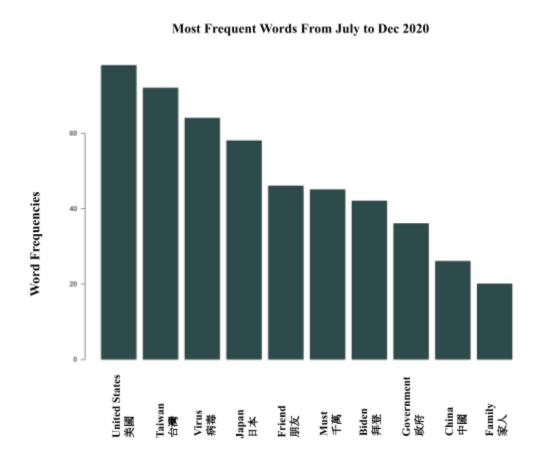


Fig. 5. Word frequencies from July 2020 to December 2020. Each point represents a frequency of 100 occurrences.

Another interesting trend during this period was the focus on news about Japan, particularly regarding the controversial import of Japanese radiated food products from Fukushima. These reports centered on the Taiwan government's connections with Japan and the perceived political and business benefits. Key phrases highlighted in these reports included "keep alert (保持警覺)," "evil or suck government (爛政府)," "business benefits (商業利益)," "nuclear pollution (核汙染)," and "the truth we don't know (我們不知道的真相)." The news accused Tsai's administration of concealing the truth from Taiwanese citizens and emphasized actions taken by the US and the EU to ban Japanese foods and even immigrants, highlighting the dire situation in Japan.



Fig. 6. A word cloud demonstrating the keywords and their frequencies from July 2020 to December 2020

From January to June 2021, as the pandemic reached its peak in Taiwan, citizens' concerns and requests about vaccines were prominently reflected in LINE's word trend. During this period, the most frequently occurring word was "vaccine (疫苗)," with a frequency of 13,800 times, setting the record for the highest frequency of a single keyword throughout the three periods. Other top-ranked keywords included "the US," "infection (感染)," "government (政府)," and "Taiwan." The most significant changes in topics revolved around (1) the brand and type of vaccines and (2) the debate between Western medical knowledge (西醫) and Traditional Chinese medicine (中醫). Available vaccine brands during this period included "Pfizer"

(generally referred to as "BNT" by Taiwanese), with a frequency of 2,600 times, "Shanghai Fosun (上海復星)," with 1,700 times, "Moderna (莫德納)," with 600 times, and the local brand "Medigen (高端)," with 200 times. Discussions on topics such as "mRNA" and the side effects and consequences of taking these vaccines also garnered significant attention from the audience, with a frequency of 600 times.

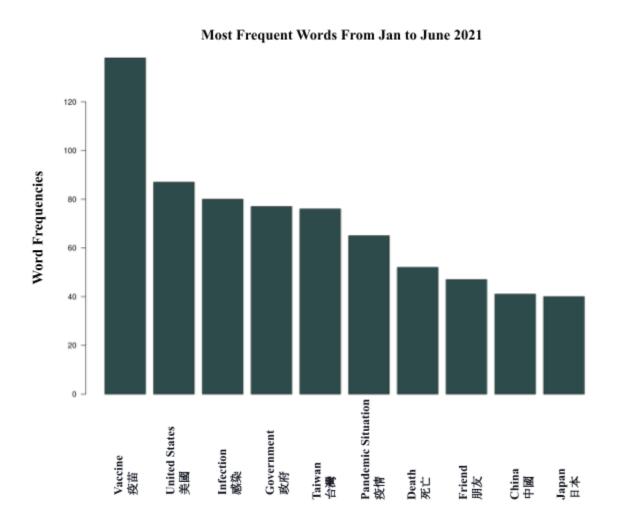


Fig. 7. Word frequencies from January 2021 to June 2021. Each point represents a frequency of 100 occurrences.

In May 2021, Taiwan faced its most significant crisis of the outbreak and vaccine shortages. Discussions ranged from scientific topics such as "cycle threshold value (Ct 值)," "test positive (陽性)," and "pandemic investigation (疫調)," to discussions about "secret treatments (秘方)" and "magical tips (神奇秘訣)."



Fig. 8. A word cloud demonstrating the keywords and their frequencies from January 2021 to June 2021

In addition to the keywords varying across different stages, certain repetitive keywords throughout the three periods indicate patterns in Taiwanese preferences and priorities when consuming information. Research reveals that words such as "the US (美國)," "Taiwan (台灣)," "vaccine (疫苗)," "government (政府)," and "family and friends (家人朋友、親友)" consistently

appear among the top 100 popular posts. Remarkably, "the US" appears nearly 20,000 times across all posts, surpassing the frequency of "Taiwan," which occurs 17,500 times. Notably, "the US" consistently ranks in the top three popular keywords in each period. The term "vaccine" gained popularity as the pandemic situation in Taiwan escalated from June 2020 to its peak in May 2021, with a frequency of 14,100 times. Mentions of "government" within posts were also significant, occurring 11,300 times, encompassing references to various governments, including Taiwan, the US, Japan, China, or Russia, with both positive and negative content. Moreover, the words "family" and "friends" remained prominent keywords, often associated with urgent calls for attention (大家注意), accumulating personal merit in heaven (功德無量), or emphasizing social responsibility to help others (助人).

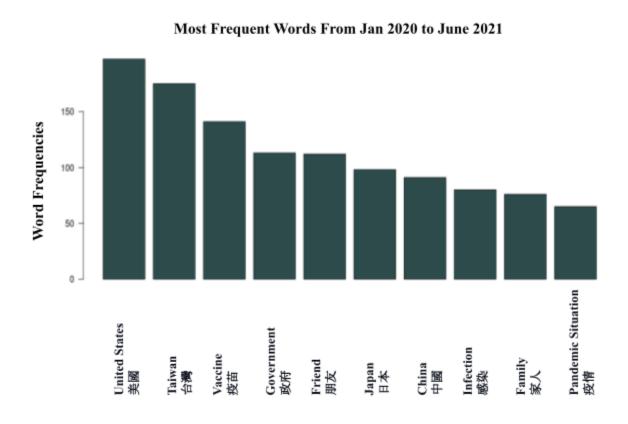


Fig. 9. Word frequencies from January 2020 to June 2021. Each point represents a frequency of 100 occurrences.

Intriguingly, the word "SARS" resurfaced with a frequency of 1,800 times, correlating with the first period's posts, where the content claimed that the COVID virus belonged to the same family as SARS. This case illustrates how the lifecycle of disinformation can reveal the intentions of those who disseminated the news, a topic to be explored further in the following stage.



Fig. 10. A word cloud demonstrating the keywords and their frequencies from January 2020 to June 2021

Methodologies To Discern Rumors, Misinformation, And Disinformation From China:

1. The Original Source Of Disinformation:

According to the research, the following statistics represent the distribution of top 100 posts across three distinct periods: January to June 2020 (Period 1), July to December 2020 (Period 2), and January to June 2021 (Period 3). Each period comprised 100 posts.

In Period 1 (Jan to June 2020), there were twenty plagiarism posts, fifty-eight COVID or public health-related posts, with forty-eight of them originating from Chinese platforms, constituting approximately 82.76% of COVID or public health-related posts.

During Period 2 (July to Dec 2020), there were fourteen plagiarism posts, fifty-one COVID or public health-related posts, with thirty-eight of them from Chinese platforms, accounting for approximately 74.51% of COVID or public health-related posts.

For Period 3 (Jan to June 2021), there were twenty-five plagiarism posts, eighty-nine COVID or public health-related posts, with forty-eight of them from Chinese platforms, making up approximately 53.93% of COVID or public health-related posts.

Across these periods, a notable trend emerges in the prevalence of COVID or public health-related posts, which increases over time. Meanwhile, the occurrences of plagiarism posts fluctuate across periods, with Period 3 showing a slight rise compared to Period 2. Additionally, the consistency in the number of posts from Chinese platforms indicates a significant presence of content originating from this source throughout the studied periods. These insights provide valuable information for understanding the online discourse surrounding plagiarism and COVID-related articles from China-based sources during the specified time frames.

2. Patterns Within Chinese-Based Disinformation:

By tracking back the original sources of the posts on LINE, collating news with similar or edited content to facilitate the identification of patterns, and translating these news items into simplified Chinese while conducting searches on Google to determine the origins of the posts, I have discovered the following patterns within China-related disinformation:

2.1 The posts overlapping with CCP official instructions or documents:

These posts serve as direct proof that the Chinese government has engaged in information warfare against Taiwan. This type of news clearly indicates orchestrated efforts to manipulate information.

First, it is rare for ordinary individuals, including Chinese citizens, to have an interest in reading multiple official documents, which are typically lengthy and dull. Moreover, the idea that people would then combine and organize this information into a coherent post is highly improbable. Finally, it is less likely that Taiwanese citizens would have the patience to collect such information and formulate a post on LINE. A prime example of this manipulation occurred at the beginning of the pandemic:

(Source 1) Starting today and for the next 10 days, Taiwan officially enters a critical period regarding the COVID-19 outbreak. Here are the recommendations:

- 1. Strictly avoid going to public places.
- 2. Opt for takeout when dining out.
- 3. Prefer outdoor dining environments.
- 4. Proper handwashing is crucial.
- 5. When taking public transportation (bus, subway), sit towards the front of the vehicle.
- 6. Avoid wearing contact lenses.
- 7. Consume hot meals, avoid raw or cold foods, and increase vegetable intake.
- 8. Maintain good digestive health.
- 9. Drink warm water frequently.

- 10. Temporarily refrain from visiting hair salons.
- 11. Hang worn clothes (jackets, pants) outdoors separately for 2 hours upon returning home.
- 12. Temporarily avoid wearing jewelry.
- 13. Wash hands immediately after handling coins. Place newly acquired coins in a plastic bag separately for a day before use.
- 14. Refrain from using other people's telephone receivers at work. Disinfect telephone receivers.
- 15. Avoid peak hours when using public transportation.
- 16. Do not visit traditional markets or night markets.
- 17. Engage in appropriate physical exercise.
- 18. Temporarily avoid entering gyms.²⁷

The underlined parts represent the overlaps with the instructions found on pages 26 to 28 of the CCP's second edition of the "COVID-19 health education instruction (中国政府网一新型冠状病毒肺炎健康教育手册第二版),"²⁸ and they are primarily copied from the "Combatting Novel Coronavirus - Prevention and Control Knowledge (抗击新型冠状病毒-防控知识)."²⁹

2.2 The posts directly translated from Chinese platforms (like WeChat, QQ, or Weibo), with the content translated into Traditional Chinese:

These types of news are relatively easy to recognize. They often contain information specific to China, such as mentioning Chinese cities, events on WeChat or Weibo, and instructions from the CCP government. Alternatively, they retain nuances from China, such as using terms like "Internet (网络)," which is called "網路" in Taiwan, "group

²⁹ http://opt.cas.cn/gb2019/zt/xgzyqfk/fkzs/202002/t20200218_5501915.html

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²⁷ Original source: 今天開始10天,台灣正式進入武漢肺炎<u>関鍵期</u>。建議如下: 1.<u>嚴禁進入公共場所</u>。2.用餐儘量將食物外帶。3.用餐環境儘量在戶外。4.正確方式的洗手(特別重要)。5.坐捷運(公車),選擇在<u>車前頭</u>。6.避免戴<u>隱形眼鏡</u>7.吃熱食,避開生凉食物,多吃蔬菜8.,保持腸胃顺暢。9.多喝溫水。10.暫停去<u>髮廊</u>。11.穿過的衣服(外套,長褲),回家先<u>單獨吊在戶外2小時</u>12.暫停戴首飾。13.一有接觸錢幣,一定要洗手,剛拿進來的<u>錢幣</u>,先單獨放在塑膠袋中,一天後,才拿出來. 14.在公司不要使用別人的<u>電話筒。電話筒的消毒</u>。15.<u>避開巔峰時間坐車</u>. 16.不去傳統市場及夜市. 17.適當的運動。18.暫停進入健身房。

²⁸ https://www.gov.cn/fuwu/2020-03/10/5489535/files/a3e521acbbb84e82a132c4f15b569470.pdf

(especially referring to groups on social media) (群)," which is called "群組," "video (视 频)," which is called "影片," "subway (地铁)," which is called "捷運," "post (帖子)," which is called "貼文," "the American (美国佬)," which is called "美國人," "Alipay (支 付宝)," which is not commonly used in Taiwan, "PCR (核酸检测)," which is called "快 篩," and "link (链接)," which is called "連結." An interesting example illustrates this phenomenon:

> (Source 2) Tomorrow from 3 a.m. to 7 p.m., the Chinese internet will begin cleaning up and organizing LINE. All groups should not send pictures or links. Once a group is cleaned, all phone numbers in the group will be controlled, which is troublesome. Please pass this on to others. Starting tomorrow at 9 a.m. until the end of the 19th Congress meeting. internet police will monitor all WeChat groups for sensitive political topics, explicit images, and advertisements. The internet police will use technical means to trace individuals. Please pass this on to others and avoid getting into trouble. Everyone, please take care and protect yourselves accordingly. 3031

> (Source 3) Tomorrow from 3 a.m. to 7 p.m., the Taiwanese internet will start cleaning up and organizing LINE. All groups should not send pictures or links. Once a group is cleaned, all phone numbers in the group will be controlled, which is troublesome. Please pass this on to others. Good morning and greeting pictures should not be sent. Rest for a day tomorrow. Please help spread this message!³²

Comparing the first post (originating from WeChat) with the second post (disseminated on LINE), we observe that the words were translated into Traditional Chinese, but the nuances were not adjusted accordingly. Terms such as "Internet (网络)," "group (群),"

³⁰ https://www.jianshu.com/p/1761e220873d 简书, Original from Wechat

³¹ Original source: 明天早上3点至晚上7点, 中国网络开始清理整顿上INE, 所有族群都不要发图片和连接, 一但 群被清理, 群里所有手机号都将被控, 很麻烦, 望相互转告。从明天上午9点开始到十九大会议结束, 明天开始网 警将对所有微信群实施监控,敏感政治话题及露点图片和广告。网警将通过技术手段追查到个人,望大家相互转 告,别撞到枪口上。望各位注意因应自保!

