

Telling stories about the origins of the Covid-19 pandemic:

An investigation of biases in
the international news media

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Abstract

This article reports a case-study investigation into the possible existence of partiality, or bias, within the international news media. The case study concerns the 2021 global study of the origins of SARS-CoV-2 convened by the World Health Organisation (WHO). A mix of methods is employed: discourse analysis of items published in newspapers in Australia, Britain, China, and the United States; natural language processing, general use sentiment analysis of the same articles; and sentiment analysis of associated headlines by an international panel of 12 social scientists. The WHO study was politicised from the outset having been established at the insistence of the Australian government because an earlier WHO study had been considered too favourable to China by influential Western pundits. However, initial coverage of the study in the Western media ranged from mostly neutral to sceptical but turned overwhelming negative towards China following publication of a – contested – story that vital data had been withheld from the study’s scientists. Analysis revealed multiple sources of bias. Generalised negativity bias differed in intensity across the three Western countries, while coverage of the WHO study by the largely state controlled Chinese media was more neutral than positive in tone. Partisanship associated with newspaper ownership was apparent, as was evidence of structural bias with multiple uncritical cross-referencing adding to mainstream bias. There was some indication of cultural distancing with reports from foreign correspondents in China and by medical and science journalists displaying less negativity. While it is unclear whether ideological bias revealed in the Western media was the result of concision, sensationalism or conscious intent, there appeared to be a possible symbiosis of political and commercial interests that fostered the dissemination of news stories beneficial to Western governments.

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Rationale

The Pew Research Center reports that global opinion unfavourable to China ‘has soared over the past year’ with people’s views in many countries being coloured by perceptions of how well China handled the coronavirus pandemic (Silver et al., 2020). Global public opinion, therefore, does not seem to be impressed by China’s success in controlling the epidemic, limiting deaths to 4,636 in a population of 1.39 billion and with a Covid-19 related deathrate that is bettered by only eight countries. (The deathrate associated with Covid-19 is 0.35/100k in China, while those in the United States and Britain are respectively 178.07 /100k and 191.39 /100k.²)

China learned much from the zoonotic transfer of SARS1 in 2005: the importance of rapid lock down; the need for testing; and the dangers of a cover-up that tarnished China’s reputation abroad. In January 2020, virus testing was routine, contingency plans for controlling an epidemic were in place, and Chairman Xi Jinping instigated a raft of public health policies immediately after person-to-person transmission was announced. China alerted the World Health Organisation (WHO) on 31st December 2019, within two or three weeks of the first hospitalisation, and succeeded in sequencing and then sharing the genetic code by 12th January. The city of Wuhan, the epicentre of the pandemic, was dramatically locked down from 23rd January until 8th April 2020 and many other cities followed, albeit for shorter periods. As a result, China rapidly entered a post-pandemic phase with the economy enjoying a V-shaped recovery, achieving a 6.5 per cent growth rate in the fourth quarter of 2020 and 2.3 per cent for the year.

It is possible, of course, that China is paying a high price, in terms of international public opinion, for being the first country to identify and report the existence of Covid-19 with the consequence that it is generally considered to be the source of the global pandemic. However, disaffection with China increased markedly in many counties in the year before the onset of the pandemic which suggests that other factors may be in play: President Trump’s rhetoric and the ‘trade war’ with China; issues concerning human rights in Hong Kong and Xinjiang; the growth of separatist tendencies in Taiwan; accusations of a growing personality cult around President Xi Jinping; and/or a more orchestrated diplomatic campaign fuelled by anxiety over China’s growing economic and political might. It is at least possible, therefore, that the public’s perception of China was not influenced by its management of the pandemic but that perception of its management of the pandemic has been coloured by attitudes towards China.

One important influence on people’s attitudes is the news media, an increasingly complex ecosystem in which the difference between news and fake news is a topic of increasing interest and contention (Ognyanova, et al., 2020; Fazio, 2020). Therefore, while seeking to establish the causes of the growing public distrust of China is beyond the scope of this article, it is still important to explore the narrower issue of whether the established media could have contributed to the growth of anti-Chinese sentiment and, if so, why.

2 <https://coronavirus.jhu.edu/data/mortality>

A priori evidence of media influence

In January/February 2021 a panel of 10 scientists from the World Health Organisation (WHO) visited Wuhan to further investigate the origins of the COVID19 pandemic. The following package covering the visit to Wuhan was broadcast on the BBC World Service's 'The Newsroom' at around 10:15pm GMT on 13th February 2021.

Host (Alan Ritson): introduced the piece as follows (emphases added):

Some members of the group have said that China was uncooperative and withheld information about some of the first cases.

Correspondent (Peter Goffin) started:

The researchers wanted raw data ... But Dr Dominic Dwyer ... said...Chinese officials refused to supply that basic data instead offering up a summary of their findings

Dwyer (recording): *"In the ideal world you would go through patient by patient by patient... they gave us the results, we would have liked, I guess, to have seen the raw data."*

Correspondent continued:

Dr Dwyer said that that information could still be forthcoming, and Beijing has insisted that it was transparent with the WHO.

But, the team encountered roadblocks from the outset. Their arrival in China was delayed when Beijing was slow to approve their visas. The Danish epidemiologist Thea Fischer .. said that she thought that the entire trip was tinged with geopolitics.

Some of the researchers say Chinese officials encouraged them to consider unproven claims that the virus originated outside China.... Dr Dwyer said that there were disagreements between the WHO team and the Chinese scientists, but he played down their significance

Dwyer (recording): *they might have been more firm about what the data showed... but that's natural. Whether there is political pressure on people to have different opinions on the other side I don't know. There may be, but, you know, it is hard to know.*

Correspondent ended:

Not all the researchers encountered problems. The British zoologist Peter Daszak... tweeted that he found trust and openness with his Chinese counterparts and that he was given access to critical new data

The package justifies Alan Ritson's assertion that 'China was uncooperative and withheld information'. However, as the following paraphrasing demonstrates, it is possible to present a story of compliance by the Chinese authorities, even great openness, without in any way abusing the evidence. The wavy line annotation indicates a positive tonality, while the plain underlining points to a negative one; in Box A, the same annotation is applied to the original BBC item:

Western scientists sent to Wuhan by the World Health Organisation to investigate the origins of the pandemic found trust and openness, despite the geopolitical pressures that surrounded the trip. While there were inevitably scientific disagreements, they were given critical new data and encouraged

to examine novel hypotheses about the origin of the pandemic. Having been shown analysis of the early stages of the pandemic, the WHO scientists are now hoping to obtain information on individual patients despite issues of confidentiality.

Box A: Annotated transcript from BBC World Service’s ‘The Newsroom’ 13th February 2021.

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Not all the researchers encountered problems. The British zoologist Peter Daszak... tweeted that he found trust and openness with his Chinese counterparts and that he was given access to critical new data

There are at least two-sides to every story (if only that of the teller and the listener) and so the re-write does not in itself demonstrate bias. The acting editor of the programme, Paul Day-Bush, wrote that the correspondent was ‘careful to reflect other opinions, in order to deliver a fair and balanced finished product, in accordance with the BBC’s commitment to impartiality’. Equally, the piece contains many examples of potential bias:

- **Spin**, heightening the importance of the story: ‘Chinese officials refused’; ‘the entire trip was tinged with geopolitics’;

- **Slant**, emphasising one side of the story: ‘Chinese officials refused to supply that basic data’ rather than ‘was given access to critical new data’; ‘Beijing has insisted that it was transparent with the WHO But, the team encountered road-blocks from the outset’; Not all the researchers encountered problems;
- **Omission**, selective presentation of evidence: Thea Fischer who said that she thought that the entire trip was tinged with geopolitics continued: ‘Everybody knows how much pressure there is on China to be open to an investigation’, thereby shifting the emphasis from China playing geopolitics to other countries playing politics (Hernández and Gorman, 2021); there is no mention that Thea Fischer had already tweeted that ‘Our quotes are intendedly twisted casting shadows over important scientific work’.

Much of the effect of presenting a recalcitrant China was achieved by word choice and placement:

- **Word-choice**: ‘unsubstantiated claim’ rather than ‘hypothesis’; ‘wanted raw data’ rather than ‘would have liked’ raw data; ‘played down their significance’ rather than ‘insignificant’.
- **Placement**: the idea that there were ‘disagreements’ was placed ahead of their being ‘played down’; ‘Chinese officials refused to supply that basic data’ comes before ‘information could still be forthcoming’; Peter Daszak’s entirely positive take on the trip is placed at the end

From the listener’s perspective, too, the programme host’s framing of the item by saying that ‘China was uncooperative and withheld information’ set up expectations that this was to be (another) negative news story about China.

