



The representation of Covid-19 and China in *Reuters*' and *Xinhua*'s headlines

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ABSTRACT

The scare caused by China's sudden coronavirus outbreak turned out to be a global threat. The new virus cases and infections have been spreading fast both in China and abroad, prompting the World Health Organization (WHO) to declare a global health emergency. By analysing a corpus of 16,980 English headlines of *Reuters* and *Xinhua* from January 8, 2020, to February 29, 2020, the present study seeks to examine the most frequently discussed topics in this context. It also investigates how China is represented in the headlines of the two news agencies. Informed by critical discourse analysis, the headlines were analysed quantitatively and qualitatively. The representation of the virus in the news headlines of the two agencies reflected differences in the thematic focus. *Reuters* focused on the immediate and long-term repercussions, serious implications, and consequences of the current health crisis. *Xinhua*'s reporting, on the other hand, tended to play down the effects of the coronavirus spread on the Chinese economy and highlighted China's readiness and ability to curb the spread of the disease. The study concludes that the local media's reporting is geared towards enforcing the "Us vs. Them" dichotomy by highlighting the government's efforts in fighting the epidemic.

Keywords: **Headlines, critical discourse analysis, coronavirus, media agencies, Xinhua, Reuters, China**

INTRODUCTION

Coronaviruses are known to cause respiratory tract illnesses, with some common flu symptoms such as fever, cough and shortness of breath. The current SARS-like 2019-nCoV (novel coronavirus) outbreak originating in Wuhan raised the question, why China again? According to Richburg (2020), the fact that all three respiratory infections—bird flu, SARS, and 2019-nCoV, have originated in mainland China in a relatively short period would suggest that the protective measures taken have not been strict enough to curb further outbreaks of the same virus. This particular dimension is of paramount importance since the global spread of the virus has lately transformed into an uncontrollable pandemic.

Given the intricate nature and mystery surrounding this condition, researching the very nature of the coronavirus outbreak is quite complicated and diversified, with its medical, economic, social, political, linguistic and psychological effects, repercussions and consequences (see Al-Salman & Haider, 2021; Haider & Al-Salman, 2020). In other words, its impact has affected different domains and disciplines. Accordingly, the analytical approach for this research will be informed and guided by the multi-modal and multidisciplinary nature of critical discourse analysis (CDA). This study covers the first phase of the COVID-19 outbreak (from January 8 to February 29, 2020), and depicts the representation of COVID-19 in two major news outlets by analysing a corpus of 16,980 English headlines of Reuters and Xinhua.

This research attempts to provide an answer to the following questions:

- 1) What are the most frequently discussed topics in the context of coronavirus in the headlines of Reuters and Xinhua?
- 2) How is China represented in the headlines of the two news agencies?

CONTEXTUAL BACKGROUND of COVID-19 (from January 8 to February 29, 2020)

The sudden outbreak of coronavirus in late 2019 was so stunning and confusing, especially with the death toll and virus infections dramatically rising around the clock. The World Health Organization (WHO) responded quickly by declaring a state of global emergency. WHO's reaction was indicative of its concern over the gravity of the situation. This health threat, which reached the levels of a pandemic, exploded to reach almost every district in China and the world (Secon, Woodward & Mosher, 2020). On January 3, 44 suspected patients with a mystery disease were reported by China, and the first death due to the coronavirus was reported on January 9. A spike in cases of COVID-19 was reported on January 18-19. Wuhan closed airports and railway stations on January 23. By January 25, more countries were affected by COVID-19. On February 28, WHO raised the risk of the COVID-19 from "high" to "very high."

According to doctors and health experts, the coronavirus' symptoms are similar to those of Severe Acute Respiratory Syndrome (SARS). But with the situation worsening, no one was sure enough to predict how long the virus would continue (Donnelly, Malik, Elkholy, Cauchemez, & Van Kerkhove, 2019).

LITERATURE REVIEW

Media news discourse is one of the main domains of critical discourse analysis, which embraces the social, political, economic, ideological and cognitive aspects of news processing (Al-Abbas & Haider, 2020). This orientation lends support to the macro aspect and conditions of news media as a multidisciplinary system of interactive social practice (Haider, Olimy, & Al-Abbas, 2021). This is not to ignore, however, the linguistics aspect of media news reporting where media discourse is to be analysed at different levels of language structure: lexical, syntactic, semantic, textual and contextual.

According to Su et al. (2021), in a global pandemic of the kind of COVID-19, communication is essential in dismissing fears and helping people to fight health threats. Similarly, Almahasees and Jaccard (2020, p. 515) argued that “social media becomes an essential means of communication since COVID-19 updates take place around the clock”. In this case, media coverage should be balanced, fact-based and truth oriented.

Headlines undoubtedly stand out as one of the most fundamental features of news discourse as they provide a summary of the main information in news items (Haider & Hussein, 2020). More often than not, the form and style of the headline can mirror the thematic structure of the news report or story. Sometimes, transparency and objectivity may be outweighed by the political affiliation of the source and/or the ideological implications of the headlines, both cognitive and social, targeting a given group of readership. In this case, the headline may be biased or prejudiced, which is not a rarity in news coverage.

Basch, Kecojevic and Wagner (2020, p. 1089) pointed out that “news media play a vital role in enhancing the understanding of the pandemic and in shaping public response to public health messages.” They added that with the huge number of media outlets reporting on the COVID-19 pandemic, it is important that these sources provide the most credible and reliable information. Thomas, Wilson, Tonkin, Miller and Ward (2020, p. 1) investigated how and where the media framed the responsibility for COVID-19 in Australia. Their findings showed that “the Australian printed media were slow to report on the COVID-19 pandemic. This was interpreted as being due to an evaluation of the pandemic risks as low by the media”. In the same vein, Liu, Zhang and Huang (2020) argued that the media narrative is known to impact and shape public opinion to COVID-19.

According to Casero-Ripollés (2020), media is a valuable source of information in difficult situations, especially the one created by the COVID-19 pandemic. As reported by Chang, Liu, Jin and Wang (2020), the awareness of people about the methods of prevention against the infectious disease through media coverage was enhanced to reduce the rate of infection in Hubei, China.