³² Original source: 明天早上3點至晚上7點,台灣網絡開始清理整頓LINE, 所有族群都不要發圖片和鏈接, 一但 群被清理,群裡所有手機號都將被控,很麻煩,望相互轉告。早安、問候的圖片不要發,明天休息一天,請幫忙轉 發發分享出去!

and "link (链接)" remain in the sentences. More intriguingly, the original post explained the (real) reason for the warning, citing the "19th Congress meeting (十九大会议)" and the launch of an online surveillance system to censor "sensitive political topics (敏感政治话题)," "nude photos (露点图片)," and "advertisements (广告)," with tracking back to the posters (追查到个人). However, when posted on LINE, this explanation was omitted, and the discourse shifted to claim that "the Taiwanese internet will start cleaning up and organizing LINE (台灣網絡開始清理整頓LINE)."

2.3 The titles with adjustments on the authorities or the countries' names:

This type of revision is the most common category. According to the research, many innocent doctors and scholars were forced to declare that they had not released the information that became popular on LINE, with their names featured in the news titles:

(Source 4) This is 100% accurate information, and it is very effective for everyone. Why has the number of infections in mainland China decreased significantly over the past few days? ... Doctor Shu-Ang Wang from Tung's Taichung MetroHarbor Hospital: Before the novel coronavirus reaches the lungs, it can survive in the throat for 4 days. During this time, people may experience coughing and sore throat. If they can drink plenty of warm water with salt or vinegar, they can eliminate the bacteria. Please pass on this message as soon as possible, because you may save someone's life!³³

(Source 5) Chairman's post from the Veterans General Hospital: Before the novel coronavirus reaches the lungs, it can survive in the throat for 4 days. During this time, people may start coughing and experience a sore throat. If they can drink plenty of warm water with salt or vinegar, they

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³³ Original source: 這是100%準確的信息, 對於每個人都非常有效。為什麼中國大陸過去幾天大大減少了感染人數?…… 童綜合醫院王叔昂醫師: 新冠肺炎在還沒有來到肺部之前, 它會在喉嚨部位存活4天。在這個時候, 人們會開始咳嗽及喉痛。如果他能儘量喝多溫開水及鹽巴或醋, 就能消滅病菌。儘快把此訊息轉達一下, 因爲你會救他人一命!

can eliminate the bacteria. Please pass on this message as soon as possible, because you may save someone's life!³⁴

Based on the research findings, the earliest source of the content originated from a WeChat post by Dr. Jian-Zhong Huang (黄建中), who claimed to be a "medical professor in the United States," but could not be found when searched online. The news above gained popularity not only on LINE but also on WeChat and WhatsApp. However, the doctor mentioned in the post, Shu-Ang Wang (玉叔昂)³5, is actually an orthopedic doctor and did not comment on this topic. The other revisions of the post, which were "attributed" to doctors Nanshan Zhong (鐘南山)³6 or Shiuhon Chui (崔紹漢)³7, were also clarified by these innocent medical professionals as being purely fake information. According to the examples, the pattern reveals that disinformation originating from Chinese platforms tends to "borrow" the names of individuals with high reputations in Taiwan. This preference sometimes could extend to individuals who may currently have fewer connection with the field:

(Source 6) Dr. Ming-Chian Gao (高明見), Honorary Professor at National Taiwan University College of Medicine, suggests adding a piece of tissue paper inside the mask, disposing of it after use, and using a hairdryer to blow the mask for 1-2 minutes for reuse. The doctor says that the Wuhan virus will die at temperatures above 65°C, so using a hairdryer to blow the mask can make it reusable. Therefore, I checked online and found that the temperature of a hairdryer at close range can reach above 65°C, so there's no rush to buy masks for now.³⁸³⁹

³⁴ Original source: 榮總主委的貼文: 新冠肺炎在還沒有來到肺部之前, 它會在喉嚨部位存活4天。在這個時候, 人們會開始咳嗽及喉痛。如果他能儘量喝多溫開水及鹽巴或醋, 就能消滅病菌。儘快把此訊息轉達一下, 因爲你會救他人一命!

³⁵ https://zh-tw.sltung.com.tw/department_detail.php?id=13

³⁶ https://tfc-taiwan.org.tw/articles/2119

³⁷ https://www.rthk.hk/oldassets/files/extra file/20200427104029 759163224.pdf

³⁸ Originating from QQ: http://kuaibao.qq.com/s/20200128AZP0CW00?refer=spider

³⁹ Original source: 台大醫學院名譽教授 高明見建議 口罩內層加一張衛生紙再戴, 使用後紙丟棄, 口罩用吹風機吹1~2分鐘就可重複使用。……醫生說武漢病毒超過65度C會死掉, 網上建議口罩用吹風機吹, 可重複使用, 所以我上網查了一下, 近距離吹風機的溫度可達65度C以上, 所以暫時不用急著去搶口罩了。

(Source 7) Forwarding is an act of kindness: An article by the passed Professor Lin, an authority in toxicology at Chang Gung Memorial Hospital, suggests: It's no wonder that there are more and more cancer patients. When using an electric cooker to steam food, be sure to use boiled water or filtered water. This is because if you use tap water directly, it contains chlorine. After heating, because the pot lid is closed, the chlorine is completely enveloped in the food. Therefore, it is essential to use boiled water or water filtered to remove chlorine when steaming food. Chlorine poses a cancer risk, and this is really important! Even if you're just steaming buns, you should have this common sense! Please share this message widely so that more people are aware of it!⁴⁰⁴¹

In the two posts, Professor Ming-Chian Gao (高明見) and the late Doctor Lin were mentioned in the titles to attract people's attention. Taiwanese citizens tend to hold doctors in high esteem, particularly those with a strong reputation or authority in their fields. In the second post, the title was crafted in a way that didn't provide the full name of "Doctor Lin who had passed away (已故林教授)," leading Taiwanese readers to automatically associate it with the renowned Dr. Chieh-liang Lin (林杰樑). Dr. Lin had consistently provided valuable suggestions and warnings to the public, imparting practical health knowledge. These examples illustrate that even if a professor has retired or passed away, posts can still benefit from their esteemed reputation, thereby increasing trust among readers.

In some cases, even religious leaders are bothered by news that intentionally uses their names:

⁴⁰ Originating from Zhihu: https://www.zhihu.com/guestion/29792780/answer/133348180

⁴¹ Original source: 轉發就是善行: 長庚醫院毒物科權威醫師 已故林教授的文章稱: 難怪有癌症的人愈來愈多,用電鍋蒸煮東西時,一定要用開水,或是過濾過的水,因為如果直接用自來水,自來水有氯,再經過加熱後,由於鍋蓋是蓋著的,氯被全部包覆在食物上。所以一定要用煮沸過的開水或用已過濾掉氯的水來蒸東西。因為氯有致癌的危險,這真的很重要! 即使只是蒸饅頭,都要有此常識! 請多多轉發,讓更多的人知道~~!

(Source 8) Reference!! Venerable Master Jingkong is already 94 years old and highly respected. The venerable monk said, "According to Guanyin Bodhisattva's instructions, when going out, put a piece of ginger in your pocket, and every morning, drink hot water with a few slices of ginger. The largest ginger production base in China is Laiwu City, Shandong Province. Currently, the only city in Shandong Province with zero cases is Laiwu City. It is possible that the novel coronavirus does not like the taste of ginger, or that ginger contains components that the novel coronavirus does not like.⁴²

In this example, Master Jingkong stated that he had never made such remarks.⁴³

Finally, changing the country's name was another significant sign of disinformation. News could be reposted with only a simple edit, replacing one country's name with another while keeping the rest of the content unchanged. One of the most famous examples is the news about "the first country to conduct autopsy research on bodies infected with COVID-19":

(Source 9) Singapore has become the first country in the world to conduct autopsies on Covid-19 bodies. After thorough investigation, it was found that Covid-19 does not exist as a virus, but rather as bacteria exposed to radiation and causing human death through blood clotting. "... It is just clotting in the blood vessels and treatment methods. Antibiotic tablets, anti-inflammatory drugs, and taking anticoagulants (aspirin). This protocol has been announced in Singapore. China has known this but has never published a report. Share this information with your family, neighbors, acquaintances, friends, and colleagues to dispel fear of Covid-19 and realize that it is not a virus, but bacteria exposed to radiation.⁴⁴

^{**} Original source: 參考參考!! 淨空和尚已經94歲了德高望重。老和尚說 "觀世音菩薩指示的 出門放一塊薑在口袋裡,每天早晨用幾片薑沖熱開水喝。中國最大的薑生產基地是山東省萊蕪市。目前整個山東唯一零病例的城市就是萊蕪市。有可能新冠狀病毒不喜薑的味道,或者薑裏面含有成分是新冠狀病毒不喜歡的。

⁴³ https://cofacts.tw/article/2uc67fevvjn34

⁴⁴ Original source: 新加坡已成為世界上第一個對 Covid-19 屍體進行屍檢(驗屍)的國家。經過徹底調查,發現 Covid-19 並不作為病毒存在,而是一種暴露於輻射並通過血液凝固導致人類死亡的細菌。......「它只不過是血管內的凝固(血塊)和治療方法。抗生素片抗炎和服用抗凝劑(阿司匹林)。這種效果的協議已經在新加坡公佈中國已經知道這一點,但從未發佈過報告。與您的家人、鄰居、熟人、朋友和同事分享這些信息,讓他們擺脫對 Covid-19 的恐懼,並意識到這不是病毒,而是只暴露於輻射的細菌。

Based on the investigation,⁴⁵ the news had more than five versions with different countries' names, ranging from Canada, Singapore, Vietnam, and Russia, to Italy and Ecuador, all being "claimed" to be "the first country."

2.4 The United States as the "Super Brand":

Upon extensive research, it becomes evident that "the US" emerges not only as the predominant keyword across all three periods but also serves as a primary conduit for the dissemination of misinformation and disinformation. Within the top 100 popular posts, a recurrent pattern emerges wherein "the US" is strategically employed as both a subject and a discourse, wielding considerable influence in shaping public opinion on social media platforms in Taiwan. This phenomenon is not confined to a single platform but extends its reach to encompass popular platforms such as LINE and Facebook.

The ensuing analysis will investigate the select cases exhibiting significant popularity, thereby illuminating how the United States becomes a strategically manipulated discourse within the realm of disinformation in Taiwan. In this stage, I have identified the following patterns and will provide examples to elucidate the mechanism:

1. The perspective from the United States, 2. translation into English, 3. news stigmatizing the US and Western actors, and 4. news (from the US perspective) criticizing the Taiwan government.

2.4.1 The Perspective from the United States:

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 $^{^{45}}https://docs.google.com/spreadsheets/d/1KDM8_N90UCxiN1brXEtrblVh05D4v3Sa12nAcVGTlkA/edit?usp=sharing$

Disinformation in Taiwan frequently incorporates perspectives, suggestions, and resources from the United States. Despite numerous instances being debunked as pure fabrications—wherein the purported statements were never made by US authorities or the cited individuals did not exist, as discussed in the preceding section on authority discourse—many pieces of misinformation still cite sources from the US, including official documents. The ensuing cases will illustrate how information producers leverage these sources and intertwine them with the desired message intended for Taiwanese citizens:

2.4.1.1 The US Officials:

(Source 10) The United States has officially stipulated: for individuals aged 65 and above, the standard blood pressure is 150/90, and for those aged 80 and above, even 160 or 170 is acceptable... For individuals aged 70 and above, hypertension should not be lower than 130; otherwise, it is extremely prone to orthostatic hypotension and fainting. Blood pressure between 150 to 130 is safer, it's better to be a bit higher than lower.⁴⁶

The sources cited in this post originated from the 2014 evidence-based guideline⁴⁷ for the management of high blood pressure in adults, published by the National Institutes of Health (NIH). According to the NIH document, the information presented therein was accurate. However, it is noteworthy that this news was initially disseminated on LINE in 2020, subsequent to the NIH's announcement in 2018⁴⁸ that they would cease using this guideline to measure blood pressure. Despite this, the news

48 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6454321/

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⁴⁶ Original source: 美國已正式規定:65歲以上標準血壓150/90, 80歲以上的正常老人, 160甚至170也可以...70歲以上的人高血壓不能低於130, 否則極易產生體位低血壓暈倒, 高血壓在150~130之間較為安全, 寧可高一點, 別低.