A focus on explanation

The suggestion of wide-spread media bias is hardly novel. Typically, bias is presented along a left-right political spectrum and sometimes, as in the case of the Ad Fontes media charts, scaled according to reliability (Sheridan, 2021). Fact-checking websites are also proliferating, linked to the growth of social media, the political polarization of news coverage in the United States, the growing prevalence of disinformation and overt lying for effect by politicians and national leaders (Stencel, 2019). While the very existence of neutral facts has long been questioned by some sociologists and philosophers of science, the former arguing that facts are conditioned by perspective (Mead, (1934), the latter that facts have no meaning unless interpreted through theory (Kuhn, 1970; Popper,2002), a commitment to facts and to accurate reporting remains central to ‘good journalism’ (Boesman and Meijer, 2018; Pingree et al., 2017).

There is, though, much less academic work on media bias in the coverage of international and foreign affairs by Western media although accusations of Western bias are frequently made by the leadership of countries with political regimes that do not fit the ideal of a liberal democracy (Zhang, 2021; Ceron, and Memoli, 2015; Hewitt, 2011). It remains to be seen whether a uni-dimensional measure of political bias retains much value in the coverage of international news, while reliability seems pertinent but challenging to establish empirically. Nor is it self-evident

that to count as bias, inaccurate reporting should be sustained and intentional as demanded by Williams' classical definition (Williams, 1975; Hamborg et al., 2019). Whether bias is sustained is an empirical matter that may well be pertinent in understanding the consequences of bias, how much, for example, it affects readers' understanding of events or whether it attracts likeminded readers as followers keen to avoid cognitive dissonance (Harmon-Jones, 2019), while intentionality directs attention to the explanation of bias, the focus of the analysis reported below. Bias, unintentional or otherwise, in the presentation of news is likely to distort the understanding of the news consumer; intentional bias is more invidious in that so-called news is being used as a tool of manipulation (Hamborg et al., 2019).

In covering an international story there is considerable scope for unintentional bias: cultural and ideological distancing; inadvertent bias arising from the values and professional competency of individual journalists; and structural bias stemming from journalists' work practices and managerial and proprietorial expectations. The recipient of international news is generally being told a story about a topic that is located within a different culture and ideology than their own. Therefore, the risk of loss or distortion in the process of cultural translation is extremely high unless the journalist is deeply informed about both cultures. A much repeated saying in China is that 'everything is difficult but everything is possible'; the average Chinese person might interpret both the delay in visa applications, emphasised in the BBC package, and the initial reluctance to provide information, as an unexceptional manifestation of this principle. In China, too, persons are rarely accused directly of any failing, even in scientific endeavour; politeness forbids this.³ Therefore, it is to be expected that, as Dr Dwyer opined, the scholarly exchanges realised by the WHO delegation would have been heated if they focussed on the limitations of Chinese science. Ideological differences may also be important. The fact that the research team was shepherded by 'officials' was mentioned in the package to the point of being emphasised. An alien concept in liberal democracies, Party officials are active in all aspects of Chinese life and are generally seen as benevolent, albeit with varying degrees of competence, rather than as posing a threat.

Structural bias can arise from the multiple pressures to which journalists are exposed in a newsgathering working environment. This is in addition to impact of a journalist's own values that may be an inadvertent and unconscious source of confirmation bias, reporting only what they expect to report. As news journalists, they are typically required to cover a range of topics, to produce newsworthy and timely copy that is appealingly and succinctly written. They need, too, to write in language that is quickly understood by someone without specialist knowledge. This is likely to result in concision bias (simplistic and formulaic accounts); mainstream bias (reporting what others are reporting); sensationalism (an emphasis given to the unusual and extreme), path dependency (carrying forward prior understandings and modes of presentation); speculation (un-evidenced assertion) and slant or tonality bias (Eberl et al., 2015).

3 This helps to explain the cultural power of exposure in the 'struggles' of the cultural revolution and when officials are publicly named for not performing well as in the containment of Covid-19.

These sources of bias are evident in the BBC item. The editor explained that Peter Goffin was ‘the duty reporter on the day’ and was ‘neither a specialist on China nor on Covid-19’. The starting point for the piece was ‘the audio of Dr Dominic Dwyer’, released as a video by Reuters under the headline ‘China refused to provide WHO team with raw data on early COVID cases, team member says’ (Goh, 2021). Goffin also appears to have drawn on a piece published in the *New York Times* a day earlier (Hernández and Gorman, 2021). The package was well crafted, told a strong story and was delivered with the assuredness and crisp intonation for which BBC radio is renowned. However, there is no evidence that Goffin checked on the validity of his two sources. The Reuters video was released without a transcript of the questions posed to Dwyer and it is at least possible when saying ‘we would have liked, I guess, to have seen the raw data’ that he was riding back from a leading question, perhaps: ‘They wouldn’t give you the raw data?’. Because the BBC forbade Goffin to reply to any queries, it is unclear whether he knew that Thea Fischer had claimed that she has been misquoted.

Taking presentation of the same news item, the scientific fact-finding visit by the World Health Organisation, in the mainstream newsprint media as a case-study, the article explores the nature and extent of any systematic bias and considers the reasons for it in the context of the prevailing geo-political context.

Methodology

A mixed method approach was adopted primarily focussing on traditional print media. Coverage of 2021 WHO fact-finding mission by the eight top selling titles in Australia, Britain and the United States was compared with each other and with that of seven English language print media in China controlled by the Chinese State Council or the Chinese Communist Party (Annex A). All media associated with the titles were searched including on-line items and Sunday newspapers.

The choice of Western countries reflects their common ideological tradition that embraces English as the main language; a free press and commitment to democratic institutions; neoliberal free market economics as a dominant intellectual influence; and residual welfare systems (Isakjee, 2017). Each country has also experienced a marked deterioration in their diplomatic relationship with China over the last year or more with Australia first calling China to account for not controlling the global spread of Covid-19 (Kelly, 2020). News Corp and associated companies established by Rupert Murdoch own a significant proportion of news media outlets in each country (Patel, 2021; Langworth, 2020); including five of the selected titles from Australia and two each from the United States and Britain.

Given the overwhelming impact of Covid-19 on global society over the last 15 months, the volume of media coverage is enormous. Therefore, the analysis is contained by focussing on the scientific investigation of the origins of Covid-19 undertaken by the World Health Organisation in February 2021. News items were accessed from the Dow Jones Factiva database through the Harvard Library account using an inclusive and non-directive search term (“WHO-China Joint Mission” or (mission and WHO) or (visit and W.H.O) or (WHO and Wuhan) with articles extracted from 1st January to 31st March 2021. The analysis reported below appertains primarily to the 11 days following the end-of-visit press conference held

in Wuhan on 9th February. Similar and duplicated articles were omitted from the analysis and 103 articles examined in detail.

Following Lichter et al. (2020), bias is defined generically as being a lack of impartiality and objectivity and will be operationalised as positive or negative sentiment expressed in relation to China, the Chinese Government; the Communist Party of China; Chinese officials and Chinese science.

Four forms, or sources, of bias are identified and investigated: individualistic impartiality; structural bias arising from journalistic work practice and managerial expectations; cultural distance reflecting a misunderstanding of social norms and behaviour; and ideological bias expressed as antipathy towards different modes of economic or political practice. In addition, consideration is given to the possible role played by negativity bias, a tendency toward critical or cynical coverage (Seroka, 2014), and to partisan or political bias on a spectrum from liberal (left) to conservative (right) (Benkler, et al., 2018).

Parsing bias into its constituents is made difficult by potential overlap between the different forms of bias. Negativity bias is explored through general use sentiment analysis (GUSA) using cloud software supplied by Monkeylearn. This employs natural language processing (NLP) and machine learning algorithms to break text into lumps of meaning and then to classify them into the categories of positive, negative and neutral. The GUSA is a general-purpose tool 'trained' across a vast amount of diverse text rather than being domain specific and is therefore ideally suited to assess the sentiment of news items without reference to political or cultural clues. All 104 news items were analysed and given a sentiment score: positive, negative or neutral, each with a tendency range of 1 to 100.