METHODOLOGY

The news articles comprising the data for this study were compiled through Factiva News Database. News articles on COVID-19 were collected from two major news sources, namely *Reuters News Agency* and *Xinhua*, the biggest and most influential media organisation in China. It is noteworthy that for the articles to be included in the corpus, they should occur in the specified time span, particularly January 8, 2020, when the first article on the virus was published, to February 29, 2020, when other countries, especially Europe, became the epicentre of the epidemic. For the article to be included in the corpus, it should include the following query term, namely: *coronavirus*. The search resulted in 16,980 articles; 3019 of which were published in January (2507 in *Reuters* and 512 in *Xinhua*) and 13,961 in

February (8399 in *Reuters* and 2543 in *Xinhua*). The research procedures followed are outlined in Figure 1.

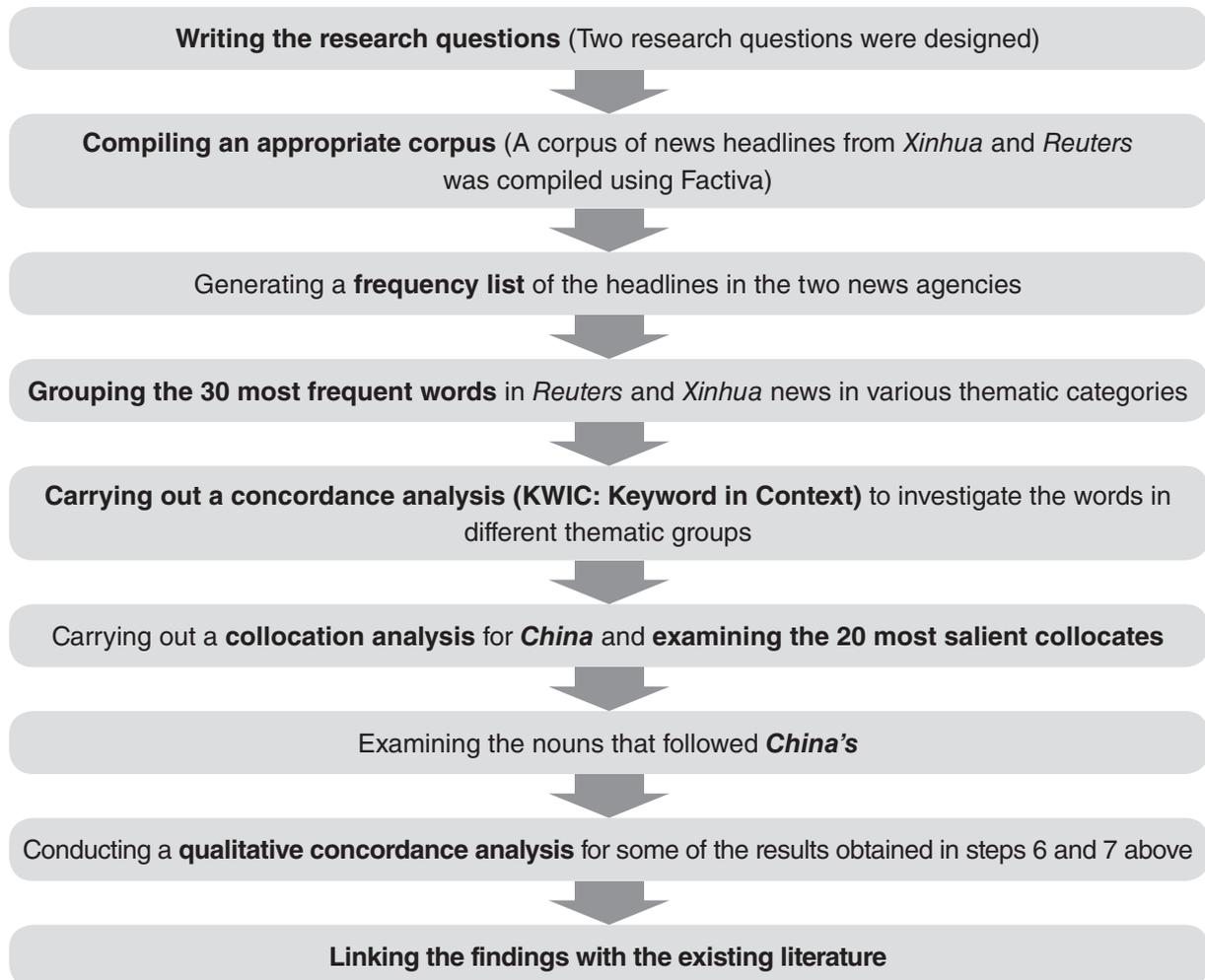


Figure 1. The procedures followed in this study

DATA ANALYSIS AND FINDINGS

Upon tracking and analysing the coverage of the virus outbreak by the two leading news hubs, the authors identified and targeted some key domains, which have been directly and heavily influenced by the COVID-19 crisis.

Frequency analysis

To identify the most frequently discussed topics by the two news agencies under study, the researchers generated a list of the 30 most frequent words in the two corpora of headlines, as Figure 2 shows. It is worth pointing out that the researchers used a stop list to filter out the function words.

Reuters			Xinhua		
N	Word	Freq.	N	Word	Freq.
1	coronavirus	4,221	1	china	1,351
2	china	2,281	2	coronavirus	1,020
3	virus	1,577	3	epidemic	460
4	says	1,324	4	novel	443
5	new	684	5	chinese	335
6	outbreak	669	6	outbreak	283
7	fears	652	7	fight	262
8	cases	551	8	new	244
9	stocks	545	9	cases	241
10	health	491	10	control	186
11	impact	474	11	wuhan	169
12	reports	343	12	confirmed	149
13	oil	308	13	hubei	138
14	global	306	14	reports	136
15	hit	281	15	virus	133
16	low	281	16	patients	124
17	chinese	275	17	infection	114
18	demand	262	18	support	112
19	shares	255	19	battle	105
20	case	249	20	official	100
21	first	248	21	pneumonia	98
22	fall	247	22	world	98
23	who	230	23	medical	97
24	growth	224	24	case	88
25	rise	214	25	xi	84
26	spread	214	26	measures	78
27	asia	210	27	efforts	73
28	wuhan	203	28	beijing	70
29	flights	202	29	says	68
30	japan	198	30	hong	66

Figure 2. The 30 most frequent words in Reuters and Xinhua news agencies

As Van Dijk (1997) puts it, “a text is merely a tip of iceberg and it is the responsibility of the discourse analysts to uncover the hidden meaning of the text.” Guided by this interdisciplinary approach of multimodality, the researchers grouped the 30 most frequent words in *Reuters* and *Xinhua* in six categories: (1) outbreak of the virus, (2) places, (3) reporting verbs and officials, (4) number of cases, (5) repercussions (psychological, economic, transportation), and (6) fighting the virus, as Table 1 shows.