⁴⁷ https://pubmed.ncbi.nlm.nih.gov/24352797/

continued to be reposted in various iterations, particularly during the onset of the pandemic when public health issues garnered heightened attention.

Taiwanese citizens placed trust in these posts, as some versions even included a screenshot from the NIH article abstract along with a link to the original source.

The underlying strategy here is not to propagate outright false information but rather to utilize the United States as a rhetorical device and the NIH as a reputable scientific authority to bolster trust among LINE users for such messages. Given the citation's validity and the accuracy of the information provided, even well-educated individuals may struggle to discern the discrepancies without scrutinizing the dates and obtaining the latest updates from the NIH. As users become accustomed to this type of messaging, they are more inclined to share similar information, particularly during times of uncertainty such as the onset of an unfamiliar pandemic.

2.4.2 News from Twitter, Personal Blogs, and Translation:

In addition to official documents, unofficial resources originating from the US play a significant role in garnering the trust of Taiwanese individuals. Despite the comparatively smaller user base on platforms such as Twitter and personal blogs as opposed to LINE, English posts or translations of English posts often attract considerable attention when reposted on LINE. Remarkably, our research indicates that the majority of translated posts originate from Chinese platforms.

Furthermore, posts recounting personal experiences tend to share strikingly similar narratives, suggesting a coordinated effort behind their dissemination:

(Source 11) "The media tells you to wash your hands and avoid anyone with symptoms. I did. There is no way to avoid catching this except avoiding all other humans," wrote a woman who recovered from Coronavirus.⁴⁹

(Source 12) Sharing a personal experience written by an American infected with COVID-19 in Seattle. I had COVID-19 and here is my story. I made this post public out of several requests from my friends who asked me to share. I hope it gives you some good information and peace of mind! 5051

(Source 13)"The Effective Self-Treatment Methods Learned While Studying in Germany (Combating COVID-19) - Written on March 23, 2020" I come from New Taipei City, and my surname is Huang. Currently, I am pursuing my Ph.D. in Microsystems Engineering (IMTEK) at the University of Freiburg in Germany. I am the only Taiwanese student in our class, with many students coming from China and a significant number from India as well. As the COVID-19 pandemic spreads across European countries, Germany is no exception. Students from Asian countries such as China and India wear masks, while German students generally do not. Statistics show that the mortality rate of infected individuals in Germany is remarkably low, which has piqued my curiosity. I wonder what extraordinary advantages the Germanic people possess, despite having a world-class public healthcare system. Why do most infected individuals exhibit mild symptoms or remain asymptomatic? A diligent classmate

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⁴⁹ https://twitter.com/htTweets/status/1237615716867510272

⁵⁰ From WeChat: https://bbs.wenxuecity.com/health/895286.html

⁵¹ Original source: 轉~翻譯一篇在西雅圖感染新冠肺炎病毒的美國人所寫的個人經歷。我感染了新冠病毒(武漢肺炎),由於不少我身邊朋友的請托,希望我可以跟大家分享我的情況,所以我決定把我的染病的經驗公開,讓大家可以有更多的了解。

informed me that middle to upper-class German families typically have zinc and vitamin B12 supplements readily available. They regularly use these two supplements to boost their immunity. Therefore, they are not overly concerned about the new coronavirus. The majority of them view it as nothing more than a severe flu. As long as their immunity is robust, there is no need for panic. 5253

In sources 11 and 12, the narrative is framed as that of "an American who experienced COVID-19 infection," adopting a didactic tone that conveys information from a superior position downward. This approach, known colloquially as "teaching down," underscores the Taiwanese audience's inclination to look up to the United States and their readiness to heed its guidance. Unlike American culture, where individual autonomy is prized, Taiwanese society tends to defer to authority figures, with the US being perceived as a trustworthy and benevolent authority compared to China. It's noteworthy that Taiwanese individuals often harbor concerns about the quality of medical instructions and treatments originating from China, a sentiment reflected in the keyword analysis where mentions of "Shanghai Fosun (上海復星)" were notably less frequent compared to vaccines from the US and Germany.

Source 13 presents a compelling case. Despite claiming to be Taiwanese, the poster, Huang, employs Simplified Chinese and utilizes linguistic nuances

⁵² Posted on 萬維博客 https://blog.creaders.net/u/5568/202004/370538.html

⁵³ Original source: 我在德國留學學到的在家自行治病(抗擊新冠病毒)很有效的方法 (寫於2020年3月23日) 我來自新北市,我姓黃,目前在德國弗萊堡大學微系統工程(IMTEK)的博士班。我們班上只有我一個是台灣來的,中國來的很多,印度也不少。這次新冠疫情在歐洲各國流行,德國也不例外。中國及印度等亞洲國家來的學生會戴口罩,德國學生原則上是不戴的。經統計,在德國的感染者死亡率奇低,這種種實在讓我好奇,他們這日耳曼民族有什麼過人優越之處,即使他們具有世界一流的公共醫療保健系統,憑什麼感染的人症狀輕微或無症狀居多?我一位熱心同學告訴我,原來德國的中上經濟家庭,平時一般都會準備鋅及B12營養補充品,平常至少會用這2種補充品來提高免疫力,所以他們也沒什麼擔心這新冠病毒,他們大多數人認為,這不過就是比較嚴重的流感罷了,只要免疫力夠強,沒什麼好恐慌的。

distinct from typical Taiwanese discourse. While Huang does not explicitly mention the US, the invocation of cultural superiority in the statement "I wonder what extraordinary advantages the Germanic people possess (他們這日耳曼民族有什麼過人優越之處)" taps into the Taiwanese reader's admiration for Western, well-developed nations, thereby bolstering belief in the "German secret tips" proffered in the post.

In certain instances, news articles incorporate medical research findings, official reports, or content sourced from foreign users posted in English. However, this poses a challenge for elder Taiwanese citizens, as they may face barriers in reading English text. Exploiting this situation, posters capitalize on these individuals' reverence for English resources and their limited ability to comprehend the original content. By providing translations, either in full or in part, into Traditional Chinese, the posters aim to enhance the perceived credibility of the posts among this demographic.

One illustrative example involves the intentional translation of a post claiming that the United States has developed a potent oral medication capable of curing COVID-19 within five days:

(Source 14) Great news! COVID-19 pandemic is saying goodbye! (Goodbye forever). The United States will soon have an "oral liquid for treating COVID-19." Patients with COVID-19 can take this medicine orally at home for 5 days, completely clearing the virus from their bodies, and achieving full recovery. The generic name of this medicine is "Monapinavir," jointly developed by the German company "Rigibel" and the American company "Merck." It has successfully completed Phase I and Phase II clinical

trials in humans with a 100% effectiveness rate. The Phase III clinical trial is nearing completion, and the results are extremely promising. If all goes well, it will be available on the market within 4 to 5 months. Patients can easily take this medicine at home, and with just 5 days of treatment, they can fully recover. It will be as convenient as treating a common cold in the future. COVID-19 will no longer be terrifying.⁵⁴

(Source 15) The United States will soon have an"oral solution for the treatment of the new coronavirus(Covid-19)." People suffering from the new coronavirus took the drug at home for 5 days, the new coronavirus was completely cleared from the body and the patient fully recovered. The drug is translated as "Monapinavir" and is jointly developed by the two major pharmaceutical companies "Rigibel" in Germany And "Merck" in the United States. It has successfully completed the first and second phase clinical trials in humans with 100% effect; Currently, the third phase of clinical trials is nearing the end and the effect is very good. If it goes well, it will be available in the market within 4 to 5 months. The patient can take this medicine by himself at home and heal in 5 days, which is very convenient to use. Treating the new coronavirus in the future is like treating the common cold now. The coronavirus is not terrible anymore.

However, the news often distorts the comprehensive message of the original sources by selectively choosing parts to support their arguments or intentionally misinterpreting the information.⁵⁵ In the example cited above, a search of the post in English reveals that the original source was a research article titled "Human

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⁵⁴ Original source: 特好消息! 新冠疫情再見了!(永遠不再見了) 美國即將有「治療新冠病毒的口服液」。患有新冠狀病毒者在家口服該藥5天, 體內徹底清除了新冠狀病毒,患者徹底康復。該葯譯名為「莫那皮納偉」(Monapinavir), 由德國「瑞吉貝爾」(Rigibel) 和美國「默克」(Merck) 兩大藥廠聯合研製, 已經在人體成功完成第一期和第二期臨床試驗, 效果100%; 目前第三期臨床試驗接近收尾, 效果非常好。如果順利的話, 在4~5個月內就可以面市。該藥患者在家裡可以自己口服, 5天痊癒, 使用非常方便。以後治新冠病毒就像現在治療普通感冒一樣。新冠狀病毒就不可怕了。

⁵⁵ MyGoPen查證參考: https://www.mygopen.com/2021/04/Molnupiravir.html

Safety, Tolerability, and Pharmacokinetics of Molnupiravir, a Novel Broad-Spectrum Oral Antiviral Agent with Activity Against SARS-CoV-2"56 from the U.S. Department of Health and Human Services (HHS). However, neither the English version nor the translation conveyed the conclusion of the original article accurately. In fact, the only aspects of the post that were accurate were the purpose of the research and the names of the pharmaceutical companies involved. The article itself mentioned that the medication had successfully passed second-stage tests but was still far from being available for public consumption. Additionally, it was noted that the medication was in capsule form, not liquid, and there was no mention of its ability to "cure people in 5 days."

Moreover, there exists another type of disinformation that exists in both English and Traditional Chinese versions but originates from an original source in Simplified Chinese. These posts are translated into Traditional Chinese and then further translated into English:

(Source 16) The new NCP coronavirus may not show sign of infection for many days, how can one know if he/she is infected? By the time they have fever and/or cough and go to the hospital, the lungs are usually 50 % Fibrosis and it's too late! Taiwan experts provide a simple self-check that we can do every morning: Take a deep breath and hold your breath for more than 10 seconds. If you complete it successfully without coughing, without discomfort, stuffiness or tightness etc it proves there is no fibrosis in the lungs, basically indicating no infection. In critical times, please self-check every morning in an environment with clean air!"⁵⁷

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⁵⁶ Painter, Wendy P et al. "Human Safety, Tolerability, and Pharmacokinetics of Molnupiravir, a Novel Broad-Spectrum Oral Antiviral Agent with Activity Against SARS-CoV-2." *Antimicrobial agents and chemotherapy* vol. 65,5 (2021): e02428-20. doi:10.1128/AAC.02428-20

⁵⁷ Original source: 由於NCP新型冠狀病毒, 有0~24天的潛伏期, 感染病毒後, 沒有任何徵兆, 但肺細胞已經開始了纖維化進程, 直到有一天因發燒及咳嗽去醫院檢查, 此時肺部通常已經50%纖維化了, 為時太晚! 專家提

The rationale behind these translations is evident, given the prior evidence indicating Taiwanese preferences for US and English sources. There is little justification for translating content into English and sharing it on social media platforms where the primary audience may not understand it. This translation practice reveals two key points: firstly, that the news has been manipulated by the poster, and secondly, that the lack of proficiency in foreign languages, coupled with a preference for such resources, creates an opportunity for institutions disseminating disinformation to alter, extract, and misinterpret information from original sources.