A second approach focusses on ideological bias with China and things Chinese as the focus of analysis. This was achieved by inviting a panel of twelve social science academics from each of the four countries to assess newspaper headlines associated with the 103 articles in response to the following instructions:

In January/February 2021 an international panel of scientists from the World Health Organisation (WHO) visited Wuhan to investigate the origins of the COVID19 pandemic.

This visit attracted a lot of coverage by mainstream media internationally.

Below I have presented 103 headlines. Please can you say whether you feel that the headlines present China in a positive or negative light.

Responses were scored on a five-point scale from (1) 'very positive towards China' to 'very negative towards China' (5) and a mean score calculated based on the twelve responses defined as the dependent variable. The three American (mean score 3.56) and three British (3.57) scholars tended to rate the headlines as being more negative towards China than either the Australian (3.36) or Chinese (3.26) scholars, but the scores were highly correlated ranging from 0.79 between Australian and Chinese scholars to 0.87 between American and British scholars.

Clearly headlines, which are typically drafted by sub-editors, function to attract attention as well as to succinctly capture the essence of the news story. They are therefore arguably more likely to be more provocative than the main body of the text (although the scores from the GUS and panel sentiment analyses were significant-

ly correlated [$R=0.35$]). Therefore, a third complementary strategy was employed which entailed discourse analysis of all the 103 articles together with the television interviews cited in the articles and/or videos accompanying them when published on-line (Talbot, 2007). The analysis focussed both on content and linguistic modes of expression with particular attention paid to the construction of argument, word choice and placement, commission and omission of evidence and sources and the use of rhetorical devices to allude and insinuate in place of demonstration.

Bias implies a factual truth from which reporting systematically departs. Only one of the 10 non-Chinese scientists on the WHO visit has responded to a request to assess the truthfulness of the assertion that ‘China was uncooperative and withheld information’ and, while somewhat ambivalent, this offers no support for this core contention (Table 1). Public statements from the scientists also appear to undermine this key contention:

I found trust & openness w/ my China counterparts. We DID get access to critical new data throughout. Dr Peter Daszak, *Twitter*, 12th February 2021

We DID build up a good relationship in the Chinese/Int Epi-team. Allowing for heated arguments reflects a deep level of engagement in the room. Our quotes are intendedly twisted casting shadow over important scientific work. Prof. Thea Fischer, *Twitter*, 12th February 2021

We saw a very great deal about specifically those 174 people... ..this is just the start of a process...what I have said though is that we have seen a great deal of information about those early cases. There is more that we would like to see both in the way of analyses and data we have been talking with our Chinese counterparts about that, We hadn’t ever anticipated that this was an event that would be one off...We see it as the start of a process...Prof John Watson, *BBC The Andrew Marr Show*, 15th February 2021

We talked to our Chinese counterparts — scientists, epidemiologists, doctors — over the four weeks the WHO mission was in China. We were in meetings with them for up to 15 hours a day, so we became colleagues, even friends. This allowed us to build respect and trust in a way you couldn’t necessarily do via Zoom or email. Professor Dwyer (2021), 22nd February 2021

However, some commentators suggest the participating scientists are compromised (Butler, 2021). Therefore, an editorial in *Nature* based on a collective reading of the final report of the Joint WHO-China Study is presented as the final evidence on the value and reliability of the study visit’s work:

Researchers say that a World Health Organization (WHO) report on the pandemic’s origins offers an in-depth summary of available data, including previously unseen granular details. But much remains to be done to establish the provenance of the virus.

Table 1: Responses of a western scientist on the WHO-convened Global Study of Origins of SARS-CoV-2

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
China refused to hand over important data to WHO scientists				1	
China granted the WHO expert team full access in Wuhan		1			
WHO scientists were given access to critical new data		1			
Chinese officials were uncooperative with roadblocks from the outset			1		
The Chinese authorities turned down requests to provide raw data on 174 cases of Covid-19 identified in Wuhan			1		
There were significant disagreements between the WHO team and the Chinese scientists.				1	
The mission was worthwhile		1			

The back story

It would be hard to disagree with Thea Fischer's assessment that the 2021 World Health Organisation inquiry into the origins of Covid-19 'was tinged with geopolitics'. The visit was the second organised by the World Health Organisation. The first took place between the 16th and 24th February 2020 at a time when Covid-19 was still very much China's problem, and one that was seemingly under control. Indeed, by the start of the visit the number of new cases in China had fallen from a peak of 4,050 to 2,008 on the day of arrival and continued to fall to 220 on the day of departure. Contemporaneously, the daily toll of new cases outside of China rose ominously from 12 to 325.

The first visit received comparatively little press coverage outside of China. Of the eight most read newspapers in Australia, Britain, and the USA only *The Australian*, *The Guardian*, *The New York Times (NYT)* and *USA Today* mentioned the visit in real time, the *NYT* and *The Guardian* both noting a two-week delay and a lack of response to an offer of assistance from the US Centers for Disease Control and Prevention (CDC).

Coverage of the end-of-visit press conference and the project report received more, although rather cursory attention, reporting that China seemed to be on top of the pandemic. Only Emily Rauhala in *The Washington Post* (27th February 2020) took a critical stance, although James Tozer in Britain's *Daily Mail* (25th February) suggestively juxtaposed Dr Bruce Aylward, leader of the WHO investigative team, wearing of a mask and the WHO claiming that there was not yet a pandemic. Rauhala embedded coverage of the visit in a piece that, a seeming precursor to cover-

age of the second visit, asserted: ‘What is clear is that China is not sending details that WHO officials and other experts expect and need’. This appeared to relate to the period before the visit with Tarik Jasarevic, a spokesman for the Geneva-based organization, quoted as saying that: ‘We received disaggregated information at intervals, though not details about health care workers’. Rauhala concluded that ‘WHO’s credibility [was] at stake’ but that ‘For now, the WHO seems to be doubling down on its public support for China and its leaders.’

Only the Chinese news media reported actual findings of the WHO (2020, pp. 18; 16-17) which concluded:

The COVID-19 virus is a new pathogen that is highly contagious, can spread quickly, and must be considered capable of causing enormous health, economic and societal impacts in any setting.

1. In the face of a previously unknown virus, China has rolled out perhaps the most ambitious, agile and aggressive disease containment effort in history....
2. Achieving China’s exceptional coverage with and adherence to these containment measures has only been possible due to the deep commitment of the Chinese people to collective action in the face of this common threat.....
3. China’s bold approach to contain the rapid spread of this new respiratory pathogen has changed the course of a rapidly escalating and deadly epidemic.....

However, Dr Aylward was much quoted in the weeks that followed, especially his emphasis on the contagious nature of the virus and the dangers it posed, the success of China’s strategy of trace and quarantine, and the importance of community engagement. But attitudes abruptly changed on 31st March 2020. Asked repeatedly by Yvonne Tong, *Radio Television Hong Kong (RTHK)* reporter, whether WHO would reconsider letting Taiwan join the organisation, Aylward appeared to hang up. (Taiwan is not recognised as an independent state by any part of the United Nations.) The Australian media reported that the interview had been viewed five million times by 30th March; *The Guardian*, *The Daily Telegraph*, *The Times* and *The Daily Mail* in the UK all ran the story with Ian Birrell in the *Mail on Sunday* (5th April 2020) describing the WHO as ‘China’s Toxic Lackey’. Tessa Wong subsequently reported on BBC News that the episode had ‘led some to accuse the organisation of political bias towards China’, citing Michael Collins as evidence. (Collins had been described by the *NBC News* in 2018 as the ‘deputy assistant director of the CIA’s East Asia mission center’ [Smith, 2018]).

Aylward’s *RTHK* interview was not heavily covered in the USA print media except by the *Wall Street Journal*. However, *Fox News* ran a series of items suggesting that the WHO was ‘carrying China’s water’ which Michael Shear of *The New York Times* (8th April 2020) saw fit to link to President Trump’s first equivocal suggestion, on 7th April, that he was to withdraw funding from the WHO on the grounds that it was ‘very China-centric’: ‘They really called, I would say, every aspect of it wrong’. Trump eventually gave formal notice of withdrawal from the WHO on 7th July 2020.

