

China versus SARs

China and the first SARS pandemic

On 16 November 2002, a case of atypical pneumonia appeared in the city of Foshan, southeast of Guangzhou in Guangdong province, southeastern China. The spread of the disease accelerated gradually in China, but by 1 July 2003, seven and a half months later, it had reached 30 countries and sickened 8,439 people of whom 812 died, giving a 10% mortality rate. Medical personnel had been unprepared and had not understood the ease of person to person transmission of the disease: 21% of all cases were among healthcare workers.² In March 2003, the causative pathogen was identified as a bat coronavirus and named SARS-CoV, and in May, the World Health Organisation (WHO) announced that the virus had been identified in the masked palm civet, which is eaten as a delicacy in southeastern China, as the presumptive intermediate host.

After the first case, a local doctor reported subsequent cases in Guangzhou to a regional anti-epidemic authority and the first team of experts sent by China's ministry of health arrived in Guangzhou on 20 January 2003. They filed their report to provincial authorities on 23 January and apparently again on 27 January, but the report was not shared with the WHO,³ and was marked top secret. Under a Chinese law of 1989, the public could not be informed without authorisation by the health ministry.

Although the provincial authorities ordered a news blackout on the subject, a Chinese mobile phone message on 8 February that referred to a "fatal flu" in Guangzhou was repeated 126m times in the next three days. The information was picked up by the WHO, by ProMED-mail, and was reported in the Hong Kong press. The WHO questioned Chinese authorities on 10 February 2003, and China made its first report to

the WHO on 11 February. Local health officials in Guangdong told the public that the situation was under control and imposed another news blackout. On 20 February, Chinese officials informed the WHO that the disease was a pneumonia caused by chlamydia, and Chinese authorities maintained this position for months. By the time they finally reported to the WHO, 10 other countries had reported cases. China compounded its three month delay with deliberate disinformation, blaming Hong Kong for the outbreak in Guangdong province and Thailand for the spread from Guangdong to Beijing.

Messages from Chinese authorities to the WHO also claimed that the outbreak was under control and declining, and China rejected a WHO offer of assistance. On 23 February: "WHO reported that the Chinese ministry of health had declared the outbreak in Guangdong Province [to be] over," and that the Chinese illness had nothing to do with the same disease in Hong Kong.⁴

The WHO finally issued a global alert about the atypical pneumonia on 12 March, but within three days the disease was in six other countries. On 17 March, China finally requested WHO assistance and a small four-member team was dispatched on 21 March. By now Chinese doctors were acting as whistleblowers, disputing their government's claims on the number of cases and their regional distribution in China, or that the disease had been contained.

On 25 March the WHO issued an emergency travel advisory linked to air travel for the first time in its 55 year history. The disease was named severe acute respiratory syndrome, SARS, to which covid was later added, producing the designation SARS-CoV. China provided no new data to the WHO between its initial report on 10 February and 26 March. It then reported new numbers, admitted for the first

time that the disease had spread in China beyond Guangdong province, and made a series of promises to the WHO. In the following weeks, however, it failed to keep the promises. When the WHO team reached Beijing, they were not permitted to leave for Guangdong until 2 April, eight days later. And when it was admitted that the disease had reached Beijing, travellers from Hong Kong were blamed. A state council meeting on 2 April declared that the outbreak had "already been brought under control."⁵

On 6 April, Gro Harlem Brundtland, director of the WHO publicly upbraided China for delaying its reporting of the disease for months and for its lack of cooperation.