2.4.3 News Stigmatizing the US and Western Actors:

2.4.3.1 Implicit "Chinese-Central" Sense of Superiority:

This category of news frequently amplifies the purported efficacy of Traditional Chinese medicine while simultaneously disparaging Western medical treatments. By invoking cultural imperialism and ethical superiority, these narratives aim to bolster Taiwanese citizens' identification with a broader Chinese heritage:

(Source 17) The comparison between Traditional Chinese Medicine (TCM) and Western Medicine (WM) treatment groups for COVID-19 reveals striking disparities. In the TCM group of 320 patients, there were zero deaths, whereas in the WM group, 113 patients succumbed to the

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供一方法讓你盡早知道自己肺部的狀況:最、最、最大深度地"吸氣"並且"屏氣"超過10秒以上,如果可以順利完成(沒有如咳嗽、壓抑、悶、不適等)並且每日如往常一樣,恭喜你!證明肺部沒有纖維化,基本表示沒有感染。特別時期,請大家"每天"早上起床,在乾淨空氣中測試!

virus. The mortality rate in the TCM group was 0%, significantly lower than the 35.3% in the WM group. Additionally, patients receiving TCM treatment recovered in an average of 7 days, while those under WM treatment were still undergoing therapy after 20 days. TCM treatment methods, including Chinese herbal medicine and acupuncture, showed no adverse effects, whereas WM treatments resulted in complications such as pulmonary fibrosis, uremia, and myocarditis. Moreover, the financial burden of TCM treatment was minimal, costing only a few hundred yuan, compared to over 400,000 yuan for WM treatment. Before the trial's completion, many patients from the WM group transferred to the TCM group, leading to a larger TCM cohort and a smaller WM cohort. Dr. Zeng Haiji from Peking University Third Hospital emphasized that the success of the TCM group, with no deaths among 320 patients, underscores the potential of TCM in COVID-19 management. Officials from the World Health Organization lauded the TCM treatment approach during their visit, suggesting that early TCM intervention could have significantly reduced the mortality rate associated with COVID-19.58

2.4.4 Accusations Against Foreign Actors or Conspiracy Interpretations:

While the discourse centered around the US can be highly influential in persuading Taiwanese individuals to follow and disseminate disinformation, an opposing strategy exists. This study reveals that news accusing foreign actors or framing events as conspiracies are just as popular as narratives praising the West:

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⁵⁸ Original source: 武漢新冠狀病毒中西醫分組治療實驗結果對比出來了! 中西醫分組治療人數: 中醫:320 西醫:320 最終死亡病人: 中醫:0 西醫:113 死亡率: 中醫:0: 西醫:35.3% 痊癒時間: 中醫:平均7天 西醫:20天了還在治療。治療方式: 中醫:中藥、針灸。西醫:氯喹抗生素激素吊水等等。後遺症: 中醫:無 西醫:肺纖維化,尿毒症,心肌炎等等。醫療費: 中醫:幾百塊錢 西醫:大於40萬 中醫治療320人,0死亡;西醫治療320人,死亡113人。試驗遠未結束的時候,西醫治療的很多病人堅決跑到了中醫治療組,導致了事實上中醫治療的病人超過了320,而西醫治療的病人少於320人。試驗結果:西醫徹底失敗。以上是來自北京大學第三醫院曾海基大夫的數據。曾大夫說,這次我們用的全部是中藥治療,在我們觀察組一共有320個病人,無一死亡! 而對照組的320人就死了113人。連世界衛生組織的官員視察我們治療組的時候都佩服得連連誇獎。對照組後來好多病人都轉到我們中醫組來。基本上一個禮拜出院,各項檢查正常。病毒感染那是西醫的理論。報告說:如果中醫早一點介入,可以大大的降低死亡人數。

(Source 18) Everyone, quickly remind your friends around you. Many foreigners have started doing this in Taiwan, wanting to spread the epidemic to Taiwanese people as well. So now they deliberately spit saliva on the handrails of the MRT.⁵⁹⁶⁰

(Source 19) Please pay attention to the key message of this information: "There are foreigners who only transferred through Wuhan, visited a public restroom, and got infected after just a two-hour stay." Therefore, someone summarized a point: that all airport or high-speed rail station public restrooms are likely sources of infection (as infected individuals may vomit or have diarrhea, and enclosed spaces have the highest virus density), which explains why the infection rate is so high for many people leaving Wuhan for various destinations worldwide! The reason is that everyone goes to the public restroom before boarding the train or plane! 6162

Intriguingly, Source 18 even includes a video purportedly "proving" the veracity of the content. However, upon investigation, it was revealed that the incident actually took place in Hong Kong, not Taiwan, and the video had been edited to fit the narrative.

In Sources 18 and 19, the rumors insinuate the involvement of "evil foreigners" in these alleged behaviors. However, they deliberately omit specifying the origin of these "foreigners," thereby allowing for greater speculation and fostering a pervasive sense of hostility and fear toward foreign nations. Moreover,

⁵⁹https://www.scmp.com/news/hong-kong/society/article/3075853/viral-video-amid-covid-19-pandemic-backfires-badly-hong-kong?fbclid=IwAR22iYaM5L2xYi5kPK94kOkkZ-jZ4yxk_BZXm0qz-_ukK_Kfo6hGzrybic0

⁶⁰ Original source: 大家趕快提醒身邊的朋友'很多外國人開始在台灣做這件事'想害台灣人也淪陷疫情' 所以他們現在都故意把口水吐在捷運手把上喔

⁶¹ From 騰訊較真: https://vp.fact.qq.com/article?id=466418530142069e25f9047bd755ec83

⁶² Original source: 請留意這個訊息的關鍵意思:「有外國人只是經武漢轉機,曾去過公厠,僅停留兩小時就感染了」,因此有人總結了一點:就是所有機場或高鐵站的公厠很大機會是感染源(感染者上吐下瀉,封閉空間病毒、密度最高),這證明了為什麼許多離開武漢去世界各地的人染病率如此之高!原因就是人人上車前、上機前都會先去公廁!!

the term "foreign" typically evokes expectations of the US or Europe among Taiwanese people, akin to their inclination to follow advice from foreign authorities.

2.4.5 News (from the US perspective) Criticizing the Taiwan Government:

Finally, news articles written from a US-centric perspective to criticize Taiwanese officials serve as the most overt evidence of Chinese information warfare. These pieces often contain strong political ideologies and anti-government narratives. They can be categorized into two main types: 1. The disclosure of "confidential documents" and 2. Criticism from the US perspective:

2.4.5.1 The disclosure of "confidential documents":

(Source 20) The contract documents of BNT have been exposed, revealing that DPP members insisted on taking a US\$15 cut, causing a deadlock and shifting blame to China! We www We must spread this to as many people as possible! These animals, cockroaches, and garbage are truly driven by self-interest, causing harm to the country and people, and everyone must condemn them!⁶³

Source 20 presents a disclosure of "confidential documents" related to vaccine contracts, accompanied by accusations of corruption within the DDP. This type of news captivates readers by arousing curiosity about purported dark secrets and eliciting strong emotions towards the Taiwanese government. In this instance, the news alleges that the DDP parliament failed to sign contracts to acquire the BNT-Pfizer vaccine due

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⁶³ Original source: BNT 合約文件曝光, 民進黨委員硬要抽一劑抽 US\$15, 破局, 甩鍋給中國 ! ☑ ☑ ☑ 一定要傳給越多人越好!這些畜生蟑螂垃圾真是利益薰心、禍國殃民、人人得而誅之!

to corruption, while also attributing blame to China. During this period, the Taiwanese government was unable to publicly disclose the genuine documents to refute the allegations, as they had to negotiate deals discreetly with vaccine companies to avoid interference from China. The news gained popularity as neither the Taiwanese nor the US government could provide evidence to clarify the situation. This case exemplifies the manipulation of rumors to insinuate a clandestine relationship between the Taiwanese government and the US.

2.4.5.2 Criticism from the US perspective:

Another significant mechanism employed in Chinese information warfare is the amalgamation of the US authority discourse with the revelation of the "real situation." In February 2020, a post emerged on LINE, captivating Taiwanese users by critiquing the Taiwan CDC's perceived "outdated policy" and imparting "personal experiences in the US" to impart the "correct knowledge" to Taiwanese citizens. While the instruction in the post advocating for double mask-wearing may not have constituted serious misinformation from a preventive standpoint, the underlying narratives hinted at how public health discourse could serve as a political weapon:

(Source 21) Dear friends in Taiwan, I've hardly ever posted in Chinese in the past decade, so this time, using Chinese signifies the importance of the content of this post. As I watch the COVID-19 situation in Taiwan gradually intensify, I am truly worried that the tears and blood we

experienced in the United States last year may be repeated in Taiwan. Many of Taiwan's epidemic prevention measures seem to be stuck in the information from last year and haven't been updated with the research on COVID-19 that has been conducted over the past year. For example, spraying disinfectant on the streets with sprayers is merely a show put on by the government to reassure the public. There is no scientific evidence showing that disinfecting streets can prevent the new coronavirus (this is not like eliminating disease-carrying mosquitoes for dengue fever). Also, when politicians are interviewed by reporters, many reporters fail to maintain social distance and stand shoulder to shoulder in close contact with each other... Epidemic prevention in public places mainly relies on taking body temperature, without the government mandating a significant reduction in the number of people entering public venues (in Massachusetts, USA, the lowest requirement for public venue capacity was set at only 10% last year). ... In my opinion, these are all inadequate epidemic prevention measures. How can we protect ourselves from being infected? The most important thing is, of course, wearing masks. However, I rarely see discussions among Taiwanese people about the research report released by the U.S. CDC in February of this year (see attachment), which indicates that wearing two masks (double masking, with a cloth mask on the outside and a surgical mask on the inside) can effectively reduce transmission by over 90%. This is really important. After the CDC released this study, all White House officials started wearing double masks in public. I also wear two masks in outpatient clinics. As for social distancing, when I see news footage from Taiwan, I am really worried. Even at government press conferences on the epidemic, officials or reporters in the audience fail to maintain social distancing. This lack of crisis awareness is very concerning.⁶⁴

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⁶⁴ Original source: 台灣的朋友們,我十年來幾乎沒有發中文po,所以這次用中文,代表這篇的內容很重要。我看著台灣的疫情逐漸升溫,真的令我很擔心我們在美國去年經歷過的血淚在台灣重演。而很多台灣防疫的作法,還滿停留在使用去年的資訊,沒有隨著我們這一年來對COVID-19的研究而更新。譬如說,拿著花灑在街道上噴消毒水,這真的只是政府噴給民眾看心安的而已。沒有任何科學證據顯示消毒街面可以預防新肺(這又不是登革熱在消滅病媒蚊)。還有政治人物被記者訪問時,一堆記者沒有保持社交距離而肩並肩的近距離接觸彼此…公共場所防疫主要靠量體溫,沒有政府強制規定大量減少入場人數(美國麻州去年最低曾經規定公共場所容客率只能是平常的10%)。…這些在我眼裡,都是不及格的防疫措施。怎麼樣能保護自己不被傳染呢?最重要的當然是

The author commenced with a striking yet potent statement, claiming not to have posted in Chinese for over a decade, thereby emphasizing the importance of the post. This statement conveyed two key messages: firstly, that the author had resided in the US for over a decade, thereby establishing a "successful" image within the Taiwanese narrative, and secondly, that the message was so crucial that the author had to "compromise himself to write in Chinese" for the Taiwanese readers' benefit. Subsequently, the author criticized Taiwan's government for its purported "lack of the latest knowledge in preventing infection," leveraging the US discourse to blame the Taiwan government rather than adopting a purely personal perspective. However, the Chinese nuances embedded within the text subtly betrayed the author's origins.

Ultimately, this post insinuated the Taiwan administration's incompetence, thereby suggesting that Taiwanese citizens had no choice but to rely on themselves. Although this assertion may have contradicted the actual situation in Taiwan at the time, individuals lacking first-hand information were susceptible to influence by such desperate warnings purportedly "originating from the US."

2.5 The "recycled" content:

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戴口罩。而戴口罩這件事,我很少看到台灣人討論美國CDC今年二月份發布的研究報告(如附件)指出:戴兩層口罩(double masking,外層為布料口罩內層為外科口罩)可以有效減少超過90%以上的傳播。這點真的很重要,在CDC發布這份研究後,所有白宮官員在公共場合都戴上雙層口罩。我在門診也是戴上兩層口罩。至於社交距離這件事,我看到台灣的新聞畫面,真的很讓我感到憂心。連政府的疫情記者會,官員或是台下記者都沒有保持社交距離。這非常沒有危機意識。

The study demonstrates that disinformation often appears to be "recycled" and resurfaces on social media platforms. These cases are usually revised by (1) adding new information, (2) incorporating attacking narratives against particular targets, and (3) combining information from other sources to formulate a new narrative.

One significant example involves a major rumor regarding the relationship between COVID-19 and the SARS virus, which sparked public panic. The sources associated with this rumor illustrate a common pattern in the formulation of disinformation: they can be divided, combined, or inserted into one another to shape the desired narrative:

(Source 22) The Coronavirus Study Group of the International Committee on Taxonomy of Viruses, through systematic evolutionary analysis, believes that the novel coronavirus is a sister virus to the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV), belonging to the SARS-related coronavirus (SARSr-CoV) category. They named the novel coronavirus "SARS-CoV-2". Additionally, the World Health Organization has renamed "novel coronavirus pneumonia" as coronavirus disease 2019 (COVID-19). We analyze its pathological changes and pathogenesis, which may share similarities with SARS. 6566

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⁶⁵ Yanqing Ding and Xiuwu Bian, "Analysis of Coronavirus Disease-19 (Covid-19) Based on SARS Autopsy," Chinese journal of pathology (Zhonghua bing li xue za zhi), accessed April 3, 2024, https://pubmed.ncbi.nlm.nih.gov/32268662/.