At a White House Press conference on 18th April 2020, President Trump said that the WHO ‘got in earlier than anybody but they didn’t report what was happening...inside of China’. A day later the Australian Foreign Minister, Marise Payne, suggested on television that there should be inquiry into the origins of Covid-19 run independently of the WHO. This became Australian foreign policy with a diplomatic offensive to build international support for a decision to be taken at the World Health Assembly, which planned to meet virtually in May. When China imposed a partial ban on beef imports on 12th May 2020, the Chinese spokesperson Zhao Lijian simultaneously criticised Australia’s demand for an inquiry but denied that the two issues were connected (Chandler, 2020). On the World Health Assembly, China decided to co-sponsor a resolution for an inquiry proposed by the European Union and Australia that left the WHO in charge. Moreover, it successfully argued that the inquiry should be postponed until after the peak of the pandemic (Dziedzic, 2020). The visit by WHO appointed scientists in January/February 2021 represented the initial stage in the inquiry.

The developing story

There was spasmodic coverage of the WHO mission during its month-long stay in Wuhan, two weeks working in quarantine, with speculation about, and critique of, the venues visited

WHO inquiry into COVID-19 origin stinks of cover-up

Reputable virologists around the world point to the Wuhan lab as the most likely source of the pandemic, probably due to an accidental leak, because of its research into a bat virus named RaTG13, the closest known relative of the new coronavirus that has killed 2 million people worldwide. And yet WHO’s team of crack investigators say they may not ever go to the lab. They may not even meet the scientist who was conducting that risky research, China’s so-called bat woman, Shi Zhengli.

Miranda Devine, *Daily Telegraph* (Australia) 28th January 2021

World Health Organisation team looking into the origins of the coronavirus pandemic yesterday visited the market in China linked to many early infections. It visited Huanan Seafood Market about an hour and one flashed a thumbs up when reporters asked how the trip was going.

Emily Wang Fujimaya and Zen Soo *The Daily Mirror* (UK) 1st February

However, a 165-minute press conference held in Wuhan on 9th February was the first direct insight into the mission’s achievements. Fronted by the Chinese and international team leads, Professor Liang Wannian and Peter Ben Embarek, with team member Professor Marion Koopmans in support, four hypotheses as to the origins of Covid-19 were outlined with the conclusion that indirect zoonotic transmission was the most likely cause, and a virus leak from a laboratory was the least likely. Early coverage reported these findings without disparaging comment:

Embarek said there was not enough evidence to support a hypothesis that the virus escaped from a Chinese biosafety laboratory in Wuhan – the Wu-

han Institute of Virology – and that the WHO stood by its previous determination that COVID-19 most likely entered the human population through an intermediate animal.

Kim Hjelmgaard, *USA Today*, 9th February.

Scientists visiting Chinese city of Wuhan conclude that bats were most plausible source of virus.

The World Health Organization has ruled out a laboratory accident as the cause of the coronavirus pandemic, saying it was “extremely unlikely” that the pathogen leaked from a Chinese facility.

Christian Shepherd, *Financial Times*, (UK) February 2021

The understanding, too, at the time, was that both the American and Australian governments took reports of the inquiry at face value:

In Washington, the State Department’s chief spokesman Ned Price said the U.S. would wait to see the WHO team’s full report before reaching its own conclusions about the origin of the coronavirus accepted.

Kim Hjelmgaard, *USA Today*, 10th February.

Greg Hunt [Australian Health Secretary] says he is pleased that the World Health Organisation’s study into the origins of COVID has deemed unlikely the theory that it emerged from a laboratory.

The Australian, 9th February, 9.45am

This is not to say that Western media declared the visit to be a success since no ‘smoking gun’ evidence had been found:

... the investigation still leaves many questions, and the findings are unlikely to sway critics who said the WHO team was too close to Chinese authorities for a fair investigation.

Adam Taylor, *Washington Post*, USA, 9th February.

WELL, knock us down with a feather. The World Health Organisation can’t find ANY reason to blame China for Covid. It gave Wuhan its once-over and -stone the crows - nothing!

The Sun, UK, 10th February 2021

No joy on source of Covid for WHO team.

Natasha Robinson, *The Australian*, 10th February 2021

The British *The Guardian* newspaper felt moved to detect differences between Chinese and other scientific members of the WHO mission:

While the findings were delivered jointly, there were key differences in emphasis. Liang, who spoke first, focused on findings that supported suggestions the virus first occurred outside China – a narrative China has been pushing in recent months.

Helen Davidson, *The Guardian*, 9th February 2021

A piece by Javier C. Hernández in *The New York Times* situated the press conference within geopolitical competition with the headline ‘China Scores a Public Relations Win After WHO Mission to Wuhan’. Moreover, Hernández imbued the factual reporting with barely hidden opinionated scepticism:

The experts repeatedly praised their Chinese counterparts, saying the government had worked in good faith to grant access to important sites, including laboratories and markets. At the news conference on Tuesday, the experts were cordial and did not challenge statements by their Chinese hosts.....The team will face pressure in coming months to not only resolve tricky scientific questions but to demonstrate that they are carrying out a fair-minded and tough investigation.

Hernández, *The New York Times*, 9th February 2021 (Emphases added)

However, the Chinese media were not triumphalist in their coverage of the event, as might have been presumed from the Hernández piece. Indeed, the headlines and text were neutral more often than positive. However, neutral headlines arguably served China’s interests by refuting conspiracy theories about a laboratory leak and by opening the possibility of the zoonotic transfer occurring outside of China.

China Focus: Lab incident extremely unlikely for COVID-19: WHO-China joint mission. *Xinhua*, 9th February

Huanan seafood market may not be site of earliest COVID-19 outbreak: WHO-China team, Zhang Hui, Chen Qingqing and Cao Siqi, *Global Times*, 10th February

WHO team: Probe of virus’ origin should not be ‘geographically bound’, Wang Xiaoyu, Zhang Zhihao, and Liu Kun, *China Daily* 9th February

Western news coverage began to change the tone within 12 hours following an ‘exclusive’ interview with Dominic Dwyer the Australian member of the WHO mission carried by *9News*, an Australian commercial free-to-air television network, quickly reported by *The Australian* newspaper and by the *The Sydney Morning Herald* among others. This interview was editorialised as a dispute where - formally there was none - since the mission presented a joint oral report at the press conference.

An Australian scientist involved in the inquiry into the origins of COVID-19 says he believes the virus started in China and had been circulating in the community as early as mid-November. His view is disputed by the Chinese scientists in the World Health Organisation joint investigation who say the disease might have been brought into China on frozen food packets.

By the next day (11 February), attention of Australian newspapers had turned to the reflection offered by Embarek at the Wuhan press conference that the evidence did not support further inquiry into a laboratory leak of SARS-CoV-2 from a laboratory. Several articles in both *The Australian* and *The Daily Telegraph* challenged the de-

cision, some citing Former US Secretary of State Mike Pompeo's assertion on *Fox News*, also reported in *The New York Post*, that he had seen 'significant [supportive] evidence' when in government. James Morrow, in *The Advertiser*, reported 'Concerns over WHO report after it dismisses theory COVID-19 escaped from Wuhan lab', while Natasha Robinson in *The Australian* cited Professor Raina MacIntyre saying that the WHO had offered no proof in ruling out a laboratory accident. *The Washington Post* and *The New York Times*, in the United States, similarly questioned the decision, while articles in *USA Today* and *The New York Post* ridiculed it. The WHO Director General's subsequent 'clarification' on 12th February that no hypothesis had been discarded was then reported by *The Wall Street Journal* in the US, and in *The Guardian* and the *Daily Mail* in Britain.

The 'rejected lab' story seemed to legitimate a broader negative critique first in the Australian press. Eryk Bagshaw in *The Age* (owned, like *9News*, by *Nine Entertainment*) declared that 'science has now become part of a much larger geopolitical game'. *The Australian* also carried a piece in which Greg Sheridan opined that the WHO 'report is not worth the paper it probably won't be written on' and a commentary describing the mission as 'a whitewash'. The latter term appeared in other News Corp papers including *The Advertiser* and *The Daily Telegraph* in Australia, *The Sun* in Britain, and *New York Post* in the US. *The Daily Mail* group repeated cited Tobias Ellwood, the Tory chairman of the British House of Commons defence committee, referring to the mission as 'a complete whitewash'.