Table 1. Thematic categories of the 30 most frequent words in *Reuters* and *Xinhua*

Thematic Category	<i>Reuters</i>	<i>Xinhua</i>
Outbreak of the virus	coronavirus, virus, new, outbreak	coronavirus, epidemic, novel, outbreak, new, virus, infection, pneumonia
Places	China, Chinese, WHO, Asia, Wuhan, Japan	China, Chinese, Wuhan, Hubei, Beijing, world
Reporting verbs and officials	says	confirmed, reports, says, official, Xi
Number of cases	cases, hit, case, health, global, spread	cases, patients
Repercussions (psychological, economic, transportation)	fears, impact, flights, stocks, oil, demand, shares, low, fall, growth, rise	
Fighting the virus		fight, control, battle, support, measures, efforts

To shed light on the differences between *Reuters*' and *Xinhua*'s coverage of the COVID-19 crisis, the researchers examined the categories that were unique in one news agency but were not common in the other. The most dominant discourse theme in *Reuters* was “repercussions”, whereas “fighting the virus” was the most prevailing in *Xinhua*.

Unique themes discussed in Reuters' reporting

In this section, the researchers carried out a concordance analysis (KWIC) for the words listed in the “repercussions” category and how they were used in the two agencies. The words represented in this category included *fears, impact, flights, stocks, oil, demand, shares, low, fall, growth* and *rise*. These words have been further divided into three subcategories, namely economy, transportation and psychological effect (Table 2). To highlight the differences between the two news agencies, Table 2 also shows the raw and normalised frequency of these words. The raw frequency refers to how many times the word occurred in the corpus, while the normalised frequency refers to the word occurrences per one thousand words.

Table 2. The frequency of words in the “Repercussions” category

Repercussions.	<i>Reuters</i>	Raw Freq.	Normalised Freq.	<i>Xinhua</i>	Raw Freq.	Normalised Freq.
	stocks	545	0.46	stocks	17	0.06
	impact	474	0.40	impact	26	0.09
	oil	308	0.26	oil	7	0.06
	low	281	0.24	low	3	0.01
Economy	demand	262	0.22	demand	15	0.05
	shares	255	0.22	shares	8	0.03
	fall	247	0.21	fall	3	0.01
	growth	224	0.19	growth	10	0.03
	rise	214	0.18	rise	25	0.08
Transportation	flights	202	0.17	flights	24	0.08
psychological effect	fears	652	0.55	fears	11	0.04

The economic dimension seemed to dominate this category, where 9 out of 11 words representing the “repercussions” category belonged to the economic domain. The economic power and the world’s markets were among the most directly and heavily affected by the COVID-19 outbreak. The impact was most evidently reflected in *Reuters*' high frequency reporting on leading world economies and financial markets. The researchers carried out a concordance analysis for the word *impact* that has neutral connotations and the word *growth*, which has positive connotations (concordance 1 and concordance 2).

N	Concordance
1 <title> REFILE-Singapore downgrades 2020 growth forecast due to coronavirus outbreak </title>
2	Slovenia's GDP growth slows in 2019, coronavirus could hurt 2020 growth </title>
3 <title> Switzerland will lower economic growth forecasts over coronavirus </title>
4 <title> Coronavirus to trim French growth by 0.1 points: minister </title>
5	<title> Apple warns sales to fall short of target due to coronavirus impact </title>
6	<title> New Zealand says can manage coronavirus impact on economy </title>
7	German car registrations expected to fall further due to coronavirus impact </title>
8 <title> Coronavirus impact on financial markets and economies </title>
9	<title> RPT-Saudi Aramco CEO expects coronavirus impact on oil demand to be short-lived </title>
10 <title> BOJ official warns of coronavirus impact on Japan's economy </title>
11	<title> Trump's national security adviser says coronavirus could impact U.S.-China trade deal -CNN </title>
12	<title> G20 ready to adopt policies to limit economic impact of coronavirus -Saudi </title>
13 <title> Companies feel impact of coronavirus outbreak in China </title>
14 <title> Nike warns of financial impact from coronavirus outbreak </title>
15	<title> Mexican official says coronavirus outbreak in China may impact financial conditions </title>
16 <title> Italy's PM Conte says impact of coronavirus on economy could be "very strong" </title>

Figure 3. Concordance 1: Analysis of *growth* and *impact* in *Reuters*

The *Reuters*' examples in concordance 1 dismiss any positive short-term prospects for the world economy. The picture is gloomy, and the worst is yet to come if the coronavirus predicament continues to pose a threat and a decline in the international markets, trade, and industries; the backbone of the world's economic power. It is noteworthy, however, that *Reuters*' balanced, neutral and unbiased reporting approach continued to present news as is without embellishment or partisanship. This is evidenced in citations 6 and 9 of Concordance 1, which mitigated the virus impact on the world economy.

Since the outbreak of the virus in December 2019, the 2020 economic growth forecast in some countries such as Singapore, Slovenia and Switzerland were downgraded and lowered (lines 1, 2, and 3). The economies of some other countries were affected as well (lines 4, 10, and 16). The virus impacted different industries including, but not limited to, tech companies (line 5), auto industry (line 7), oil (line 9) and sportswear manufacturing companies (14). It has also affected or may further affect world trade and businesses (lines 11, 13).

From a CDA perspective, Concordance 1 data (lines 2, 3, 6, 11, 15, 16) showed that "modality," indicated by the use of modal verbs as *may*, *can*, *could*, *will*, etc., has been heavily represented in this category. This suggests that, with this condition of uncertainty, further complications of the economic situation may be in sight. Another aspect of the CDA representation is the use of "authority and power" expressions reflected in the words *minister*, *CEO*, *advisor*, *PM* and *officials* which give the news credibility (Concordance 1, lines 4, 9, 10, 11, 15 and 16).