⁶⁶ Original source: 国际病毒分类委员会的冠状病毒研究小组通过系统进化分析,认为新型冠状病毒是SARS冠状病毒(SARS-CoV)的姊妹病毒,同属于SARS相关冠状病毒(SARSr-CoV),将新型冠状病毒命名为"SARS-CoV-2",同时,世界卫生组织也将"新型冠状病毒肺炎"重新命名为冠状病毒病-19(COVID-19),我们分析其病理变化及发病机制可能与SARS有相似之处。

(Source 23) On the 23rd, sources revealed that the virus has been named SARI, confirming it as an evolved virus of SARS with identical pathogenic mechanisms. "After entering the human body, the virus interferes with the immune system, causing it to mistakenly attack lung cells as foreign invaders. Patients are killed by their own immune systems, and currently, all drugs on the market are ineffective." Regarding treatment, "only by using the same method as SARS, suppressing the immune system with hormones, but at the same time, the body will be very fragile. This virus is smarter than SARS."6768

(Source 24) It has been named SARI, confirming it as an evolved virus of SARS with identical pathogenic mechanisms. After entering the human body, the virus disrupts the immune system, causing it to mistakenly attack lung cells as foreign invaders. Patients are killed by their own immune systems, and currently, all drugs on the market are ineffective. The only method is to suppress the immune system with hormones, but at the same time, the body will be very fragile. Additionally, this virus is smarter than SARS: 1. It has a longer incubation period; 2. Patients may not exhibit fever from infection to onset to death, meaning that fever is not

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⁶⁷ 環球華語新聞中心

https://www.cgctv.com/2020/01/24/%E3%80%90%E6%9C%80%E6%96%B0%E6%B6%88%E6%81%AF%E3%80%91%E6%AD%A6%E6%B1%89%E7%97%85%E6%AF%92%E6%AD%A3%E5%BC%8F%E5%91%BD%E5%90%8D%E4%B8%BAsari%E5%B1%9Esars%E8%BF%9B%E5%8C%96%E7%97%85%E6%AF%92/

⁶⁸ Original source: 23日有消息人士透露, (病毒)已经定名为SARI了, 确定是SARS的进化病毒, 致病机理完全相同。「病毒进入人体后干扰免疫系统, 人体免疫系统误认为肺细胞是外来物从而发起进攻。病人是被自己免疫系统杀死的, 目前市面上所有的药物均无效。」就治疗方面,「只有採用与SARS相同的方式, 用激素压制免疫系统, 但同时(带来的后果是), 人体会非常脆弱, 这个病毒比SARS更聪明。」

a characteristic symptom of the disease. Temperature screening cannot guarantee complete screening, which is also the reason for the city lockdown. 3. It spreads faster.⁶⁹⁷⁰

(Source 25) Thank you for sharing the important message from Reverend Professor Shi Fujin, Honorary Professor of Intensive Care Nursing, on LINE. I'd like to share it here too! "Message from the NTU Medical Fellowship for your reference: Try to avoid close contact with people who have had COVID-19 within the past year, whether it's meeting up or eating together. Be sure to stay vigilant and not let your guard down. 1. Autopsies have shown that severe cases of COVID-19 resemble a combination of SARS and AIDS. Many doctors believe that cases where individuals test positive again for the virus after being discharged from the hospital are not relapses but rather instances where the infection was not fully cured. This is related to the characteristics of COVID-19. 2. The immune system is also almost entirely destroyed. SARS only attacks the lungs and does not harm the immune system."

⁶⁹ Translated to Traditional Chinese from a WeiBo post: https://weibo.com/5459899429/IrauYs61X

⁷⁰ Original source: 已經定名為SARI了,確定是SARS的進化病毒,致病機理完全相同。病毒進入人體後乾擾免疫系統,讓免疫系統誤認為肺細胞是外來物從而發起進攻。病人是被自己的免疫系統殺死的,目前市面上所有的藥物均無效,只有採用的方法: 用激素壓制免疫系統,但同時,人體會非常脆弱。同時,這個病毒比SARS更聰明: 1. 潜伏期更長; 2. 有患者從感染到發病,再到死亡,體溫始終是正常的,也就是說,發熱不是該病的特徵症狀,通過體溫篩查不能確保完全篩查,這也是封城的原因。3. 傳播速度更快。

⁷¹ Captured from LINE post

⁷² Original source: 謝謝重症護理榮譽教授, 施富金牧師來的LINE, 有很重要的提示, 我也借來分享咯!"台大醫團契msg,給各位參酌~ 近一年內盡量避免與得過新冠肺炎的人近距接觸, 或會面或在一起吃飯。千萬要有防護意識, 不能鬆懈。一. 屍體解剖顯示: 1. 重症新冠肺像 "SARS+AIDS"。多位醫生認為, 出院後核酸檢測返陽的情况, 不是複發, 而是未治愈。這與新冠肺炎的特點有關。2. 免疫系統也幾乎全被摧毀。"SARS 只攻擊肺, 不會傷害免疫系統。

In this particular case, sources from China's medical research, Chinese news outlets, and directives from the CCP were amalgamated. These combined sources were then translated into Traditional Chinese from a Weibo post and ultimately attributed to Pastor Shih before being published on LINE.

The other revisions involved combining the original post with resources from other articles. This type of revision is most commonly observed when examining personal healthcare tips. For instance, a news article suggesting that people should drink saltwater to prevent infection might incorporate additional information, such as drinking lime juice, vinegar, and hot water, when republished. Subsequently, a new post on LINE might emerge, advocating for drinking garlic water as an additional preventative measure:

(Source 26) Vietnam's COVID-19 death rate remains at zero.

International experts have obtained Vietnam's super formula! Even if infected with the coronavirus, it will not lead to death. A large amount of factual data proves that the formula is very simple yet highly effective.

The international super healing formula is as follows: 1. Brew green tea with hot water. 2. Mix lemon juice and drink with hot tea. 3. This secret formula can immediately kill the coronavirus. Share this miraculous secret with everyone, as it brings immeasurable merits! This simple formula is highly effective because it cannot be infected with the coronavirus!⁷³

⁷³ Original source: 越南新冠病毒至今零死亡.率。有關國際人士已經獲取了越南的超級國家密方! 如果即使被感染了新冠病毒, 也一定不會導致死亡, 大量的事實數據證明, 配方還非常簡單, 卻特別有效.。國際超級治病的秘方如下: 1、將熱開水泡好綠茶.. 2、將檸檬汁混合後再喝熱茶。3、該秘方可以立即殺死新冠病毒。...... 向所有人分享這一神奇秘訣, 可是功德無量啊! ...這個簡單的配方非常有效, 因為它不會被新冠病毒感染!

In the following examples and database, it is evident that by recycling published information or combining it with other sources, news can "revive" on social media platforms and potentially have a greater impact, especially if the timing of its republication is opportune.

2.6 The "revival" old news:

These types of news articles were initially published anywhere between six months to even ten years ago. Given that this research categorizes time periods into intervals of six months, we consider news that resurfaces after a lapse of at least six months as experiencing a "revival." The following materials exemplify two posts that had been originally published approximately six years ago when they were reposted in 2020:

> (Source 27) Revealing the astonishing truth about the immune system, worth collecting and revisiting multiple times. The author of this article is Dr. Chen Zhaofei, a renowned Chinese-American scientist and the founder of "Nutritional Immunology." In 1997, she was honored with the "Top Ten Outstanding Young Americans Award," becoming the first Chinese person to receive this prestigious award in 59 years and the only woman to have ever received it. Understanding this article is invaluable!⁷⁴⁷⁵

(Source 28) This is a post from my daughter's classmate in the United States: **(a)** At first, I thought it was a rumor, but after checking, it's indeed a notice issued by the US Food and Drug Administration (FDA) on

⁷⁴ Originating from Xueqiu in 2014: https://xueqiu.com/1706383576/31053853

⁷⁵ Original source: 揭秘免疫系統驚人真相, 值得收藏多看幾遍。本文作者為陳昭妃博士, 著名美國華裔科學家, 「營養免疫學」的創始人。1997年,她榮獲「美國十大傑出青年獎」,是59年來首位獲此殊榮的華人,也是獲此獎項 唯一的女性。讀懂本文, 價值千金!

December 29th. A week ago, a US law came into effect: . The FDA issued Import Alert 99-33 on July 28, 2015 (updated on October 17, 2016), prohibiting the entry of the following **Q** Japanese food into the United States..... XDo not consume anything from Japan. XRadiation levels have been found to be increasingly high in coastal areas of the United States. It's best to avoid going to Japan if possible. XThe Australian government has stopped issuing visas to Japanese people, And the United States has also stopped immigration from Japan. Currently, the situation in Japan is more serious than we imagined, with over @70% of the entire territory contaminated. @Radioactive materials from Japan have already flowed into the ocean, and the affected area of the ocean is expanding. It's more serious than we thought, and the Japanese government fears causing panic, so they may give up or lie to inform the surrounding people. From now on, never consume seafood or sashimi from Japan. 7677

Based on the research, Source 27 originated from a post on the Chinese website "Xueqiu (雪球)" in 2014. It reappeared on LINE on January 8th, 2020, amassing 745 searches on

⁷⁶ From Wechat account "Zi zai tang (自在堂)" in 2015 (The post has been removed)

⁷⁷ Original source: 這是在美國女兒的同學發的貼: ◎剛開始以為是謠言,查了一下,確實是美國药監局12月29 號發佈的通知。一星期前美國法例已生效: ◎美國食品药品管理局FDA 7月28日2015 (2016年10月17日更新)發佈的第99-33進口警示,禁止下列 ◎日本食品進入美國...... ★不要飲食日本的東西。 美國的臨海中被發現到放射性數值越來越高。盡量能不去日本最好不要去。 ★澳大利亞政府已經停止日本人的簽証發放, ★美國也停止了日本人的美國移民。目前日本的狀况比我們想像的還嚴重,全日本领土的 ◎70以上被污染。 ◎日本的放射性物質已經向海洋流入,而且受影響的海洋面積越來越廣。它的嚴重超過想像,日本政府怕帶來恐慌,他們會放棄或者謊言來告知周邊人。從現在開始,千萬不要飲食日本的海鮮或生魚片。

the fact-checking chatbot and enduring for 539 days on the platform.⁷⁸ This timeframe was calculated until the conclusion of the research period on June 30, 2021.

Source 28, on the other hand, stemmed from a post on WeChat in 2015. It resurfaced on LINE on January 17th, 2020, accumulating 798 searches on the fact-checking chatbot and enduring for 526 days on the platform. Again, this timeframe was calculated until the conclusion of the research period on June 26, 2021.

The ensuing inquiries are particularly compelling: Why would the post originating from China in 5 years ago undergo reposting on social media platforms, including translation into Traditional Chinese, and dissemination on LINE? Who conducted the "literature review" of prior self-care articles, and to what end? Why did the poster opt to republish it during a period when the COVID-19 pandemic loomed on the cusp of eruption?

In situations where Taiwanese citizens confront a dearth of comprehensive knowledge, they tend to invest trust in individuals perceived as flawless. Within Taiwanese communities, individuals possessing Western-oriented backgrounds (with a distinct preference for the US), esteemed academic credentials (particularly from medical institutions), or commanding economic prowess are often venerated within the "golden life club (人生勝利組)" and revered among the elder demographic. These individuals' titles not only serve as mere names but also signify their institutional affiliations. While individuals may not possess a profound understanding of specialized professional knowledge, they are familiar with the esteemed reputations of these institutions.

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⁷⁸https://docs.google.com/spreadsheets/d/1KDM8_N90UCxiN1brXEtrblVh05D4v3Sa12nAcVGTlkA/edit?usp=sharing

⁷⁹ Ibid

Upon scrutinizing the two articles, it becomes evident that they disseminate scientific knowledge or, at the very least, employ scientific terminology with authority. The conveyors of this information are culturally esteemed figures—a Chinese American doctor or a girl studying in the US. In these instances, the central figures, either Doctor Chen or "the daughter of a friend," impeccably align with these criteria, complemented by an American narrative. This confluence of factors undoubtedly contributed to the extensive dissemination of the posts. This case reveals a crucial strategy: when selecting material from previous news cycles, actors responsible for reproduction meticulously consider the elements within the posts and strategically opt for figures deemed ideal by those who place unwavering faith in prestigious titles and institutional affiliations.

The examples provided illustrate an abnormal phenomenon. Historically, news articles typically enjoyed a short lifespan, confined to newspapers, radio broadcasts, and television programs, often fading into history once the event concluded. However, the advent of social media and the internet has rewritten these rules. Online posts, regardless of their original publication date, can be instantly accessed through search engines, and accompanying information is readily available during the search process. These unique characteristics greatly facilitate the reproduction of information. This observation holds significant relevance to the subsequent stage of this research, which focuses on analyzing the lifetime of posts.

Examine The Lifespan Of Particular Disinformation:

The longevity of news dissemination amid the pandemic serves as compelling evidence of China's active involvement in information warfare targeting Taiwan. In the ensuing analysis, I

will elucidate how revisions and the timing of reposts exemplify the manipulation of disinformation.