However, the real game-changer was an article by Jeremy Page and Drew Hinshaw published on 12th February in the *Wall Street Journal* entitled 'China Refuses to Give WHO Raw Data on Early Covid-19 Cases'. Immediately picked up by Reuters, this assertion was repeated by Javier C. Hernández and James Gorman in a *The New York Times* feed eight hours later under the headline 'China refused to hand over important data' and followed by an extended piece in *The New York Times* the following day (13th February) entitled 'On WHO Trip, China Wouldn't Share Key Data'. *The New York Times* article subsequently attracted sustained criticism in China's media with the relevant seven articles included in the study sample being the only Chinese ones to exhibit negative sentiment.

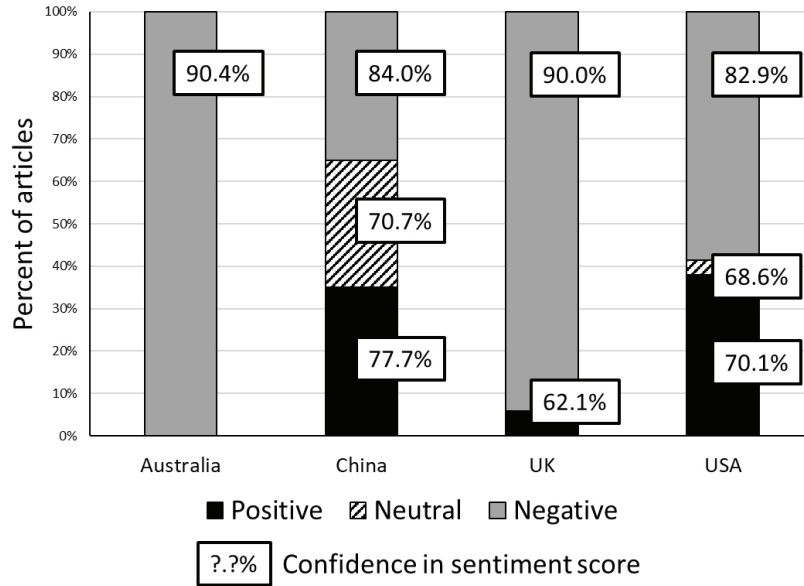
Presenting the story

Stepping back from the developing story to consider how it is told, Figure 1 summarises results from the general use sentiment analysis that exploited machine-based natural language processing to assess the full text from 103 articles published between 9th and 19th February 2021. It reveals that all the articles published in Australian newspapers and 94 per cent of those in British ones exhibited generalised negative sentiment as did 59 per cent of US ones. Moreover, there was little doubt about the negative tone since the analytic confidence measured at the 90 per cent level for articles published in Australia and Britain and at about 80 per cent for those published in the US. Chinese articles were much more evenly distributed between positive, neutral, and negative sentiment.

While negativity is the predominant sentiment, the national variation is marked with essentially the same story being told in different ways. Whether these differences reflect journalistic style and inherent negativity bias, or geopolitical posi-

The possible implication is that journalists with more knowledge of the topic and with cultural sensitivity to Chinese circumstances were less prone to use negative discourse.

Figure 1: General use sentiment analysis



tioning warrants further analysis. Therefore, a negative sentiment scale ranging from -100 to 100 was constructed by setting neutral scores equal to zero and making the confidence score associated with positive sentiment negative. This was entered into a OLS regression model of the following form:

$$Y_i = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n + \epsilon_i$$

'y' is the dependent variable, sentiment. The 'x_i's are the independent variables predicting 'y', and 'i' is the number of the independent variables. 'α' is the constant term, 'β_i' is the regression coefficient and ε is the random error term.

A series of dummy variables were considered as independent predictors in addition to country of publication. These included proprietors, location of journalists, journalistic specialisms, and type of article. Without strong theory, a stepwise procedure was adopted selecting variables with the highest explanatory power with the result that 35 per cent of the variation in negative sentiment is explained by five variables.

The model presented as Table 2 reveals that the high negativity evident in Australian and British newspapers and to a lesser extent to American ones, compared to Chinese ones, is partially offset by the more positive tone adopted by foreign journalists residing in China and by that of specialist science and medicine correspondents. The possible implication is that journalists with more knowledge of the topic and with cultural sensitivity to Chinese circumstances were less prone to use negative discourse. Bivariate analysis suggested that news articles were less

negative (score 41.3) than either opinion pieces (87.1) or leader articles (74.3). However, this relationship was explicable in terms of the higher number of leader articles devoted to the topic in the USA, and to more opinion pieces being published in Australia and Britain, than was the case in the Chinese media.

Table 2: OLS regression with a negative sentiment scale as the dependent variable

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
China refused to hand over important data to WHO scientists				1	
China granted the WHO expert team full access in Wuhan		1			
WHO scientists were given access to critical new data		1			
Chinese officials were uncooperative with roadblocks from the outset			1		
The Chinese authorities turned down requests to provide raw data on 174 cases of Covid-19 identified in Wuhan			1		
There were significant disagreements between the WHO team and the Chinese scientists.				1	
The mission was worthwhile		1			

Turning to the more specific assessments made by the international panel of policy academics which concerned sentiment towards China and its actions, headlines and subheads above opinion pieces and leaders were again generally more negative than those applied to news stories. However, this patterning was again largely attributable to national differences in the use made of leading articles and opinion pieces and failed to reach statistical significance in multivariate analysis.

Several specific hypotheses were tested as to possible explanations for variations in negative sentiment: geopolitics and ideology (country of publication); ownership and partisan leanings (News Corp and, within Britain, the Daily Mail and General Trust [DMGT] plc); cultural distance (location of journalists and China specialists) and structural factors including journalist specialisation (political and foreign affairs and science versus general reporters and emulation or mainstream bias (timing). The mean sentiment score (ranging from 1.83 [more than positive towards China] to 4.83 [almost very negative towards China] and a mean of 3.44) was substituted as the dependent variable in equation 1. Groups of independent variables were then entered in turn to explore each of the various explanations. Due to the small sample size all variables were entered as binaries.

Table 3 reveals that article headings in Australia and the USA were very negative towards China in part due, especially in Australia, to the tone adopted by newspapers owned by News Corp (indicated by smaller national coefficients in Model 2). Compared to the general use sentiment analysis reported above, Britain and the US exchange places in terms of negativity suggesting that American subedi-

tors may be more strident in the negative labelling of China when devising headlines. The influence of ownership or editorial stance is also evident in the UK with DMGT titles being more negative by almost as much as a third of the entire range.

Table 3: OLS regression with the academic panel's sentiment score as the dependent variable

	Model 1	Model 2	Model 3	Model 4	Model 5
Constant (Standard error)	2.603 (.161)	2.603 (.149)	2.600 (.143)	2.657 (.201)	2.457 (.192)
Australia	1.533 (.233)	.683** (.257)	1.209 (.284)	.517** (.288)	1.137 (.266)
USA	.946 (.211)	.489** (.213)	.748 (.233)	.467** (.237)	.778 (.221)
UK	.863 (.204)	.466** (.222)	.370 (.228)	.225* (.232)	.400 (.215)
News Corp		.410 (.177)	.225* (.191)	.501 (.192)	.275** (.178)
Daily Mail and General Trust		.991 (.246)	.390** (.253)	1.030 (.258)	.413** (.244)
Specialist reporter on China			.066 (.269)	.029 (.272)	.078 (.252)
Political or Foreign affairs reporter			.073 (.180)	.034 (.187)	.043 (.174)
Medical or science reporter			-.525 (.214)	-.200* (.220)	-.506 (.204)
Reporter based in China			-.454 (.350)	-.155 (.352)	-.445 (.329)
News article				-.071 (.177)	-.033 (.164)
Publication after 11 th February					.523 (.128)
R Square	.311	.420	.489	.490	.569
Adjusted R Square	.291	.390	.440	.435	.517

Significance: **0.01; * 0.05; + 0.10

With the important exception of pieces written by science or health journalists, the sentiment of headlines is unrelated to authorship and expertise. This is no doubt partly due to the role of subeditors, who will usually be experienced journalists but without specialist knowledge; consequently, they may feel more constrained by technical content than by political or cultural reportage. Headings above articles written by health and science journalists were less negative towards China than articles in general. On the other hand, as already noted, once account is taken of country and ownership, headlines added to leaders, news items or opinion pieces did not differ in their pro- or anti- Chinese sentiment.