On the other hand, to depict *Xinhua*'s reporting and coverage of the COVID-19 impact on the world economy, the researchers conducted a concordance analysis for the words *growth* and *impact* in *Xinhua*'s corpus (concordance 2).

N	Concordance
1 <title> Long-term economic growth fundamentals unchanged: Xi </title>
2 <title> China's digital marketing industry maintains growth amid epidemic </title>
3 <title> Novel coronavirus impact not to reverse growth of China's economy: Chinese state councilor </title>
4	Experts say China's economy resilient enough to withstand coronavirus impact </title>
5 <title> Coronavirus impact on Chinese economy to be limited: official </title>
6	<title> Greek business leaders express optimism over coronavirus impact, officials suggest calm </title>
7 <title> Coronavirus epidemic impact will be temporary, limited: China's forex regulator </title>
8 <title> Epidemic unlikely to heavily impact China's financial system: official </title>
9 <title> China capable of minimizing impact of epidemic on economy: spokesperson </title>
10 <title> U.S. economist says impact of COVID-19 on Chinese, world economy limited </title>

Figure 4. Concordance 2: Analysis of growth and impact in *Xinhua*

Going through the incidents in *Xinhua*, it can be inferred that the news agency tended to present an optimistic outlook towards the economic impact of the coronavirus outbreak on the global economy. For *Xinhua*, the overall assessment of the economic situation was positive, and according to the Chinese President Xi, “the long-term economic growth fundamentals remain unchanged” (line 1). *Xinhua's* coverage confirmed that the virus might only have a short-term impact on the resilient Chinese economy, financial system, digital marketing and industry. The news agency quoted Chinese and non-Chinese officials to highlight this aspect. For example, the President of the People’s Republic of China, Chinese State Councillor, China’s forex regulator and other officials stressed that the impact of the virus was temporary and limited on the Chinese economy (lines 1, 3, 5, 7, 8 and 9). Non-Chinese economists, experts, and business leaders were supportive as they stressed the same idea (lines 4, 6 and 10). *Xinhua's* positive-self representation of China in the news resides in the fact that the news agency operates under government control and its releases reflect the countries’ official policy.

The second aspect in the repercussion category that received heavy coverage was “air transport”. *Reuters'* data showed a heavy emphasis on air travel, which has been massively influenced by the COVID-19 outbreak. Most international airline carriers have either suspended, cancelled, or reduced their flights to destinations hit by the coronavirus. Such measures were meant to minimise contact with people who may be potential carriers of the virus (Concordance 3).

N	Concordance
1 <title> Abu Dhabi's Etihad suspends flights to Hong Kong on low demand </title>
2 <title> Lebanon restricts flights to countries with coronavirus, halts pilgrimage trips
3 <title> Taiwan to suspend most flights to mainland China to control coronavirus </title>
4 <title> Pakistan halts flights to and from China: civil aviation authority </title>
5 <title> S.Korean airlines halt flights to Daegu, city with most virus cases </title>
6 <title> Czech government bans direct flights to China, effective February 9 </title>
7 <title> Ukraine to stop direct flights to China from Feb. 4 </title>
8	<title> Singapore starts screening all China flights, warns against Wuhan travel to deter coronavirus
9 <title> Qantas suspends China flights from Feb 9 due to coronavirus </title>
10	<title> Delta says it will suspend all U.S.-China flights </title>
11 <title> Bulgaria Air cancels flights to Milan over coronavirus </title>
12 <title> Germany's Lufthansa cancels flights to China due to coronavirus - Bild </title>
13 <title> Egyptair to suspend all flights to and from China over Coronavirus </title>
14 <title> Kenya Airways suspends all flights to China amid coronavirus outbreak </title>
15	<title> Indonesia's Lion Air Group to suspend all flights to China from February </title>

Figure 5. Concordance 3: Analysis of flights in *Reuters*

The *Reuters'* data shows that transport, air travel in particular, has sustained big losses resulting from COVID-19. To compare *Reuters'* findings with its Chinese counterpart, the researchers carried out a concordance analysis for the word “flight” in *Xinhua* (Concordance 4).

N	Concordance
1	<title> Airlines begin canceling Italy flights amid coronavirus outbreak </title>
2	<title> China Southern Airlines resumes over 2,100 domestic flights amid epidemic </title>
3 <title> Charter flights bring home 310 Hubei residents from abroad: Foreign Ministry
4 <title> UAE suspends all Iran flights following COVID-19 outbreak </title>
5 <title> Suspending flights not to help curb epidemic, but sow panic: spokesperson
6 <title> Hong Kong to arrange two flights to bring back residents on quarantined ship in Japan </title>
7 <title> Charter flights to bring home 2,000 Chinese tourists from the Philippines
8 <title> Iraqi Airways suspends flights with Iran over Coronavirus </title>
9 <title> Italy agrees to resume some flights with China </title>
10 <title> China's civil flights won't be suspended: FM spokesperson </title>

Figure 6. Concordance 4: Analysis of *flights* in *Xinhua*

Unlike *Reuters'*, *Xinhua's* coverage focused on responses that reduced the impact of COVID-19 on the aviation sector. Instead of highlighting suspensions of international flights to China, the news agency diverted attention to flight cancellations to other countries hit by the virus, such as Italy and Iran (lines 1, 4 and 8), and other countries' flights resumption with China (9). *Xinhua* also highlighted the resumption of domestic flights (lines 2 and 10), and focused on the efforts of the China in bringing the Chinese people from abroad (lines 3 and 7).

The third aspect in the repercussion category was the “psychological effect”. The COVID-19 outbreak was appallingly terrifying to the entire international community, especially when many countries became coronavirus hotspots such as South Korea, Italy, Iran, the Middle East, European countries, the US and Canada. Fears have escalated over the increasing number of new cases and the rising death toll. WHO's declaration of COVID-19 as a pandemic aroused fear where US stocks struggled and banks made emergency rate cuts to counter the coronavirus shock. *Reuters'* corpus of data for this study contained ample evidence in support of the escalating state of anxiety, fear and psychological stress leading to panic. Examples retrieved from *Reuters'* corpus are shown in concordance 5 below.