The initial case under scrutiny pertains to a widely circulated news item during the pandemic's onset in 2020, which resurfaced during its peak in 2021: "Starting today and for the next 10 days, Taiwan officially enters a critical period regarding the COVID-19 outbreak. Here are the recommendations:1. Strictly avoid going to public places. 2. Opt for takeout when dining out...."80 The lifetime of this news extended for 457 days, from March 30, 2020, to June 30, 2021, garnering 3655 search hits on fact-checking platforms. 81 The reposting of this news during its final period serves as compelling evidence of its deliberate manipulation. Originating with the statement "starting today for 10 days, Taiwan officially enters a critical period regarding the Wuhan virus pandemic (今天起10天, 台灣正式進入武漢肺炎関鍵期)," its reposting in the latter period raises significant doubts, particularly if the phrase "starting today for 10 days" alludes to the pandemic's inception in January 2020. A discerning reader would recognize the inconsistency upon encountering it in 2021, as individuals typically do not seek out year-old news for updates on current events. Hence, it is evident that those disseminating this news were intimately familiar with its content from its 2020 publication and strategically chose to repost it during Taiwan's pandemic peak in 2021.

Equally intriguing is the news's initial association with the Taiwanese Doctor Union (醫師全聯會) discourse in the 2020 post, followed by its reposting with a rumor attributing it to CDC Chair Shih-Chung Chen (陳時中) in 2021. Dr. Chen, being the foremost medical authority

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⁸⁰ Original source: 今天起10天, 台灣正式進入武漢肺炎関鍵期, 建議如下: 1.減少進入公共場所。2.用餐儘量將食物外帶

 $^{^{81}}https://docs.google.com/spreadsheets/d/1KDM8_N90UCxiN1brXEtrblVh05D4v3Sa12nAcVGTlkA/edit?usp=sharing$

in Taiwan during that period, had implemented a series of successful policies. However, both administrations vehemently denied releasing such information to the public. 82 The pivotal question arises: why was the repost attributed to Dr. Chen? The intent behind leveraging the esteemed figure's name was to attract attention and capitalize on public trust, thereby facilitating the dissemination of the fabricated content.

The persistence of Chinese information manipulation during the entirety of the pandemic is evident in various instances. Two notable cases have garnered widespread attention, each evolving through different iterations over the course of three distinct periods. Notably, Source 30 remained active for an extended period spanning 427 days, from April 2, 2020, to June 3, 2021, accumulating 1570 search hits on fact-checking platforms. It is intriguing to observe how the discourse surrounding these cases shifted to align more closely with the prevailing circumstances at different junctures.

> (Source 29) Dear friends and family, please stay at home! Continue to focus on self-improvement and cultivation! Please pay special attention to the following words from Zhong Nanshan: Emphasizing again: Don't go out. After the Dragon Boat Festival (June 25th), assess the situation of epidemic control again! Warning: Once infected, even if cured, there may be lingering effects that will affect the rest of your life! This epidemic is more serious than the SARS outbreak 17 years ago, and the side effects of the drugs used are greater. Even if there's a miraculous drug, it only serves to save lives, nothing more! Before going out, think about your family. Don't endanger them. If you can avoid going out, then stay in. Let's all spread this message together! This is a battle, not a game. Put away your blind confidence and luck, as well as your indifferent attitude. In this battle, there are no

⁸² https://tfc-taiwan.org.tw/articles/2547

bystanders! Stay at home! Stay at home! —Zhong Nanshan, Senior Expert Group Leader of the National Health Commission, Academician of the Chinese Academy of Engineering⁸³⁸⁴

(Source 30) Taiwan's Minister of Health and Welfare, Chen Shih-chung, reminds everyone once again: Don't go out. After the Dragon Boat Festival (June 25th), reassess the situation of epidemic control! Warning: Once infected, even if cured, there may be lingering effects that will affect the rest of your life! This epidemic is more serious than the SARS outbreak 17 years ago, and the side effects of the drugs used are greater. Even if there's a miraculous drug, it only serves to save lives, nothing more! Before going out, think about your family. Don't endanger them. If you can avoid going out, then stay in. Let's all spread this message together! This is a battle, not a game. Put away your blind confidence and luck, as well as your indifferent attitude. In this battle, there are no bystanders! Stay at home! Stay at home! Stay at home! Don't hit "like!" Please repost! —

The initial case involves the utilization of two distinct authorities. The dissemination of disinformation exploiting the esteemed reputation of Shih-Chung Chen persisted throughout all

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⁸³ https://t.cj.sina.com.cn/articles/view/5044511176/12cad21c801900mg6q 微博 財經頭條

⁸⁴ Original source: 亲朋好友们,好好在家呆着吧!继续闭关修身养性!请特别关注钟南山下面的这段话:再次強調:別出門,端午節(6月25日)過後,再看疫情控制情況!警告:一旦染上,就算治癒了,後遺症也會拖累後半生!這場瘟疫比17年前的非典更嚴重,用的藥副作用更大。如果出了特效藥,也只能保命,僅此而已!出門前想想你家人,別連累家人,能不出門就不出門,大家一起轉發吧!這是一場戰役,不是兒戲,收起你盲目的自信和僥倖心理,也收起你事不關己高高掛起的態度,在這場戰役中沒有局外人!在家!在家!在家!——國家衛健委高級別專家組組長、中國工程院院士鐘南山

⁸⁵ Original source: 台灣衛福部長陳時中提醒大家再次強調:別出門,端午節(6月25日)過後,再看疫情控制情況!警告:一旦染上,就算治癒了,後遺症也會拖累後半生!這場瘟疫比17年前的非典更嚴重,用的藥副作用更大。如果出了特效藥,也只能保命,僅此而已!出門前想想你家人,別連累家人,能不出門就不出門,大家一起轉發吧!這是一場戰役,不是兒戲,收起你盲目的自信和僥倖心理,也收起你事不關己高高掛起的態度,在這場戰役中沒有局外人!在家!在家!在家!不要點贊!求轉發!——陳時中

three periods. An illustrative example originates from a post on Weibo, attributing the publication to the eminent scholar affiliated with The National Health Commission (NHC) of the People's Republic of China (中华人民共和国国家卫生健康委员会), NanShan Zhong (钟南山). However, upon dissemination on LINE, the authority's name was altered to Dr. Chen.

Sources 31 to 33 originated from a Weibo post⁸⁶, depicting the evolution of disinformation across different time frames. This series of posts illustrates how revisions to the original content can be tailored to adapt to current circumstances and propagate related narratives. Source 31 endured for 357 days, spanning from June 16, 2020, to June 8, 2021, accumulating 797 search hits on fact-checking platforms. Notably, it marked the initial appearance of the post on LINE and was subsequently reported to the Cofacts database.

During the subsequent period, the post resurfaced with added content in Source 32. This iteration introduced opinions purportedly from "an Academia Sinica expert (中研院專家)," advocating for the widespread purchase of masks and downplaying Taiwan's preventive strategies compared to the previous version. Source 32 remained active for 365 days, from July 31, 2020, to June 21, 2021, amassing 560 search hits on fact-checking platforms.

Source 33, with a lifetime of 202 days, from October 22, 2020, to May 12, 2021, garnered 213 search hits on fact-checking platforms. Similar to Source 31, it debuted on LINE during its dissemination and was subsequently reported to the Cofacts database.

(Source 31) A very alarming piece of news: A study by the top U.S. institution, the Scripps Research Center, has confirmed that Covid-19 has undergone a mutation called "D614G," which increases the number of "keys" for the virus to invade the human body and stabilizes its form, resulting in a more than tenfold

⁸⁶ https://www.aboluowang.com/2020/0616/1465361.html

increase in its infectivity. American virus authority William Haseltine believes this is a significant discovery. Regardless of the future, without a vaccine, please ensure that your family wears masks when going out, and avoid crowded places! There are too many truths that we still do not know. § 87

(Source 32) A very alarming piece of news: A study by the top U.S. institution, the Scripps Research Center, has confirmed that a portion of the Covid-19 virus has mutated into the "D614G" variant, which increases the number of "keys" for the virus to invade the human body and stabilizes its form, resulting in a more than tenfold increase in its infectivity. American virus authority William Haseltine believes this is a significant discovery. This is also why scientists have recently suspected the reasons for the surge in confirmed cases in the United States and South American countries... Regardless of the future, whether there is a vaccine or not, please ensure that your family wears masks when going out, and avoid crowded places. Don't touch your eyes, nose, or mouth without washing your hands, and don't touch food! There is too much about this virus that we don't know! Please stay vigilant and don't slack off because time has passed... When you see masks, buy them, stock up on some, don't stop at nine pieces every two weeks, keep buying. Experts from the Academia Sinica bluntly say they almost thought Taiwan's epidemic prevention was very successful! The local epidemic will surely come back in the winter!88

(Source 33) Make sure to wear masks! A very alarming piece of news: A study by the top U.S. institution, the Scripps Research Center, has confirmed that a portion of the Covid-19 virus has mutated into the "D614G" variant, which makes it easier for the virus to invade the human body by increasing the number of "keys" and stabilizing its form, resulting in a more than tenfold increase in its infectivity.

⁸⁷ Original source: 一個非常不妙的消息,美國頂尖「斯克里普斯研究中心」一項研究證明: Covid-19 已產生為名為"D614G"的突變,會使病毒入侵人體的"鑰匙"數量增加且形態更穩定,導致病毒傳染力暴增10倍以上,美病毒權威William Haseltine認爲這是重大發現。未來不管如何,沒有疫苗,請不要讓家人不戴著口罩出門,也請不要讓家人去人多的地方!太多太多我們不知道的真相. ☑

American virus authority William Haseltine believes this is a significant discovery. This is also why scientists have recently suspected the reasons for the surge in confirmed cases in the United States and South American countries... Regardless of the future, whether there is a vaccine or not, please ensure that your family wears masks when going out, and avoid crowded places. Don't touch your eyes, nose, or mouth without washing your hands, and don't touch food! There is too much about this virus that we don't know! Please stay vigilant, and don't slack off because time has passed... When you see masks, buy them, stock up on some, don't stop at nine pieces every two weeks, keep buying. Experts from the Academia Sinica bluntly say they almost thought Taiwan's epidemic prevention was very successful! The local epidemic will surely come back in the winter.⁸⁹

Another intriguing observation is the overlap in the lifetimes of Source 31, 32, and 33. This phenomenon underscores the ability of similar disinformation to be disseminated and perpetuated within a relatively short timeframe, all while accruing significant popularity. Through our examination of numerous cases, it becomes evident that original posts were frequently manipulated with political ideologies before their republication. This was particularly noticeable when the revised versions were shared at different times, displaying a clear intention to influence public opinion against specific authorities or organizations. Our investigation into the persistence of disinformation yielded three significant findings.

First, there was a notable proliferation of news purportedly originating from the Taiwan government or medical authorities. Secondly, deliberate efforts were observed to incite dissatisfaction among Taiwanese citizens regarding government policies. Finally, distinct attempts were made to sow uncertainty within Taiwanese society by amplifying alarming rumors. While it may seem obvious that posts with unusually long lifespans are suspicious, it is

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crucial to recognize that many users are unaware of a post's publication time and its reach to the audience, largely due to the characteristics of LINE. As highlighted in prior research, LINE functions as an end-to-end encrypted messaging application, restricting message exchange to users on one's friend list. Consequently, individuals often remain unaware of the original poster's identity and the extent of the content's readership unless they are part of the same group.

CHAPTER IV

Discussion

In this section, I will answer the question of what are the strategies and characteristics of chinese-sourced disinformation by further analyzing the results and phenomena observed in the previous stage, with a specific focus on the six categories: 1. Exploiting Taiwanese Preference for Foreign Authorities, Particularly the US. 2. Emphasizing Social Responsibility and The Obligation to Share. 3. Revision, Plagiarism, and Reposting. 4. Lifespan of Disinformation. 5. Emotion-Provoking Narratives, Ambiguity, and Exaggeration. 6. Use of Alert Emojis.

Exploiting Taiwanese Preference for Foreign Authorities, Especially the US:

Through extensive research, it has become apparent that news originating from China-based sources frequently incorporate references to authorities in their titles, strategically targeting the Taiwanese audience. The analysis conducted using R programming revealed a discernible trend wherein medical and foreign authorities, particularly those from the United States, feature prominently among the keywords. However, it is noteworthy that the popularity of authorities extends beyond conveying positive perspectives. In addition to disseminating news urging Taiwanese citizens to adhere to specific instructions or purportedly providing the latest medical

knowledge, there exists a substantial volume of content that either blames or ridicules the US and its affiliated organizations.

In some notable instances, posts undergo translation, a practice motivated by the Taiwanese populace's preference for US-based and English-language sources, as evidenced by previous findings. However, it is illogical to translate content into English and share it on social media platforms primarily frequented by individuals who may not comprehend the language. Such translations serve two primary purposes: firstly, they indicate that the news has been manipulated by the poster, and secondly, they exploit the audience's limited proficiency in foreign languages and their preference for such sources, thereby providing ample opportunity for disinformation producers to edit, extract, and misinterpret information from original sources.