In line with the developing story revealed by the discourse analysis, sentiment towards China in the headlines covering the WHO mission to Wuhan was much affected by the date of publication. Indeed, in a confirmatory stepwise regression, timing was selected second after Australia as a major determinant of the negativity of headlines. In Model 5, time is entered as the date on which *The Wall Street Journal* claimed that China had withheld raw data. Thereafter, the model confirms

a significant rise in negative sentiment towards China as other news outlets fed off the content the article, a clear example of mainstream bias. The coefficients associated with News Corp and British newspapers slip slightly in significance pointing to the more marked increase in the negativity of headlines in these newspapers following the accusation of withheld data.

Comparison of the drafting of *The Wall Street Journal* article by Page and Hinshaw with that of Hernández and Gorman in *The New York Times* is instructive given the targeting of the latter by Chinese media. Page and Hernández were both at the time specialist journalists, the former being the *Journal's* China Political and Diplomatic Editor based in China, the latter being *The New York Times* China correspondent based in New York having been expelled from China as the result of China's retaliation for Trump administration limiting the number of Chinese journalists on 2nd March 2020 (Jakes and Tracy, 2020). Of similar length (1,510 c/f 1,607 words) and built around quotations from WHO team expert Professor Dwyer, the former has a negative general use sentiment score of 50.9 per cent and the latter one of 80.5 per cent. Both articles begin with China's alleged refusal to 'share raw data' and the implication that this prevented W.H.O scientists from understanding the origins of Covid-19. *The Wall Street Journal* article then states explicitly that 'the Chinese authorities turned down requests to provide personalised raw data on 174 cases of Covid-19', that 'the refusal of the Chinese authorities... led to heated discussions' and 'to concerns among many foreign governments and scientists about a lack of transparency in China's approach' and that Chinese authorities 'didn't respond to requests for comment'.

While, in terms of substance, Hernández and Gorman's *The New York Times* article is no more damning of the Chinese authorities than that of Page and Hinshaw, the tone is strikingly different. Whereas the latter embed their accusations in neutral reporting of the research activities that Chinese scientists shared with their WHO counterparts, Hernández and Gorman craft a cut and thrust story between antagonists, the honest but perhaps naïve WHO experts and the deceitful Chinese, scientists and officials. 'Evidenced' by 'scientists say', 'several say', and 'say members of the team', the piece reports disagreements over 'the patient records and other issues' that were:

'so tense that they sometimes erupted into shouts among the typically mild-mannered scientists'; Chinese counterparts were frustrated by the team's persistent questioning and demands for data; Chinese officials urged the WHO team to embrace the government's narrative... including the unproven notion that it might have spread to China from abroad... The WHO scientists responded that they would refrain from making judgments without data... In the end, the WHO experts sought compromise, praising the Chinese government's transparency'... but ...It remains unclear if the compromise will work.... how fully the Chinese government -- which remains in firm control of research into the origins of the virus -- will cooperate.'

With citations decontextualised but embedded in this semantic matrix, it is easy to appreciate why experts felt that they might have been misquoted. In the following passage Professor Fischer could simply be describing the scientific method, not complaining about a refusal by the Chinese authorities to supply data:

“If you are data focused, and if you are a professional,” said Thea Kølsen Fischer, a Danish epidemiologist on the team, then obtaining data is “like for a clinical doctor looking at the patient and seeing them by your own eyes.”

A hint at the reason for the difference in style is gained from a comparison of the general use sentiment scores for the latest 15 articles published previously by each of the four authors. Their mean scores varied from -35.1 (i.e. positive in tone) for Gorman, the NYT science writer at large, to 45.8 for Hernández, his lead co-author, the only score to be statistically different from the neutral zero. It seems likely that Hernández’s negativity infused the NYT article, but it is impossible to determine whether it was stylistic or reflected ideological bias, since his accessible writing is mostly about China and he did not reply to a request for an interview.

Following up on the story

China’s reported refusal to release data generated a second spike among the case-study articles in Australia and the UK, with six separate rebuttals in the Chinese media. Beyond the sampled articles, a Google search on 12th May 2021 generated 17,700 hits linking the alleged refusal to release data to *The Wall Street Journal* article and 33,400 to that in *The New York Times*. Restricting the search to the days immediately following publication and taking the first 50 items listed, embracing newspapers and dedicated news websites across 18 countries, 60 percent *The New York Times* alone and 31 per cent *The Wall Street Journal* or both publications. Seventy-six per cent expressed generalised negative sentiments with an average confidence of 87 per cent, but just five outlets (10 per cent) sought critically to assess the report, including the *China Daily* and the *China Global Television Network*. Eighty per cent quoted Professor Dwyer and 64 per cent carried the disputed citation from Professor Fischer without qualification.

As the cumulative result of these citations - mainstream bias - it seems likely that most news consumers will have learned and probably believed that China prohibited release of crucial data. They may also have inferred a degree of cultural and ideological superiority through a belief that such things could only happen in China; confirmation bias for those already not trusting China (Gentzkow and Shapiro, 2011; Wang and Jeon 2020). There seem also to have been political implications that crossed national boundaries. First, departing from the US State Department’s initial wait and see position on 9th February after the joint press conference in Wuhan, on 13th February the White House issued a statement from Camp David under the name of the National Security Advisor Jake Sullivan (White House, 2021). This Bloomberg (Leonard, 2021) attributes to publication of Hernández and Gorman’s *The New York Times* article. Certainly, the statement’s expression of ‘deep concerns about the way in which the early findings of the COVID-19 investigation were communicated and questions about the process used to reach them’ is consistent with this interpretation of events. However, it is additionally possible that the earlier *The New York Times* article, also authored by Hernández suggesting that China had scored ‘a public relations win after WHO mission’ alerted the Admin-

istration to the geopolitical implications of – or opportunities arising from - the pending WHO report on the origins of Covid-19.

In Britain, the following day (14th February), the BBC's prestige current affairs television programme, the *Andrew Marr Show*, was devoted to the WHO mission. Marr repeatedly mentioned the Dwyer 'accusation' of withheld data and the Sullivan statement in a lengthy interview with to WHO team member Prof John Watson. He, then, with his opening question, elicited the following response from the British Foreign Secretary, Dominic Raab:

Marr: The US administration, Mr Biden's administration, are profoundly worried about the W.H.O investigation into China. Are you as well, are you concerned?

Rabb: Well, it is important that they were allowed to make that first visit. We do share concerns that they get full cooperation, and they get the answers that they need. So, we will be pushing for it to have full access, get all the data it needs to be able to answer the questions that most people want to hear answered around the outbreak, the causes. And that's important not for geopolitical point scoring, or anything like that, but so we can learn the lessons and prevent it happening again.

Raab's hesitancy, captured in the transcript by the opening 'Well,' was lost in the subsequent Reuters' press release which stated firmly that the 'UK says it shares U.S. concerns over WHO COVID-19 mission to China' (Reuters, 2021a). Likewise, hours later, Margaret Brennan interviewing the UK Prime Minister, Boris Johnson, on the US commercial CBS *Face the Nation* programme, extracted a statement supporting the US Government rather than condemning the Chinese government:

Margaret Brennan: ... because the Biden administration was clear, they have deep concerns about the investigation, about Chinese interference, and they are demanding that China hand over data about the early outbreak. Are you joining them in that call? Is China obscuring what happened?

Prime Minister Johnson: ... But we need to know exactly what happened. Was it in a- in a wet market? Did it come from the bats? Were the bats associated with the- the pangolins? All these questions are now matters of speculation. We need to see the data. We need to see all the evidence. So I- I thoroughly support what President Biden has said about that.

But, reported in the media in the USA and Britain, and indeed further afield, a clear link was drawn between the Prime Minister's statement and China's alleged withholding of data:

UK leader Boris Johnson joins US in demanding China release early COVID-19 data, *New York Post* 14th February

U.K. Backs Biden Over Call for China to Release Data Covid, *Bloomberg*, 14th February

UK backs Biden's call for China to release data on coronavirus origin, Boris Johnson 'thoroughly' supports Biden administration's call for transparency. *Politico*, 14th February

Boris Johnson calls on China to provide 'all the evidence' on Covid-19 origins amid fears over interference with WHO investigation, *Daily Mail*, UK, 14th February

COVID-19: Boris Johnson joins Joe Biden in putting pressure on China over World Health Organization investigation, *Sky News*, 15th February

'We need to see all the evidence': UK backs Biden over call for China to release Covid data. *Hindustan Times*, India, 14th February

A Reuters press release issued on 16th February went further reporting, in connection with a Group of Seven (G7) summit due to take place that week under Boris Johnson's chairmanship, that 'he would be keen to agree a global treaty on pandemics where countries agreed to share data, amid British and U.S. concern over access given to a World Health Organization (WHO) mission to China' (Smout, 2021; emphasis added). In fact, Johnson had first suggested such a treaty in September 2020 and, as the press release later acknowledges, a statement already issued ahead of the G7 meeting 'did not go into detail about any treaty on transparency'. Neither did the end of meeting press release which suggests that no conclusion had been reached or that the topic of a treaty had been discussed at all (G7, 2021).