N	Concordance
1	<title> IBM withdraws from RSA conference over coronavirus fears </title>
2	<title> N. Korea to cancel April marathon over coronavirus fears -tour company </title>
3	Korea's K-League postpones matches over coronavirus fears </title>
4	<title> Facebook cancels San Francisco summit on coronavirus fears </title>
5	Mobile World Congress in Barcelona called off over coronavirus fears </title>
6 <title> Cotton plunges over 4% as coronavirus fears grip markets </title>
7	<title> Oil prices dive to lowest in over a year on coronavirus fears </title>
8	<title> Iraq's Sadr suspends protest call over coronavirus fears - statement </title>
9	<title> North Korea suspends foreign tourism over coronavirus fears: tour companies </title>
10	Tennis-Fed Cup group moved out of China over coronavirus fears </title>
11	Russia postpones annual investment forum over coronavirus fears </title>
12 <title> Indian shares slip on fears over fast-spreading coronavirus; metal stocks fall
13	<title> Russia strengthens sanitary controls at borders over virus fears - Ifax cites watchdog </title>
14 <title> Expats across China flee as virus fears mount </title>
15	Tokyo postpones training for Olympics volunteers over virus fears </title>

Figure 7. Concordance 5: Analysis of *fears* in *Reuters*

The above citations provide evidence in support of the thesis that COVID-19 is a real threat where the psychological effect and accompanying fears were mounting to create a state of panic and anxiety at a global level. Local, national and international events and activities have been cancelled, suspended or postponed. This was evidenced in various sectors, including International Business Machines (IBM), Facebook and Mobile World Congress (lines 1, 4, 5). Sports and athletic events were impacted as well, including North Korea's April marathon, Korea's K-League matches, Tennis-Fed Cup group, and Tokyo's training for Olympics volunteers (lines 2, 3, 10, 15). Fears and concerns triggered by demand for basic needs affecting national and global economy were major causes of psychological stress and unrest (lines 6, 7, 11, 12 and 13). A true representation of the psychological effects of the coronavirus outbreak on people is shown in headline 14, which reads 'expats across China flee as virus fears mount'.

Contrary to *Reuters'* reporting on people's anxiety and psychological conditions, *Xinhua's* reporting was more assuring by downplaying the negative effects of the COVID-19 on China and the world economy (Concordance 6).

N	Concordance
1 <title> Roundup: Weekly oil prices bounce back amid easing virus fears, output cut </title>
2 <title> U.S. dollar rises as virus fears ease </title>
3 <title> Spotlight: NYC officials dine in Chinatowns to help shatter fear over COVID-19 </title>
4 <title> Feature: U.S. cities rally behind Chinatowns, quell fears of COVID-19 </title>
5 <title> Response to epidemic should be based on science, not fear: FM spokesperson </title>
6 <title> Commentary: Overcome fake fear in China-U.S. relations with foresight </title>
7	San Francisco mayor urges public confidence in Chinatown businesses amid coronavirus fears </title>
8	<title> Across China: Mental health care volunteers dispel coronavirus-caused fears, anxiety in communities </title>

Figure 8. Concordance 6: Analysis of fears in *Xinhua*

In sum, *Xinhua's* analysis of fears in all of Concordance 6 examples are a good representation of the CDA principle of "Us vs. Them". The Chinese news agency was trying to alleviate the impact of the virus outbreak by depicting the condition as a transitional period that will not have any serious repercussions on either the Chinese economy or even the world. They cited examples of the recovery of the Chinese economy while emphasizing the strength of the U.S.-China trade relations. For China, the country's growing global role, economic power, pride, and self-esteem were at stake. The same was reflected in *Xinhua's* reporting on China's management of the virus crisis, which was characterised with the highest level of professionalism, efficiency and tactfulness, to reassure China's industrial might and supremacy.

Unique themes discussed in Xinhua's reporting

The category of "Fighting the Virus" was remarkably dominant in *Xinhua's* coverage. It included many words such as *fight*, *control*, *battle*, *support*, *measures*, and *efforts*. Table 3 shows the frequency of words in this category in both *Xinhua* and *Reuters*.

Table 3. The frequency of words in the category of "Fighting the Virus"

<i>Xinhua</i>	Raw Freq.	Normalised Freq.	<i>Reuters</i>	Raw Freq.	Normalised Freq.
fight	262	0.89	fight	64	0.05
control	186	0.63	control	47	0.04

Table 3. (con't)

<i>Xinhua</i>	Raw Freq.	Normalised Freq.	<i>Reuters</i>	Raw Freq.	Normalised Freq.
support	112	0.38	support	72	0.06
battle	105	0.36	battle	15	0.01
measures	78	0.26	measures	89	0.08
efforts	73	0.25	efforts	21	0.02

The following *Xinhua*'s examples highlight the world's collective efforts in battling the virus (Concordance 7).

N	Concordance
1 <title> China appreciates Pakistan's support to battle against coronavirus: FM </title>
2	<title> Roundup: World leaders positively evaluate, support China's fight against virus outbreak </title>
3	<title> Turkish businessman donates 20,000 USD to support China's battle against Coronavirus </title>
4	<title> Ugandan president optimistic about China's measures to contain coronavirus </title>
5 <title> Putin praises China's "decisive, vigorous" measures to fight novel coronavirus outbreak </titl
6	<title> Chinese people show patriotism in coronavirus fight: spokesperson </title>
7 <title> Donation from 11 countries to fight coronavirus arrives in China </title>
8 <title> UN chief confident in China's effort to fight coronavirus outbreak </title>
9 <title> NBA stars show support for China in fight against virus </title>
10	<title> Council of African Political Parties chief hails China's efforts to contain coronavirus </title>
11 <title> Cambodian PM lauds China's efforts to contain spread of COVID-19 </title>
12 <title> China to audit coronavirus control funds, donations </title>
13	<title> Confident novel coronavirus outbreak under control by late April: health expert </title>
14	China promotes TV, radio shows to rally morale in coronavirus battle </title>
15	<title> Across China: Italians confident about China's battle against coronavirus </title>
16	<title> Feature: Japan offers warm support to China in battle against virus outbreak </title>
17	<title> China Focus: Foreigners positive, confident in battle against virus in east China province </title>

Figure 9. Concordance 7: Analysis of *Battle*, *control*, *fight*, *measures* and *support* in *Xinhua*

Xinhua's coverage showed how the international community was supportive and appreciative of China's ingenuity and wisdom in handling the COVID-19 crisis. This support was expressed in many ways and on different levels. The UN chief, world leaders, top officials, international organisations and various countries praised China's remarkable response, efforts, and speed in controlling the virus (lines 2, 4, 5, 8, 9, 10, 11, 15, and 17). For its part, China reacted with great appreciation to the international community's confidence in its strong economy, people's decisiveness, solidarity and nationalism (lines 1 and 6).