Of particular interest is the manner in which English translations are often presented within a framework of "professional" warnings or endorsements, such as "the US doctor," "the retired doctor," or "medical authorities or organizations." This phenomenon aligns with earlier findings regarding keyword popularities. It is my contention that the deliberate translation and misinterpretation of English sources serve as crucial indicators of disinformation producers' intentions to manipulate LINE users and shape public opinion.

Creating a post with English translations and foreign resources necessitates proficiency in reading English sources. Thus, it is evident that individuals who selectively choose information, misrepresent data, or cite outdated sources with the aim of supporting their arguments do so intentionally. Moreover, such translations erect a barrier for individuals unfamiliar with English, exploiting their faith in the US image to foster a sense of superstition.

Emphasizing Social Responsibility and The Obligation to Share:

The emphasis on social responsibility and the obligation to share in Taiwanese society is deeply rooted in both traditional Confucian values and indigenous cultural norms. The concept of "Gaga," which signifies ancestral wisdom in the Atayal language, underscores the communal obligation and duty incumbent upon individuals. Within indigenous communities, sharing is intrinsic to hunting practices, as it is believed that blessings from the heavens and ancestral spirits are required to secure prey. Thus, the act of sharing the catch is seen as reciprocating these divine gifts. This cultural ethos is encapsulated in the proverb: "If you are able to share with others, heaven will surely share with you; but if you are stingy in sharing with others, heaven will also be stingy in sharing with you." Such principles have historically guided indigenous hunters.

Beyond indigenous communities, Taiwanese society at large places a premium on the value of sharing, instilled from an early age. This ethos extends beyond familial ties to encompass anyone within one's social sphere, diverging from traditional Confucian norms that prioritize assistance to immediate family members. Consequently, the dissemination of information, including disinformation, is rampant due to the propensity of individuals to share with others:

(Source 34) A friend's nephew, who holds a master's degree, is currently working at a major hospital in Shenzhen. He has been reassigned to Wuhan to research the novel coronavirus. He just called to relay a message to all relatives and friends:

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⁹⁰ https://memory.culture.tw/Home/Detail?Id=247358&IndexCode=Culture_Invisible

⁹¹ 王進發、童信智。〈由原住民狩獵文化看國家與部落間之規範衝突及未來因應〉。《台灣原住民族研究季刊》第5 卷第1期(2012):頁53。2024年3月9日檢索自華藝線上圖書館。doi:10.29910/TJIS.201203.0002

when experiencing cold symptoms such as runny nose and coughing, it cannot be concluded that it is necessarily COVID-19. ... Drinking ginger soup raises body temperature, eliminating the need for vaccination. Consuming more ginger, garlic, chili, and pepper can resolve the issue, while avoiding sweet, sour, salty, and bitter foods, and refraining from going to cold weather areas. The virus will completely disappear when exposed to sunlight. Sharing this information and helping others is ultimately doing a good deed for oneself.⁹²

The promotion of social responsibility and the obligation to share are integral components in the dissemination of posts on platforms like LINE. Many posts conclude with a call to "share the information with your family and friends," capitalizing on the trust placed in close acquaintances and the perception of "a relative of a friend" as a reliable source. This pattern underscores the pervasive sense of social responsibility in Taiwanese society, serving as a strategic mechanism to enhance the likelihood of information dissemination. Moreover, framing information as originating from trusted sources within one's social circle mitigates reader skepticism, given the enduring influence of familial bonds and the obligation to share in Taiwanese culture.

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⁹² Original source: 朋友自己親外甥,碩士畢業,現在在,深圳大醫院工作。現在被抽調到武漢研究新型肺炎病毒。他剛剛傳來電,要轉告所有的親戚朋友,感冒時,如果出現流鼻涕和咳痰者,不能斷定就是新型冠状病毒肺炎。……喝薑湯,讓体內的熱能提高,無需注射疫苗。多吃薑,蒜頭,辣椒,胡椒粉,都可以解决,少吃甜酸鹹苦,别去寒冷天氣的地區。病毒只要經太陽暴曬就會完全消失。大家分享出去,多幫忙到一個人,就是在為自己,做一件好事。

⁹³ Original source: 麻煩—請轉發請轉發: 北京陸軍總醫院陳惠仁教授強調, 如每個收到這份簡訊的人, 能夠轉發十份給其他人, 肯定至少有一條生命將會被挽救回來... 我已經做了我的部分了, 希望你也能幫忙做了你的部分。感謝! 切2~3薄苦瓜片放在杯子裡, 加入熱水, 它會變成「鹼性水」, 每天飲用, 對任何人都有益。......看完, 告訴別人, 家人, 朋友, 把愛傳出去! ♣ ♥♥

Drawing from this analysis, it can be argued that the mobilization of social responsibility and the utilization of sharing culture represent significant mechanisms in the landscape of information warfare.

Revision, Plagiarism, and Reposting:

The analysis revealed numerous instances where sentences were repeated either in their original form or after revisions. Often, these revisions entailed adjustments to titles or slight alterations to specific words. Predominantly, the modified elements included the names of countries, individuals—typically authorities in medical, governmental, or religious domains—who purportedly declared significant experimental results, the attributes and classifications of viruses, and the titles of research institutions.

However, it is important to note that while revisions and reposts are prevalent in disseminating disinformation, not all revised posts originate from China. On occasions, they may stem from Taiwanese individuals circulating uncertain rumors or sharing content from obscure sources. Consequently, it is prudent to perceive revision and plagiarism as components of a comprehensive strategy employed in the propagation of general disinformation:

(Source 36) [Please copy and forward] In the next few days, it will rain, so be sure not to get caught in the rain, and stay away from rainwater! Check the weather report tonight. The clouds causing this rain are drifting over from inland China, specifically from the regions around Chongqing and Hubei. These clouds may carry bacteria and viruses, so please be cautious! 94

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⁹⁴ Original source: 【請複製轉發】這幾天會下雨,千萬不要被雨淋到,離雨水遠一點! 今晚看氣象報告,這次下雨的雲層帶是從中國內陸漂過來的,也就是重慶、湖北一帶過來的,雲層可能會挾帶細菌、病毒過來,請小心!

Interestingly, the research findings reveal another notable phenomenon: in certain instances, counterfeit information can exert greater influence within China compared to Taiwan. This finding aligns with Wang and Huang's argument that Citizens may initially be swayed by the authorities' denials and doubt the authenticity of news labeled as 'fake.' However, if the denied news is later proven to be true, citizens will not only question the veracity of the current denial but also cast doubt on future denials, leading to a decline in their satisfaction with the government. Additionally, it demonstrates that in some cases, states even disseminate propaganda on networks that they censor domestically (Fan et al. 2024).

There are occurrences where fabricated news disseminated on Chinese platforms garners such widespread traction that the Chinese government finds it necessary to issue clarifications and warnings via social media channels:95

> (Source 37) Below is a post from Professor Li Junying, a retired expert from the National Meteorological Administration and the ground commander of the Fengyun-1 meteorological satellite launch, for your reference: "Special Note for 2020: This year, we are experiencing a true celestial cycle. We are encountering the 60-year minor celestial cycle of the Gengzi year and the 180-year cycle of the Baiyuan year. The alignment of the sun, earth, Jupiter, Saturn, and the galactic plane has caused disruptions in the Earth's gravitational field and magnetic field, with solar wind and plasma flows striking the Earth more intensely. ... In the coming period, there may be a much greater risk than in normal years. Things will improve next year after changes in the Earth's external environment."9697

In this instance, the rumor initially surfaced on Weixin but was subsequently debunked by the China Meteorological Administration as disinformation. However, the origin and motives behind the dissemination remain unclear. It prompts us to question whether the Chinese government

⁹⁵ http://www.whiov.ac.cn/

⁹⁶ https://news.sina.com.cn/c/2020-07-14/doc-iivhvpwx5375137.shtml

⁹⁷ Original source: 下面是國家氣象局退休專家、風雲一號氣象衛星發射的地面指揮李俊英教授的帖子, 轉發供 各位參考:「2020特別提示:今年, 真正的天道輪回, 我們遇到了60年小輪回的庚子年, 更遇到了180年週期白元 年,太陽,地球,木星,土星,和銀河面並到了一條線,讓地球引力場,磁場紊亂,太陽風、等離子流更猛烈撲向地 球。……接下來一小段時間,可能風險比正常其它年份大很多。到了明年地球外部環境改觀後就好起來了。

itself is a target of disinformation or merely caught in the crossfire of misinformation campaigns. Such cases warrant deeper investigation to unravel the complexities at play.

Lifespan of Disinformation:

While investigating the longevity of disinformation, the unique characteristics of LINE emerged as a crucial factor, distinguishing this research from the findings of the paper "Trends in Social Media: Persistence and Decay," which focused on post and repost lifespans on Twitter. These platform characteristics significantly influence how posts garner attention and persist in the media landscape.

Unlike Twitter, LINE's encrypted chat groups and anonymous users facilitate endless reposting, allowing posts to circulate repeatedly. The closed chat group environment, combined with unknown posters and uncertainty regarding readership, creates a timeless atmosphere where every received message feels new to recipients who haven't encountered it before. Users struggle to recall all posts they've read, especially as nuances and content can be edited, altering their appearance from previous versions. Even when content seems familiar, users remain unsure if their contacts have received the "important information" yet. Moreover, most LINE posts and reposts consist solely of text (often with links), lacking timestamps or publisher names, making it challenging for users to gauge post longevity—a stark contrast to Twitter's retweet feature. The invisibility and near-impossibility of tracking post lifespans on LINE without a database recording user reports further complicate matters, as users can share posts with their friend lists,

⁹⁸ Asur, Sitaram, Bernardo A. Huberman, Gabor Szabo, and Chunyan Wang. 2021. "Trends in Social Media: Persistence and Decay". *Proceedings of the International AAAI Conference on Web and Social Media* 5 (1):434-37. https://doi.org/10.1609/icwsm.v5i1.14167.

obscuring the original source. Consequently, tracing news and its lifespan reveals manipulative information dissemination originating from specific sources with distinct intentions.

Emotion-Provoking Narratives, Ambiguity, and Exaggeration:

Building upon our earlier analysis, it becomes evident that emotion-provoking narratives, ambiguity, and exaggeration are recurring themes across various cases. These narratives are strategically designed to evoke strong emotional responses from audiences, compelling them to react impulsively. Often, the headlines fail to provide clear explanations of the events and are directly shared on LINE. The sensational nature of these news items is such that readers, even when presented with links to Chinese platforms, are drawn in by the emotional content and overlook the credibility of the sources:

(Source 38) Urgent Notice! Wuhan Suddenly Announced, the Most Worrisome Moment Has Arrived!⁹⁹¹⁰⁰

(Source 39) Anyone encountering individuals wearing such wristbands on buses or subways should be cautious and keep their distance, as they may be individuals required to undergo a 14-day quarantine due to novel coronavirus infection. Be cautious of unauthorized outings.¹⁰¹

(Source 40) A friend from Chang Gung Memorial Hospital shared: "We had a meeting this morning, and the supervisor said, 'The directors of Taipei Veterans General Hospital, National Taiwan University Hospital, and the emergency department director of Asia University have mentioned that recent data is unusual. It's best to wear masks when going out and

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⁹⁹ https://mp.WeChat.gq.com/s/P-4Ukz3MYHZonghzatzr3Q,314

¹⁰⁰ Original source: 紧急通告!武汉突然宣布, 最担心的一刻到了!

¹⁰¹ Original source: 任何人, 在巴士, 地鐵見到手上帶著這样的手環, 要小心遠離, 那是要隔離14天的新型肺炎人仕。私自外出。小心。

raise our vigilance to the level of January or February, because the temperature is around twenty degrees, and the bacteria are more activated. They advise us to be more careful.' Everyone, please don't find it troublesome. Make sure to wear masks when going out ..."¹⁰²

This aligns with Lazer et al.'s assertion that "people tend to remember information, or how they feel about it, while forgetting the context within which they encountered it." At times, the content isn't even pertinent to Taiwan and is evidently derived from events in China. Sometimes, the content isn't even relevant to Taiwan and is clearly derived from events in China. For instance, Source 39 mentioned bracelets used to identify infected patients in Hong Kong. The disinformation could be easily debunked by checking the latest policies of Taiwan's CDC. However, the news spread rapidly and reached numerous users on LINE before the Taiwan government declared it misleading, threatening fines for those who continued to share it. In this context, the actual veracity of the information is not the primary determinant of its dissemination. Instead, it is the sense of urgency and the emotions it elicits that dictate whether the news will gain popularity.

Use of Alert Emojis:

Finally, an intriguing observation warrants discussion. During the initial stages of conducting text mining programming in R, the analysis was often confounded by emojis and meaningless symbols present in the text. Consequently, I found it necessary to implement commands instructing the code to replace all such symbols with spaces.