"It would have been definitely helpful if the international expertise and WHO had been able to help at an earlier stage.... When I say that it would have been better, it means that I'm saying as the director general of the World Health Organisation: next time something strange and new comes anywhere in the world let us come in as quickly as possible."⁶

Among the promises the Chinese authorities had made were that they would supply samples from Chinese patients, but the WHO officials reported that none had yet arrived. The WHO also reported that Chinese authorities would not permit its team to visit SARS patients in Beijing hospitals. When permission was granted, the Beijing city government and military authorities moved patients from one hospital to another, hiding both patients and medical personnel in ambulances so that the investigators would not see how many SARS patients there really were. This set the WHO on the offensive again. On 16 April the *Washington Post* reported:

"The World Health Organisation said today that China is under-reporting cases of the SARS virus and maintains secret military files that make it

impossible to control and monitor the spread of the disease in the Chinese capital. WHO researchers, speaking in unusually blunt language, said at a news conference that the government has misled the public about the spread of severe acute respiratory syndrome, or SARS. Officials said the number of patients infected with the virus in Beijing could be 200, more than five times what the government has acknowledged. 'We have very clearly said you have an international community over here that does not trust your figure,' said Henk Bekedam, head of the office of the World Health Organisation in Beijing."

Public exposure of China's lying finally caused a change in Chinese government behaviour. On 18 April President Hu Jintao and Premier Wen Jiabao ordered their officials to stop under-reporting SARS cases and Wen warned that they would be punished for misrepresentation. Both the minister of health and mayor of Beijing were removed from their positions two days later, and China released new SARS statistics which raised the total number of cases tenfold, a full order of magnitude. The Chinese lying and cover-up had been acknowledged and it was over.

Summing up, the Chinese government:

- Delayed reporting to the WHO.
- Provided false information to international agencies and the international community.
- Initially restricted information even to officials outside the province where the disease began.
- Dismissed the problem as a minor one, accused other nations of what it had caused, and claimed that the outbreak was either under control or had been eliminated.

On 5 July 2003, the WHO announced that the SARS outbreak had been contained worldwide, stating: "Better surveillance and response systems must be established, which include strong national, regional and global linkages in reporting."

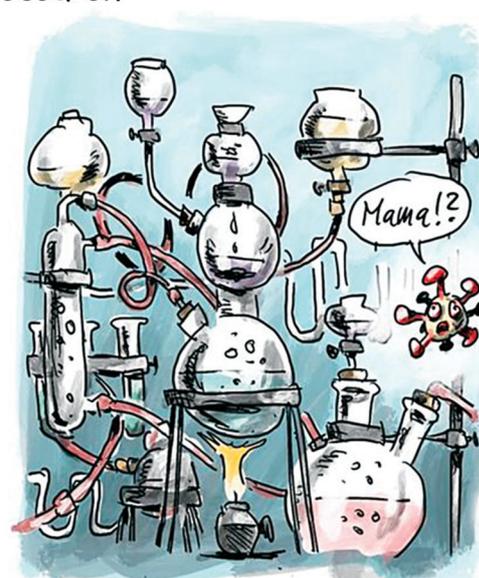
In 2003 and 2004, researchers in three countries were infected with the SARS-CoV virus while working in laboratories. One outbreak took place in Singapore, one in Taiwan and two in Beijing.⁹ The Singapore laboratory acquired infection (LAI) occurred in September 2003 in a BL-3 facility due to laboratory contamination. Singapore invited the WHO to investigate, and an 11-member WHO team headed by Dr Antony Della-Porta did the work. The

investigation was extended to all the other BL-3 labs in Singapore, and produced a report which was accepted by the government, acted upon and made available to the public.

The LAI in Taiwan took place in a BL-3 lab that was part of a BL-4 complex and was the result of grossly careless practice by a researcher in a military laboratory. In January 2004, Taiwan also invited a WHO team of three, again headed by Dr Della-Porta, to investigate.. Their report was published in a Taiwanese public health journal and the WHO stated: "These laboratories currently represent the greatest threat for renewed SARS-CoV transmission."

A series of LAIs occurred in two facilities in Beijing beginning in February 2004, first at the National Institute for Viral Disease Control and Prevention, part of the Chinese Center for Disease and Control. The laboratory director did not inform national health authorities, however, Chinese authorities reported a case on 22 April, after a hospital nurse contracted SARS, and the institute was temporarily closed. The WHO sent a team to Beijing on 24 April, without Dr Della-Porta, and which never produced a report. In mid May, China formed an investigation

Origin Research



Or is it the other way around?