To see how the category of "Fighting the Virus" was represented in *Reuters*, the researchers also carried out a concordance analysis for *battle*, *control*, *fight*, *measures*, and *support* (Concordance 8).

N	Concordance
1	<title> Battle against coronavirus turns to Italy; Wall Street falls on pandemic fears
2	<title> U.S. Senate Democrats seeking at least \$3.1 bln to battle coronavirus </title>
3	<title> China's Xi says coronavirus control the most important task </title>
4	<title> China's epidemic control is showing an improving trend- state media </title>
5	<title> Hong Kong extends school suspension until April 20 to control spread of coronavirus </title>
6	<title> Taiwan to suspend most flights to mainland China to control coronavirus </title>
7	<title> Trump says coronavirus under control in the U.S. </title>
8	<title> Trump: U.S. appreciates China's efforts and transparency' on coronavirus </title>
9	<title> Pope Francis praises China's efforts to contain coronavirus </title>
10	UPDATE 3-Japan PM Abe seeks citizens' help in coronavirus fight as Olympics to go ahead </title>
11	<title> Trump's request for \$2.5 billion to fight coronavirus 'inadequate', Pelosi says </title>
12	<title> World Bank not considering new China loans to fight coronavirus, president says </title>
13	<title> China allocates \$10.26 billion to fight coronavirus </title>
14	<title> Italy's Lombardy says emergency coronavirus measures must be extended </title>
15	<title> China to Russia: End discriminatory coronavirus measures against Chinese </title>
16	<title> Germany discussing measures in case coronavirus hits economy - Altmaier </title>
17	<title> Moscow imposes special safety measures at tourist sites over coronavirus fears </title>
18	<title> WHO: global community not ready to take same measures as China to contain coronavirus </title>
19	<title> Germany enacts new health security measures against coronavirus infections </title>
20	<title> S.Korea stocks bounce as virus spread slows, govt pledges support </title>
21	<title> EU medicines agency to support coronavirus vaccine, drug development </title>
22	<title> China issues measures to support manufacturers, businesses hit by coronavirus </title>
23	<title> UPDATE 2-China's central bank vows to step up support for virus-hit economy </title>

Figure 10. Concordance 8: Analysis of *battle, control, fight, measures* and *support* in *Reuters*

As Concordance 8 shows, *Reuter's* reporting was balanced, showing how China's measures in fighting the coronavirus were successful, something which was acknowledged and commended by other countries. For example, line 4 refers to the improving trend in China's control of the virus spread. Similarly, line 8 highlights US President Trump's appreciation of China's efforts and transparency. The same was expressed by Pope Francis's praise of China's efforts to contain coronavirus (line 9). Further acknowledgment of China's efforts in fighting the virus came from WHO stressing that the "*global community is not ready to take the same measures as China to contain coronavirus*" (line 18). At the same time, Reuters continued to emphasise China's ongoing efforts to support its national economy. For example, measures have been taken to support manufacturers and businesses hit by the coronavirus; and China's Central Bank vowed to step up support for the virus-hit economy (lines 22 and 23). This was consistent with the Chinese President describing "coronavirus control as the most important task" (line 3). *Reuters'* coverage also reflected an objective and unbiased stand, a testimony to its credibility and integrity. But with fears of the killer virus escalating, many countries, including the US, Russia, Italy, Germany, Japan, EU, South Korea, etc., were enacting new health security measures to contain the virus (cf. Concordance 8: Examples 1, 2, 5, 6, 10, 14, 16, 19, 20, 21).

In a nutshell, the above findings lead to the conclusion that media outlets and news media play a vital role in framing and shaping public opinion in understanding the COVID-19 pandemic. News media can either make or break by delivering authentic and reliable information or adversely unverified pieces of information based on rumours.

Collocation analysis

To examine how China was represented in the context of COVID-19 in the headlines of both *Xinhua* and *Reuters*, the researchers carried out a collocational analysis targeting the 20 most salient collocates, as Table 4 shows. Collocates were obtained using the Z-score

within Wordsmith's default span of 5 words on either side of the target phrase. While Wordsmith offers numerous ways of calculating collocates, namely MI, MI3, Z-score, T-score, log-likelihood and rank by frequency, the Z-score was chosen because it tends to favour medium frequency collocates which are typically lexical nouns (Haider, 2019).

Table 4. The most salient collocates using the Z-score

<i>Xinhua</i>				<i>Reuters</i>			
N	Word	Z-Score	F	N	Word	Z-Score	F
1	Reports	7.99	100	1	Hubei	20.5	137
2	Support	6.21	76	2	Province	16.6	104
3	Fight	5.17	137	3	Flights	15.8	124
4	Confident	5.11	30	4	Virus	14.3	521
5	Sees	4.08	22	5	Epicentre	12.3	44
6	Ensure	4.01	24	6	Deaths	10.3	80
7	Aviation	4	6	7	Mainland	9.68	69
8	Efforts	3.69	43	8	Number	9.03	48
9	Industry	3.63	12	9	Ore	8.98	30
10	Ensures	3.6	10	10	Reports	8.88	123
11	Solidarity	3.56	22	11	Iron	7.98	27
12	Join	3.42	9	12	Suspend	7.62	33
13	Outnumber	3.42	9	13	Stimulus	7.55	36
14	Central	3.39	15	14	Total	6.58	61
15	Confirmed	3.34	74	15	Spreading	6.54	30
16	Helps	3.26	10	16	New	6.17	182
17	Vows	3.26	10	17	Tariff	6.1	10
18	Appreciates	3.22	8	18	Commission	6.1	26
19	Issues	3.08	12	19	Imports	6	19
20	Newly	3.08	12	20	efforts	5.79	12

As Table 4 shows, most of *Xinhua's* collocates with China in the above list had positive connotations. Examples of these included *support*, *fight*, *confident*, *efforts*, *ensure*, *solidarity*, *joins*, *helps*, *vows* and *appreciates*. The other collocates included reporting verbs such as *reports*, *sees* and *confirmed*. Other words included *aviation*, *industry*, *outnumbered*, *central*, *issues* and *newly* (Concordance 9). *Xinhua* spares no effort to commend China's role, maximising the efforts and minimising the losses to enhance the positive "US-image" while at the same time not being critical of "the other".