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¹⁰² Original source: 長庚醫院朋友傳來:『我們早上開會,主管說:「北榮的院長、台大的院長、亞東的急診主任說最近的數值怪怪的的,出門在外最好口罩帶著,警覺性要提升至一、二月時的態度,因為溫度在二十度左右,病菌比較活化,要我們同仁多加注意。』大家千萬不要嫌麻煩,出門口罩一定一定要戴好↔

¹⁰³ David M. Lazer et al., "The Science of Fake News," *Science* 359, no. 6380 (March 9, 2018): 1094–96, https://doi.org/10.1126/science.aao2998.

> (Source 41) This is a post shared by a classmate of my daughter in the United States: Initially thought it was a rumor... A week ago, a U.S. law went into effect: . **(a)** On July 28, 2015 (updated on October 17, 2016), the U.S. Food and Drug Administration (FDA) issued Import Alert 99-33, prohibiting the following **D** Japanese food from entering the United States: No Fresh milk, No Butter, No Milk powder, No Infant formula, and other \infty Dairy products; \infty Vegetables, and other products Rice, Whole wheat; Fish; Meat and poultry; Clams; Sea urchin; Victrus fruits; Vikiwifruit. X The reason is radiation contamination (Radionuclide contamination)... It has caused many people to suffer from \(\times\) cancer or \(\times\) diseases, seriously affecting the global human and ecological environment, which is unimaginable! X Do not consume Japanese products. X Radioactive values have been found to be increasingly high in U.S. coastal areas. It is best to avoid going to Japan if possible. The Australian government has stopped issuing visas to Japanese people, and X the United States has also suspended U.S. immigration for Japanese people. Currently, the situation in Japan is more severe than we imagine, with **o** over 70% of the entire Japanese territory contaminated. @ Radioactive substances from Japan have flowed into the

ocean... Deformed seafood and plants are being discovered Mutated mushrooms Mutated fish, Mutated marine products contaminated with radioactive substances will induce esophageal cancer, lymphoma, leukemia, etc., within 1-2 years after consumption, especially affecting infants and pregnant women. Surrounding countries have stopped seafood trade with Japan. Blue fish, Shellfish, Shiitake mushrooms imported from Japan... 104

To captivate readers' attention, particularly those lacking proficiency in professional jargon or language, the visual presentation of the message becomes paramount. As exemplified, the inclusion of alerting emojis renders the core message of lengthy texts more accessible and impactful to readers. Even individuals unfamiliar with Chinese can readily discern the sense of urgency and anger conveyed within the subsequent narrative.

¹⁰⁴ Original source: 這是在美國女兒的同學發的貼: ◎剛開始以為是謠言...... 一星期前美國法例己生效: . ◎美國食品药品管理局FDA 7月28日2015 (2016年10月17日更新)發佈的第99-33進口警示,禁止下列 ②日本食品進入美國: 》鲜奶、》黄油、》奶粉、》嬰兒奶粉、及其它 》乳制品; 》蔬菜、及其它制品 》大米、》全麥; 》魚類; 》肉類和禽類; 》蛤蜊類; 》海胆; 》柑橘柚類水果; 》奇異果。 ※ 原因是核污染 (Radionuclide contamination)...... 已導致多人患上 ※ 癌症或 ※ (疾病,已嚴重影響全球人類及生態環境了,真不敢想像! ※ 不要飲食日本的東西。 ※ 美國的臨海中被發現到放射性數值越來越高。盡量能不去日本最好不要去。 ※ 澳大利亞政府已經停止日本人的簽証發放, ※ 美國也停止了日本人的美國移民。目前日本的狀况比我們想像的還嚴重,全日本领土的 ◎ 70以上被污染。 ◎ 日本的放射性物質已經向海洋流入...... 開始發現 ※ 畸形海鮮及植物 ※ 變異的菇類 ※ 變異的魚類, ※ 變異的海產受到放射性物質的食品,飲食之後1--2年內會誘發 ◎ 食道癌 ◎ 淋巴癌 ◎ 白血病等,特别是對幼兒, ◎ 孕婦會有更大的影響。周邊國家已經停止了與日本的海鮮貿易。從日本進口的 》青魚, 》 香菇......。

CHAPTER V

Conclusion

In conclusion, the study provides a comprehensive analysis of China-based information warfare tactics targeting Taiwan, unveiling multifaceted strategies deeply rooted in Taiwanese societal values of social responsibility and sharing. Leveraging cultural norms influenced by Confucian principles and indigenous traditions, these mechanisms exploit platforms like LINE as battlegrounds for the propagation of disinformation, fostering an environment conducive to the spread of manipulated narratives. The examination further reveals intricate tactics such as repeated sentences, ambiguity, and emotive language, strategically designed to evoke strong emotional responses and shape public sentiment. Emphasizing the evolving nature of dissemination strategies, the study highlights the significance of visual elements, including emojis and symbols, in capturing attention and conveying urgency. The research also elucidates the complex interplay between cultural norms, technological platforms, and strategic communication, urging further investigation to comprehend and counter these pervasive tactics.

The analysis uncovers patterns in general and China-based fake news dissemination, shedding light on the manipulation of subjects to appeal to audiences and exploit their expectations.

The patterns of general fake news and the patterns of China-based disinformation exhibit distinct characteristics and motivations. In terms of origins and targets, general fake news originates from various sources and can target a wide range of topics and audiences, often driven

by sensationalism or clickbait. On the other hand, China-based disinformation originates from sources within China and typically targets specific geopolitical objectives, such as undermining Taiwan's government, sowing discord, or advancing Chinese Communist Party narratives.

Regarding content and themes, general fake news can vary widely but often includes sensational or exaggerated claims, false narratives, and misinformation on diverse topics. In contrast, China-based disinformation often focuses on Taiwan-related issues, such as attacking the Taiwanese government, spreading fear or panic among Taiwanese citizens, or promoting narratives favorable to China's interests. In terms of strategies and tactics, general fake news relies on broad dissemination strategies, including social media platforms, websites, and traditional media outlets, with tactics like emotional manipulation, sensational headlines, and false claims. China-based disinformation, however, utilizes tailored tactics to exploit cultural, linguistic, and political sensitivities in Taiwan, such as plagiarizing and reposting content from Chinese sources, evoking panic or desperation, and framing events to blame the Taiwanese government or foreign actors.

Furthermore, while general fake news often employs generic or broad subject matter to appeal to a wide audience, China-based disinformation targets specific subjects relevant to Taiwan-China relations, leveraging appeals to national identity, fear, or mistrust of foreign actors. Additionally, China-based disinformation may involve translation of content from Simplified Chinese to Traditional Chinese to target Taiwanese audiences, exploiting language barriers and preferences for US and English sources to enhance credibility among certain demographics. Overall, while both general fake news and China-based disinformation aim to manipulate public opinion, the latter exhibits a more targeted and strategic approach, tailored to specific geopolitical objectives and cultural contexts relevant to Taiwan-China relations.

The other significant discovery is the flexibility of changing the subjects within the content. In the realm of traditional writing instruction, the elements that constitute the subject matter of an article - including the nation, esteemed experts, authoritative figures, and reputable institutions - are typically regarded as foundational components. Any alteration to these subjects risks compromising the integrity and efficacy of the entire composition. However, within the domain of Chinese-based disinformation, a notable phenomenon emerges: a substantial portion of post reproduction involves the substitution of these subjects. This observation underscores a fundamental shift in the priorities of audience engagement, indicating that the allure of a subject, particularly as presented in the title, supersedes the intrinsic value of the content itself. This shift has been notably facilitated by advancements in artificial intelligence (AI) technology, which adeptly manipulates subject matter to resonate with the desires and expectations of social media audiences. The subjects are replaceable, much like how AI can seamlessly place any person's head on Arnold Schwarzenegger's body.

Through this lens, it becomes apparent that the success of information dissemination hinges less on factual accuracy or realism and more on the ability to align with the audience's preferences regarding the identities and actions of prominent figures. Thus, the replaceability of subjects underscores the evolving landscape of information warfare, wherein strategic presentation trumps factual substance in capturing and retaining audience attention.

Finally, the study underscores the prominent role of the United States as a "Super Brand" in the dissemination of misinformation in Taiwan, with narratives often framing events to provoke panic and blame the Taiwanese government. Through an exploration of the lifetime of disinformation posts, the research argues that the absence of a sense of time and the closed chatting environment on platforms like LINE contribute to users' eagerness to share posts

deemed "emergent" and "important," further amplifying the impact of information warfare tactics.

APPENDICES

APPENDIX A

A R code for filtering the repetitive words and sentences of the news reported

from the LINE users to the Cofact database

```
library(tidyverse)
library(dplyr)
library(tidytext)
# LOAD DATA
data <- read csv("./title1.csv")
# INIT FINAL WITH FIRST DATA ROW, 1 CHAR
fexf <- c(data[2, 2])
final <- tibble(text = fexf) %>%
 unnest tokens(shingle, text, token = "character shingles", n = 1) %>%
 count(shingle, sort = TRUE)
# RUN REST OF 1 CHAR
for(i in 3:101) {
 text <- c(data[i, 2])
 temp <- tibble(text = text) %>%
  unnest tokens(shingle, text, token = "character shingles", n = 1) %>%
  count(shingle, sort = TRUE)
 final <- bind rows(final, temp)
# RUN 2 CHAR THROUGH 20 CHAR
for (j in 2:20) {
 for(i in 2:101) {
  text <- c(data[i, 2])
  temp <- tibble(text = text) %>%
   unnest tokens(shingle, text, token = "character shingles", n = j) %>%
   count(shingle, sort = TRUE)
  final <- bind rows(final, temp)
```

```
}
}
# PRINT OUT FINAL
final <- final |>
  group_by(shingle) |>
  summarize(count = sum(n, na.rm = TRUE))
final
```

APPENDIX B

A R code for text mining

```
install.packages("tm")
install.packages("SnowballC")
install.packages("wordcloud")
install.packages("RColorBrewer")
install.packages("tidyverse")
install.packages("tidytext")
install.packages("foreach")
install.packages("doParallel")
library(tidyverse)
library(tidytext)
library(tm)
library(SnowballC)
library(wordcloud)
library(RColorBrewer)
library(foreach)
library(doParallel)
# Read text from file
text <- readLines(file.choose("wordtext.txt"))</pre>
# Load the data as a corpus
docs <- Corpus(VectorSource(text))</pre>
# Set up parallel backend with 8 CPUs
num cores <- 8
cl <- makeCluster(num cores)</pre>
```

```
# Function to preprocess documents
preprocess document <- function(docs) {</pre>
 docs <- tm map(docs, content transformer(function(x, pattern) gsub(pattern, " ", x)), c("\reft]",
"-","-","三","三","。",",","---","多位第",""","!",":"))
 docs <- tm map(docs, removeNumbers)</pre>
 docs <- tm map(docs, removeWords, stopwords("english"))
 docs <- tm map(docs, removeWords, c("the", "and", " ", "you", ":", "all", "can", "this", "your",
"with", "元", ", ", "。"))
 docs <- tm map(docs, removePunctuation)
 docs <- tm map(docs, stripWhitespace)
 docs <- tm map(docs, stemDocument)
 return(docs)
}
# Preprocess documents in parallel
docs processed <- foreach(i = 1:length(docs), .combine = c) %dopar% {
 preprocess document(docs[[i]])
}
# Stop the parallel backend
stopCluster(cl)
# Combine processed documents into a corpus
docs combined <- Corpus(VectorSource(docs processed))</pre>
# Create TermDocumentMatrix
dtm <- TermDocumentMatrix(docs combined)
# Convert to matrix
m <- as.matrix(dtm)
v \le sort(rowSums(m), decreasing = TRUE)
d \le data.frame(word = names(v), freq = v)
# Print the top 10 terms
head(d, 10)
```

registerDoParallel(cl)

APPENDIX C

A R code for detecting the keywords from all the news articles

```
library(tidyverse)
library(dplyr)
library(tidytext)
library(readxl)
title1 result original copy <- read excel("title1 result original.xlsx")
str_detect(title1_result_original_copy$shingle, "危險")
title1 result original copy %>%
 filter(str detect(shingle, "危險"))
out word <- title1 result original copy %>%
 filter(str detect(shingle, "危險")) %>%
 pull(shingle)
out word
options(max.print = .Machine$integer.max)
install.packages("writexl")
df danger <- data.frame(out word)</pre>
library("writexl")
write xlsx(df danger, \\Users\\hanhsins\\content1\\danger)
```

APPENDIX D

A R code for data visualization

```
findFreqTerms(dtm, lowfreq = 2)

# Print the results to a bar chart and a word cloud graph
barplot(d[1:10,]$freq, las = 2, names.arg = d[1:10,]$word, col ="darkslategray", main ="Most
frequent words from Jan to June 2020", ylab = "Word frequencies")

set.seed(1218)
wordcloud(words = d$word, freq = d$freq, min.freq = 2, max.words=30, random.order=FALSE,
rot.per=0.0000000000000000005, colors=brewer.pal(8, "Dark2"))
png("wordcloud packages.png", width=20,height=20, units='in', res=300)
```

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BIBLIOGRAPHY

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