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team which produced a report in July that just dealt with a portion of the cases that occurred. Only extracts of this report are available. Interestingly, two Chinese newspapers - Caijing and Southern Weekly – both published several stories about the outbreak, and both ceased investigative reporting several years later.

Amazingly, in 2015, China's Peoples Liberation Army published a book which included a chapter reviving the long-discredited disinformation that the 2002-3 SARS pandemic was caused by a virus that had not evolved naturally within China but was a laboratory constructed organism produced in some unidentified country. By implication that made it a "bioterrorist" attack using "a gene weapon" against China.¹⁰

During the 2002-3 SARS outbreak in China, the local and national authorities learned that they could mislead, misinform and manipulate the WHO with no greater penalty than a slight public scolding by the current WHO secretary general. During and after several SARS lab infection outbreaks in China in 2004, that lesson was reinforced. For the far more consequential 2019-21 SARS-CoV-2 pandemic, the Chinese government applied that lesson in an aggressively grand and bravura style.

China and the second SARS pandemic

Sometime in November 2019, possibly even in late September or October, another anomalous pneumonia broke out in China, this time in Hubei province, and Wuhan, its capital city of 11 million people. H5N1 and H7N9 influenza and the 2002-3 SARS-CoV had all originated in China, where longstanding cultural practices involving animal husbandry and food preferences led to zoonotic spillovers. In addition, the MERS coronavirus was passed from bats to camels and infected humans in 2012, before spreading to 27 countries. It was therefore natural for virologists and epidemiologists to assume that the same applied to SARS-CoV-2. Except for one anomalous factor. It happens that Wuhan houses six research institutes that work with bat coronaviruses.¹¹

Pre-eminent among these is the Wuhan Institute of Virology (WIV), home to the world's largest collection of bat coronaviruses. This institute removed its database of those viruses and additional databases in September 2019; among them were those with the closest unpublished genomes to the SARS-CoV-2 virus.¹² The WIV apparently began gain of function (GoF) research using bat coronaviruses around seven or eight years ago and published papers describing that research in 2015, '16 and '17. It was doing GoF research with bat coronaviruses in 2019.

By 25 December 2019, and apparently even as early as 5 December, several doctors in Wuhan hospitals realised that they had cases of an anomalous pneumonia that was transmissible from person to person. Remembering the SARS pandemic that originated in China in 2002, one of them, Dr Li Wenliang, informed fellow physicians of this via social media. He was called in by local police authorities, questioned, accused of "disrupting the social order," reprimanded and forced to publicly admit to having distributed "rumours."¹³ The first international mention of the outbreak was a ProMED communication on 31 December 2019. On the same day, Taiwanese public health officials also notified the WHO that the new virus was transmissible from person to person. The WHO did not publicise the warning but questioned Chinese authorities about it. By issuing a formal request for verification, the WHO activated Article 10 of the International Health Regulations, which required China to respond within 48 hours.¹⁴ On 2 January, Chinese authorities told the WHO what the silenced doctors had been reprimanded for, except that they stated the infection was not transmissible from person to person. Within another two days, multiple Chinese institutes had decoded the RNA genome of the virus, revealing that it was a SARS coronavirus. However the genome was not publicly released until 12 January.

China's president, Xi Jinping, was informed that the disease was transmissible from person to person on 7

January, but it was not until 20 January that Chinese authorities admitted to the WHO that the virus could be transmitted from person to person. That occurred after the venerable Chinese SARS expert, Zhong Nanshan, had visited Wuhan and reported to Beijing that this was the case.