N	Concordance
1	<title> UN appreciates China's effort against novel coronavirus: Guterres </title>
2	<title> China Focus: General aviation helps fight epidemic </title>
3	<title> China central bank raises limit on small bank payments </title>
4	<title> China's central bank voices confidence in fighting epidemic impact </title>
5	<title> IMF chief "confident" that China's economy "remains resilient" </title>
6	<title> China "confident in, capable of" containing, defeating epidemic: NHC </title>
7	<title> China Focus: Foreign companies confident of Chinese market despite coronavirus outbreak </title>
8	<title> India fully confident in China's victory over coronavirus outbreak: FM </title>
9	<title> Roundup: World grows confident in China's victory against novel coronavirus </title>
10	<title> China Focus: Foreigners positive, confident in battle against virus in east China province </title>
11	<title> China's efforts to fight novel coronavirus achieving positive results: envoy </title>
12	<title> UN official lauds China's efforts to combat novel coronavirus </title>
13	<title> Roundup: World leaders speak highly of, support China's efforts in fighting novel coronavirus </title>
14	<title> China to ensure power supply in battle against novel coronavirus </title>
15	<title> Roundup: Arab health ministers hail China's fight against COVID-19 </title>
16	<title> China helps students studying abroad mitigate epidemic-related obstacles </title>
17	<title> China's digital marketing industry maintains growth amid epidemic </title>
18	<title> China Focus: Overseas Chinese join anti-coronavirus campaign </title>
19	<title> China sees more patients recover from novel coronavirus infection </title>
20	<title> Roundup: Foreign gov'ts, legislative bodies express solidarity, confidence with China on overcoming pneumonia epidemic </title>
21	<title> Jordan's king reaffirms solidarity with China in face of coronavirus </title>
22	<title> Syria voices solidarity with China in fighting new coronavirus </title>
23	<title> Roundup: World leaders positively evaluate, support China's fight against virus outbreak </title>
24	<title> China never forgets support from Ethiopia in fighting coronavirus: ambassador </title>
25	<title> Xinhua Headlines: China wins global support for epidemic fight </title>
26	<title> China to provide support to countries with weaker health systems: FM spokesperson </title>

Figure 11. Concordance 9: Most salient collocates with China in *Xinhua*

As Concordance 9 shows, *Xinhua's* collocates with China are a testimony to the news agency's outright support of van Dijk's "Us vs. Them". Collocational paradigms of the kind, evidenced in citations 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 17, 18; 20, 12, 22 and 25, express solidarity and confidence with China.

Some of *China's* collocates in *Reuters* are related to Chinese places like *Hubei*, *province* and *mainland*. Although the word *virus* was a frequent word in the corpus, it was a salient collocate with China that is said to be the *epicenter* of the disease. Some words that have negative connotations were salient in the list; these included *deaths*, *suspend* and *spreading*. The economic aspect was also reflected in the collocates *ore*, *iron*, *Tariff* and *imports*. The researchers also carried out a concordance analysis for China's collocates, as shown in Concordance 10.

N	Concordance
1	Saudi Arabia, UAE caution oil market against gloom over China virus </title>
2	<title> Brent logs worst weekly loss in a year as China virus fears swell </title>
3	<title> South African rand weaker in early trade on China virus scare </title>
4	<title> China virus scare sends shudder through European luxury goods sector </title>
5	<title> U.S. must be 'understanding' if China virus impacts trade pledges -agriculture secretary </title>
6	<title> Australia shares gain amid China virus fears </title>
7	<title> Japan stocks erase gains as China virus fears offset tech earnings hopes </title>
8	<title> China virus causes scare for India's smartphone makers </title>
9	<title> How to cope with China virus? Stay in and see 'The Flu' </title>
10	<title> White House adviser says China virus to delay U.S. export surge from trade deal </title>
11	<title> WRAPUP 8-China virus spreads to U.S., curbing travel plans and spooking markets </title>
12	<title> Rouble firms as China halves U.S. import tariffs and virus fears ease </title>
13	<title> China to halve tariffs on some U.S. imports as coronavirus risks grow </title>
14	<title> China steel futures rise on stimulus measures, easing of travel curbs </title>
15	<title> China iron ore futures snap 10-day rally amid pandemic fears </title>
16	<title> Wall Street jumps as China stimulus measures soothe virus worries </title>
17	<title> Russia's Magnit suspends fruit and veg imports from China over virus fears - RIA </title>
18	<title> Indonesia says to stop livestock imports from China </title>
19	<title> Chinese Premier Li visits Wuhan, epicentre of virus outbreak </title>
20	<title> Hospitals in China's virus epicentre launch public appeals for supplies </title>
21	<title> A mother's fight for toddler stranded in China's coronavirus epicentre </title>

Figure 12. Concordance 10: The most salient collocates with China in *Reuters*

Unlike Xinhua's positive discourses of China, Reuters' list of collocates portrayed a relatively negative picture of the situation. For example, citations 1, 2,3, 4, 7, 10 and 15 sent strong messages to the international community of the gravity of the situation at the economic level. Nevertheless, Reuters' reporting maintains a balanced stand as shown in citation 16 'Wall Street jumps as China stimulus measures soothe virus worries.'

The nouns that occurred at the L1 position of China's with a minimum frequency of three were also examined, as Table 5 shows.