There could be debate about whether the two Reuters' press releases were examples of concision bias, slanting or sensationalism but, alongside reporting on the alleged refusal to release raw data, they helped to foster a context of suspicion that played to anti-China confirmation bias. This sentiment was further promoted by the critical response to the WHO decision to cancel publication of an interim report on the Wuhan visit, by the persistence of the laboratory leak hypothesis, reignited by an article co-authored by the former US Secretary of State, Mike Pompeo, published in both *The Wall Street Journal* (23rd February) and *The Australian* (24th February), and an open letter claiming 'the joint team investigation falls short of the mark', signed by some 24 'scientists' that was initially carried by *The Wall Street Journal* and *Le Monde* (4th March). The letter, which was organised by Jamie Metzl (a self-styled 'geopolitics expert' and Senior Fellow of the Atlantic Council) and Gilles Demaneuf (a data scientist at the Bank of New Zealand), was reworked after publication of the Joint WHO-China Study final report to call, as reported by Reuters (2021b) for a 'new probe into COVID-19 origins - with or without China'. Of greater significance, on the day the final report was published, the US Department of State, with the support of the Australian, United Kingdom and 11 other governments, released a 'Joint Statement on the WHO-Convended COVID-19 Origins Study' which voiced:

'shared concerns that the international expert study on the source of the SARS-CoV-2 virus was significantly delayed and *lacked access to complete, original data and samples*.' (emphasis added)

Reflections and conclusion

This study was prompted by an interest in the role that international media might have played in the increasing anti-China sentiment evident in many Western countries and concludes by noting the interaction between the print media and global geopolitics. The intention was not to explain increased disaffection with China. This phenomenon is likely to prove to be exceedingly complex with a range of individual triggers apart from the Covid-19 pandemic including Hong Kong, Taiwan, Xinxiang, and Huawei. Many potential mechanisms would also need to be explored ranging from deliberate media manipulation to stochastic processes. Therefore, rather than focusing directly on global attitudes, the intent has been to consider one possible mechanism, partiality in the coverage of global issues by the international media, and when established, to try to parse out the reasons for it. No case study can be definitive, but from media coverage of the 2021 WHO sponsored joint inquiry into the origins of Covid-12, it seems clear that partiality in the international media is a topic worthy of further investigation.

No study of bias or partiality can avoid ontological issues relating to the nature of truth. It is evident that a visit by 10 scientists to Wuhan organised by the WHO took place in early 2021 with the intention of investigating the origins of the Covid-19 pandemic - although the status of the visit is contested by those who are unhappy with the results (Butler, C. et al., 2021). It is unclear whether China actually 'refused to hand over important data' not least because China itself cannot act; only Chinese individuals, be they officials or scientists organised into groups. The most likely story is that there was resistance, perhaps among Chinese scientists, to handing over individual level data. Despite a common requirement on researchers to deposit research materials in databanks, science mostly progresses based on aggregate analyses published in peer-reviewed journals with reviewers seldom having access to individualised data. Based on public statements gleaned from the western scientists involved in the WHO visit, there appears to have been no formal refusal and discussion about the release of data was outgoing. This, however, was generally not the story told in the Western media reviewed above.

The analysis revealed marked patterning in media coverage of the WHO joint enquiry. Negative sentiment was most striking in the headlines and content of Australian newspapers, with headlines being more negative in the United States than in Britain although the negativity of the content of some British newspaper was extreme. Coverage in Chinese news media was quite different, mostly neutral until the strong reaction to *The New York Times* article alleging the withholding of data by Chinese officials. Interpretation of these generalised national differences must be somewhat speculative. The generalised sentiment could simply reflect the negativity bias inherent in competitive news markets driven by the belief that good news does not make good news copy; news outlets compete for readership and provocative news stories are believed to attract readers (Soroka et al., 2019). Noting that two forms of sentiment analysis were employed in the research (headlines were assessed with respect to sentiment in relation to China whereas the analysis of articles was not content specific), the research bears out received wisdom that US newspapers better segregate news coverage and opinion than either Australian or British ones.

Headlines were more negative towards China in Australian and US newspapers

which reflects the secular trend in public opinion (although opinion has turned against China most rapidly in the UK [Silver, 2020]). This leaves open the question of whether the media primarily follow public opinion or shape it. Wu (2021) argues that for some time much of the Australian media has taken an adversarial stance vis-à-vis China for political, ideological, and commercial reasons, some segments emphasising economic and geopolitical concerns, others playing on racist and conspiratorial fears. Reviewing US media coverage of the pandemic in 2020, Jia and Lu (2021) conclude that it had the effect of serving President Trump's "America First" doctrine through using such rhetorical techniques as naming, shaming, and blaming.

There is evidence of partisanship with ownership of newspapers seen to affect anti-Chinese sentiment in the coverage of the WHO probe. Newspaper proprietors invariably opine that they have no editorial control over the content of newspapers, but News Corp and the Daily Mail and General Trust (in the UK) are generally seen to be aligned to the political right. The statistical analysis of headlines revealed that newspapers owned by these groups were significantly more likely to be negative towards China, and thereby to contribute to overall national differences (especially the DMGT group in Britain). However, it is noteworthy, with respect to coverage of the 'denied data' story that *The Wall Street Journal* is owned by News Corp while *The New York Times* – which attracted China's ire – is generally considered, on domestic issues at least, to veer towards the political left.

The most striking evidence of inadvertent bias is the explosion of media interest following the emergence of the story of alleged withholding of data. As in the case of the BBC World Service item by Peter Goffin, there is precious little evidence of any checking of the credibility of the story even among newspapers with a reputation for journalism. The repute of *The New York Times*, and within the article by Hernández and Gorman, the reference to *The Wall Street Journal* and the reputable *Australian Broadcasting Corporation*, might all be taken as a defence against accusations of slack journalism. Also, a quarter of publications took the story from Reuters. Equally, though, the multiple replications demonstrate the ease with which mainstreaming bias is created. Moreover, the fact that so many publications followed the more conspiratorial line offered by *The New York Times* version of events might speak simultaneously to confirmation bias and sensationalism.

Evidence of distortion due to cultural distance in telling the story of the WHO enquiry is weak but not non-existent, as noted in the above discussion of the piece by Peter Goffin for the BBC. Cultural sensitivity may also help to explain the less negative general sentiment observed among foreign reporters working in China and among medical and science reporters covering the story. Similarly cultural distance could have been a factor, too, in the more critical tone of editorial and opinion pieces which were more often written by general columnists than by specialist reporters. However, it should be remembered that *The New York Times* article that amplified story of data being refused was written by the newspaper's China reporter and a science specialist.

To return, finally, to politics since it is politics not science that is at the heart of the story reproduced thousands of times around the world. It is at least possible that China had hoped to control the story of Covid-19 to demonstrate the virtues of governance 'with Chinese characteristics', but the scale of the failure of western governments adequately to respond to the pandemic meant that China became a

useful scapegoat for Western politicians. Accused of releasing the SARS-COV-2 virus from a laboratory, it became the victim of, at least based on evidence made public, nothing less than a state sponsored conspiracy theory. The visit itself was born of global politics at the time when the Trump administration had lost control of the pandemic and turned on China and the WHO. This may have encouraged the Australian government, without informing allies, to insist on an ‘independent’ investigation although this was not actually achieved (Dziedzic, 2020). Hence, the story of China withholding information served to legitimate the Australian government’s initial position and may explain why the story was carried first by the Australian media before being repeated, initially by News Corp papers in the United States.