In the intervening weeks and early months of 2020, the Chinese authorities:

- Arrested and "disappeared" at least five Chinese bloggers and vloggers who had been reporting and photographing in Wuhan.
- Banned any uncensored Chinese press or other Chinese media reporting on the disease outbreak in Wuhan.
- Began to censor Chinese social media on 31 December 2019, deleting coronavirus-related terms and threatening severe penalties for infractions by ordinary citizens.
- Issued a decree on 3 January 2020 from China's National Health Commission forbidding Chinese institutions from "publish(ing) any information related to the unknown disease," and requiring all samples to be transferred to designated testing institutions (which were not specified) or to be destroyed.
- Required that all professional journal publications about the SARS-CoV-2 virus undergo a special review by central government authorities.
- Forced the retraction of one journal paper by two Chinese academics which had been posted before the prohibition was announced, and which suggested that the SARS-CoV-2 virus had probably escaped from WIV. Chinese censors also removed the paper from the internet.¹⁵
- Expelled foreign journalists who were reporting on the pandemic in China, particularly those from US newspapers.

A critical aspect of the events of December 2019 and January 2020 is the interaction between official knowledge of early cases and the delay in providing accurate information to the Chinese public, particularly in Wuhan, to the WHO, and in locking down the city. A *South China Morning Post* press story quoted Chinese government documents indicating that the initial case may have been identified on 17 November 2019,

and the Chinese government knew of 266 cases by 31 December, and 381 by 1 January 2020. Later, in February 2021, China would report 174 cases in December 2019 to the joint Chinese-WHO team in Wuhan. The head of that team, Dr Peter Ben Embarek, noted, however, that as only 12-15% of the people who were infected by the virus were symptomatic, it was likely that about 1,000 people in Wuhan had contracted the disease by the end of December 2019. Multiple modelling studies by Chinese scientists suggest an initial infection date in early or mid November 2019.¹⁶ In the US Jonathan Pekar suggested mid October to mid November 2019.¹⁷

Even so, the Chinese government allowed Wuhan and Hubei provincial communist party authorities to hold their annual meetings in Wuhan on 6-10 January 2020, and to host a Lunar New Year dinner for 40,000 people in Wuhan on 18 January. From January 6 to January 17, for 12 full days, Wuhan was in the midst of what the Party refers to as “two meetings time”. These rubber stamped legislature, the fourth and fifth Plenum of the CPCC in Wuhan from the 6th to 10th January and the 3rd Plenum of the CPCC in Hubei from the 11th to the 17th. On 20 January President Xi made his first public statement, saying that he had ordered officials to stop the virus, but without mentioning person to person transmission. The government did not order the lockdown of Wuhan and other cities in Hubei province until 23 January 2020. By then over five million people had left the city, travelling all over China and worldwide as normal, in anticipation of the Chinese New Year on 25 January. Tens of thousands flew to cities throughout Europe, very probably leading to the early cases in France, Italy and Spain that Chinese authorities point to in claiming that the SARS-CoV-2 virus appeared in other countries before it did in China.

Another modelling study suggested that if China had locked down Wuhan and Hubei Province three weeks earlier, cases of Covid-19 in China would have been reduced by 95%.¹⁸ On 22 January 2020, WHO Director General Ghebreyesus praised President Xi

fulsomely but inaccurately for his “cooperation” and for his “leadership and intervention,” which had been “invaluable” in responding to the outbreak. A WHO emergency committee stated: “The virus does not constitute a public health emergency of international concern.” On 30 January the WHO declared the coronavirus a “global health emergency,” but “recommended against border closures, visa restrictions and quarantining of healthy visitors from affected regions.”