Table 5. Nouns with "China's"

	<i>Xinhua</i>			<i>Reuters</i>	
	Word	F		Word	F
China's	fight	90	China's	province	34
	Hubei	42		Wuhan	34
	effort	27		Hubei	27
	battle	14		Xi	16
	Wuhan	13		city	12
	economy	8		economy	8
	bank	7		coronavirus	7
	measure	7		Number	6
	victory	6		outbreak	5
	industry	6		Tianjin	4
	firm	5		market	4
	PMI	5		clampdown	3
	market	5		epicenter	3
	sector	4		virus	3
	legislature	3		effort	3
	hub	3		response	3
	SOE	3			
	province	3			
	transport	3			
	news	3			
sale	3				
control	3				

As for the representation of China through identifying the nouns that came immediately after the word China forming an s-genitive construction, concordances 11 and 12 below furnish a corpus of data that sheds light on the nature of this rapprochement. At the outset, Xinhua's data depicted a very vibrant picture of China's unparalleled success in making strides curbing the spread of the epidemic. For example, the use of some noun phrases like *China's victory* and *China's fight* expresses confidence in China's battle against the epidemic. Xinhua's unlimited support of the Chinese government's efforts was evident in different headlines. This was a testimony to *Xinhua's* role in mobilising public opinion by having the Chinese people rally behind their government with a strong vote of confidence.

N	Concordance
1	<title> India fully confident in China's victory over coronavirus outbreak: FM
2	<title> Spotlight: World confident in China's victory over novel coronavirus </title>
3	Roundup: Overseas political parties, organizations express confidence in China's victory over coronavirus </title>
4	<title> Roundup: World grows confident in China's victory against novel coronavirus </tit
5	<title> Feature: German video blogger voices support for China's fight against epidemic </title>
6	<title> Ukrainian composer creates music piece supporting China's fight against coronavirus </title>
7	<title> Senior UN official voices confidence in China's fight against novel coronavirus </title
8	<title> Indonesian policeman sings "Jiayou Wuhan" to cheer on China's fight against COVID-19 </title>
9	<title> Interview: Epidemic unlikely to batter China's economy </title>
10	<title> Coronavirus unlikely to cause long-term setback to China's economy: economists </title>
11	<title> IMF chief "confident" that China's economy "remains resilient" </title>
12	Chinese envoy says epidemic will not change positive fundamentals of China's economy </title>
13	<title> Novel coronavirus impact not to reverse growth of China's economy: Chinese state councilor </t
14	<title> Feature: New Zealanders show support for China's battle against COVID-19 </title>
15	<title> Roundup: Foreign party leaders express confidence in China's battle against epidemic </title>

Figure 13. Concordance 11: Nouns after “China’s” in *Xinhua*

On the other hand, *Reuters'* use of the s-genitive with the world China was less affirmative and perhaps indicative of caution (Concordance 12). For example, “*China's Xi says coronavirus is a 'devil'*” (line 2) does not entail a sense of victory. Example (5) was indicative of lack of confidence in managing the virus crisis “*Mayor of China's Wuhan says city's governance 'not good enough'*”. The effect of the virus on the Chinese economy was so clearly expressed in (10). Once again, *China's* representation in *Reuter's* reporting was balanced, objective, and impartial, without reflecting any kind of bias, prejudice or partisanship.

N	Concordance
1	<title> Trump says he spoke to China's Xi , U.S. working closely with China on coronavirus </title>
2	<title> China's Xi says coronavirus is a 'devil' </title>
3	<title> China's Xi pledges to to minimise impact of virus </title>
4	<title> North Korea's Kim offers condolences to China's Xi about virus outbreak: KCNA </title>
5	<title> Mayor of China's Wuhan says city's governance 'not good enough' as virus spreads
6	<title> U.S. citizen died from coronavirus in China's Wuhan </title>
7	<title> Germany calls for calm as evacuees return from China's Wuhan </title>
8	<title> Turkey to evacuate citizens from China's Wuhan over virus outbreak: NTV </title>
9	<title> Residents fret as China's virus exclusion zone widens </title>
10	GLOBAL MARKETS-Stocks, oil tumble on fears virus to hurt China's economy </title>
11	> White House sees minimal impact on U.S. economy from China's coronavirus </title>
12	<title> U.S. disappointed with China's coronavirus response: White House adviser </title>
13	<title> China's coronavirus may help boost U.S. jobs: Ross </title>
14	<title> Brazil draws up plan to evacuate nationals from China's coronavirus epicenter </title>
15	<title> China's coronavirus disrupts global container shipping trade </title>

Figure 14. Concordance 12: Nouns after “China’s” in *Reuters*

As Concordance 12 examples show, a state of uncertainty, weakness, concern, and lack of confidence was being expressed. Such a discrepancy in concordance between *Xinhua's* and *Reuters'* is most likely to confirm the basic tenets of “self vs. other” in CDA theorising.

CONCLUSION

The present study has illustrated that the discursive power of news. COVID-19, which invaded the globe so suddenly, has created a state of terror, panic and repulsive feelings

worldwide. As a result, different discourses have been brought to the scene to explicate the intricate relationship between the different domains being affected by the virus.

The research findings have probed the effect of the pandemic with emphasis on the representation of COVID-19 and China in the headlines of *Reuters* and *Xinhua*. In the present study, comparison between *Reuters'* and *Xinhua's* coverage was identified, explained and discussed. The present study has most succinctly depicted the vital role of critical discourse analysis (CDA) in analysing massive corpora to provide authentic analysis of communicative events. The representation of the virus in the news headlines of the two agencies reflected differences in the thematic focus. *Reuters* focused on the immediate and long-term repercussions, serious implications and consequences of the current health crisis. *Xinhua's* reporting, on the other hand, tended to play down the effects of the coronavirus spread on the Chinese economy and highlighted China's readiness to overcome and curb the spread of the disease. China received a balanced coverage in *Reuters* and a positive reporting in *Xinhua*.

The current research has its own limitations as: (1) it only covers the first phase of the COVID-19 outbreak (from January 8, 2020 to February 29, 2020), and (2) it depicts the representation of COVID-19 in two major news outlets (*Reuters* and *Xinhua*) through the analysis of a corpus of 16,980 English headlines. And since WHO has not yet declared the end of the pandemic, more research will be needed to fill gaps and provide answers to many questions that still surround the mystery of COVID-19. In a similar vein, there have been growing fears of the emergence of a new coronavirus outbreak involving a more contagious strain of the virus than the one that hit Wuhan. To this end, the second phase of our research will provide more comprehensive coverage and representation of COVID-19, pending problems and lessons learned.

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