While some have proposed a causal link from *The New York Times* article to the US State Department hardening its position on the WHO enquiry and possibly through to the joint inter-governmental statement undermining the published report, there is much that still needs to be understood. The Chinese were careful in their coverage of the Wuhan press conference, sentiment being neutral, lacking the positive tone typical of most articles appearing in the government-controlled media. Nevertheless, with the WHO team’s effective dismissal of the laboratory leak hypothesis, Hernández was able to claim in *The New York Times* that China had scored a ‘Public Relations Win’. Given the seeming need for the new Biden administration to stand up to China, did this apparent victory for the Chinese government cause the US State Department concern? What, too, is the role played by Hernández and what is his motivation? Unfortunately, he did not respond to a request for interview. His articles were invariably negative and provocative lacking the neutrality associated with in situ reporting despite previously having been based in Beijing. Likewise, press releases issued by Reuters tended to be more definitive and assertive than their original sources. It is not clear, in either case, whether this was the unintentional result of concision, the desire to make good copy or the wish to influence events. It might alternatively have reflected unconscious institutional, ideological or confirmation biases.

And if, indeed, government policy was affected by the media coverage, did the Biden administration believe that significant data had deliberately been withheld by the Chinese or was the story merely used to engage in geopolitical theatre? Quite what was achieved by issuing the Joint Statement is also unclear. Did the scores of governments not included among the signatories refuse to join in the criticism of the report and, if so, why? The parallel statement released by the European Union seems more in tune with the facts as known:

While regretting ... the limited availability of early samples and related data, we consider the work carried out to date and the report released today as a helpful first step (EU, 2021).

However, the media coverage received by US State Department Joint Statement was much greater with further repetition of the story of important data being denied. Maybe, therefore, media coverage was the purpose of the Joint Statement revealing the possibility of a symbiosis of political and commercial interests in which the hunger for news copy fosters the dissemination of stories favoured by government. This, then, calls into question both the role of a free press and the source of media bias. ✕

Postscript

Sadly, or perhaps not, the world does not stand still during the lengthy process of publishing research reports. The politics of the Covid-19 pandemic have developed apace.

The March 30th publication of the Joint Statement on the WHO-Convened COVID-19 Origins Study, met with an immediate, sceptical response in the form of the ‘Joint Statement’ from 14 nations orchestrated by the US Department of State. Then, on May 26th, President Biden asked the US intelligence services to investigate Covid-19 leaking from a laboratory and to report within 90 days.

On August 12th, twelve days before Biden’s report was due to be published, the World Health Organisation called on ‘all governments to depoliticize the situation and cooperate to accelerate the origins studies’ arguing that:

“Countries have a collective responsibility to work together in the true spirit of partnership and to ensure scientists and experts have the space they need to find the origins of the worst pandemic in a century.”

This request coincided with its announcement of, and call for nominations for, a new advisory group, the International Scientific Advisory Group for Origins of Novel Pathogens (SAGO). This is to advise ‘on the development of a global framework to systematically study the emergence of future emerging pathogens with pandemic potential’. SAGO will also be charged with supporting ‘the rapid undertaking of recommended studies outlined in the March 2021 report’.

Writing this postscript on August 19th, just five days before the US intelligence services are due to report, media coverage is hotting up. On August 15th, the *Wall Street Journal* carried an opinion piece (by Robert Redfield and Fox News medical correspondent Marc Siegel) headed: ‘The World Needs to Know What Happened at the Wuhan Lab’. It offered no new evidence. Similarly, Harvard Professor Naomi Oreskes argues, in a pre-publication opinion piece for September’s *Scientific American*, that ‘the lab-leak theory of COVID’s origin is not totally irrational, unfortunately, its strongest proponent [President Trump] was, which tainted its reception’. Oreskes provides no empirical data appertaining to a laboratory leak.

New evidence of sorts has emerged in a documentary shown by the Danish public channel TV2 on August 12th and summarised on its website. Reporting this, *The Washington Post* cites Peter Ben Embarek, who headed the 2021 Joint WHO investigation, saying that the team were only allowed to mention the lab-leak theory in the Joint Report ‘on the condition’ that they ‘didn’t recommend any specific studies to further that hypothesis’.

Perhaps more importantly, *The Washington Post* also translates Ben Embarek as saying:

‘A lab employee infected in the field while collecting samples in a bat cave — such a scenario belongs both as a lab-leak hypothesis and as our first hypothesis of direct infection from bat to human. We’ve seen that hypothesis as a likely hypothesis.’ (August 12th)

According to *Aljazeera* (August 13th), Jamie Metzl, who organised the open letter of

The analysis suggests that media coverage of the pandemic was characterised by partiality, half-truth and inuendo

scientists rebutting the Joint WHO report ahead of publication, called Embarek’s comments ““a game-changer”, describing his earlier declaration that a lab leak was unlikely “shameful”.”

However, *The Washington Post* further reported that Ben Embarek ‘initially said the interview had been mistranslated’ (emphasis added) and, indeed, this translation of the original Danish is substantively different from either that in the London-based *The Guardian* or on *Aljazeera* (which, in turn, differ from each other). *The Washington Post* provides no evidence that Ben Embarek subsequently recanted his claim of mistranslation.

It must be presumed that the world will have changed again before this post-script is published. Certainly, that it the expectation of the Chinese media. *The Global Times*, for example, reports that:

‘US intel agencies struggle to produce concrete proof to support “lab leak” theory, make do with circumstantial, unreliable evidence as deadline nears’ [...but] the sources revealed that despite all the above-mentioned obstacles, the US still intends to release the report by the end of August as scheduled’ (August 17th).

The followup studies overseen by SAGO may one day identify the source of the Covid-19 pandemic. Perhaps US Intelligence will be more adept at basic science than in predicting how long it would take the Taliban to assume control in Afghanistan. Maybe, politicians will accept responsibility, if not for the origin of the pandemic, then for the way that it has spread. Surely, as individuals, we too should acknowledge our sins of omission and commission, whether vaccinated too much or not at all.

The issues raised in this working paper about partiality in global reporting will remain salient even if read at a time when the origins of the pandemic are perfectly understood. Moreover, the morphing demonstrated in the previous paragraph, from a concern with origins of the pandemic to a focus on responsibility -naming, blaming, and shaming - is equally apparent in global media coverage. This raises the much-debated question of whether journalism is about unearthing facts or disseminating opinion. The mass media, of course, do both in unequal measure and for a variety of reasons embracing both profit and propaganda.

It has only been possible to go so far in establishing the reasons for the partiality in reporting, partiality that perhaps contributed to the focus on responsibility and guilt attribution. However, it is evident that the media played a part in the politicising of Covid-19 about which the World Health Organisation rightly complains. In the case of the Chinese media this is understandable, even justifiable, for their role is to speak on behalf of their government. Western media, though, have a duty to speak truth unto power and not, for whatever reason, to legitimate power as truth. The analysis suggests that media coverage of the pandemic was characterised by partiality, half-truth and inuendo. Truth was seldom the caged bird singing for freedom. More often it was an insect trapped in a fly-zapper fuelled by opinion.

Robert Walker
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Annex A

Title	Circulation (daily publications)	Owner
Australia (2018)		
Herald Sun	303,140	News Corp
The Daily Telegraph	221,641	News Corp
The Courier-Mail	135,007	News Corp
The Sydney Morning Herald	78,789	Nine Entertainment
The West Australian	128,365	Seven West Media
The Age	74,360	Nine Entertainment
The Advertiser	112,097	News Corp
The Australian	88,581	News Corp
USA (2019)		
USA Today	1,621,091	Gannett Company
The Wall Street Journal	1,011,200	News Corp
The New York Times	483,701	The New York Times Company
New York Post	426,129	News Corp
Los Angeles Times	417,936	Nant Capital
The Washington Post	254,379	Nash Holdings
Star Tribune	251,822	Star Tribune Media Company
Newsday	251,473	Newsday Media Group
UK (2020)		
The Daily Telegraph	360,345	Press Holdings (Barclay brothers)
The Times	368,929	News Corporation
Financial Times	157,982	Nikkei Inc.
The Guardian	132,341	Scott Trust Limited's Guardian Media Group.
Daily Mail	1,169,241	Daily Mail and General Trust
Daily Express	296,079	Reach
The Sun	1,250,634	News Corporation
Daily Mirror	451,466	Reach
China		
Xinhua - New China News Agency		State Council of the People's Republic of China
China Daily (China's official English language daily)		State Council Information Office
People's Daily--English edition (Newspaper of the CCP)		Central Committee of the Chinese Communist Party
Beijing Review		China International Publishing Group
Caixin Online		Caixin Online
Xinhua wire service		Xinhua wire service
Global Times		People's Daily

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