On 19 February 2020, one month after they had rejected the French groups letter on Covid release¹⁹, the prominent journal, *The Lancet*, published a statement in support of scientists, public health professionals and medical professionals of China combating Covid-19, signed by 27 scientists. It was written by Dr Peter Daszak, director of the EcoHealth Alliance, based in New York City, who obtained the 26 co-signatures. Despite a sentence that followed the statement: “We declare no competing interests,” Dr Daszak had been collaborating with the WIV at least since 2012. He was a co-author with Dr Zhengli Shi and other WIV scientists on multiple journal publications, and had directed at least \$600,000 and possibly as much as \$4.3m in US government funds to the WIV. The statement included the following: “The rapid, open and transparent sharing of data on this outbreak is now being threatened by rumours and misinformation around its origins. We stand together to strongly condemn conspiracy theories suggesting that Covid-19 does not have a natural origin.”²⁰

The term “conspiracy theory” to suggest any mechanism of origin of the SARS-CoV-2 virus other than natural evolution was repeated globally in hundreds of media commentaries²¹, with little professional challenge throughout 2020. The words were enthusiastically adopted by the Chinese government and would eventually find their way into the joint Chinese government-WHO report published in March 2021, appearing no fewer than four times in the four-page annex to the report that concerned the WIV. Daszak would be selected to serve

on the “independent” team that went to Wuhan on behalf of the WHO in January-February 2021. He would also be appointed by *The Lancet* to head a Lancet covid commission task force “to conduct a thorough and rigorous investigation into the origins and early spread of SARS-CoV-2”.²²

By the end of January 2020, when it was apparent that a new SARS pandemic was beginning to envelope the world, there were two alternative explanations for the origins of the virus, and both were clear and obvious. The first was the traditional explanation citing natural evolution of a virus in a wild or domesticated animal and its transfer to humans, either directly or via an intermediate host. That is what happened with the first SARS pandemic in 2002, and with MERS, Ebola and several other viruses. To date, however, no one has been able to find the SARS-CoV-2 virus in any natural bat population, nor any intermediate host, despite the fact that Chinese scientists tested some 80,000 wild and domesticated animals as potential hosts. Nonetheless, this was the classic expectation and entirely plausible, if not for the extraordinary circumstances that pointed to the second explanation.

This was that a scientist in one of the six Wuhan virology institutes working with bat coronaviruses had contracted an LAI, either in the course of laboratory research or during field sampling of wild bat populations. This explanation was plausible because the WIV had been carrying out GoF research using bat coronaviruses and producing chimeric viruses using seamless, undetectable, molecular genetic technology. In addition, the WIV researchers and those at sister virology institutes in Wuhan had been doing this work since around 2014 under BSL-2 laboratory conditions, which was all that was required by recommended international protocols at the time. Sometimes the research was conducted under BSL-3 conditions, but never in the BSL-4 facility at the WIV, where Dr Shi is shown in photos in hundreds of publications. Additionally, the WIV BSL-4 lab did not become operational until 2018. No direct evidence existed to

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support the second explanation, but while there was no circumstantial evidence available to support the first explanation either, there was masses of circumstantial evidence to support the second one.

The *Bulletin of the Atomic Scientists* published a paper in June 2020 called: “Did the SARS-CoV-2 virus arise from a bat coronavirus research programme in a Chinese laboratory? Very possibly.”²³ The paper examined eight categories of circumstantial evidence in substantial detail:

1. Official Chinese government recognition early in the SARS-CoV-2 outbreak of biosafety inadequacies in China’s high containment facilities. As seen in the narrative of the 2002-3 SARS outbreak, such LAIs occurred no fewer than four times in China in 2004. In fact, another LAI happened in China in December 2019 involving the pathogen for the animal disease, brucellosis, which escaped from an agricultural laboratory in Lanzhou. Historical examples^{24,25} therefore added as much credibility to the possibility of an LAI²⁶ as they did to the assumption of a natural spillover. In addition, in a film displaying the heroics of China’s virological bat samplers, released by China’s CCTV on 10 December 2019, Dr Tian Junhua, the head of the Wuhan CDC sampling team, said: “It is while discovering new viruses that we are most at risk of infection.”²⁷
2. Recognition by Dr Zhengli Shi, who heads a research team at the WIV, that a laboratory escape was a possibility.
3. Questions surrounding the Chinese government’s initial attribution of Wuhan’s Huanan South China Seafood Market as the source of the SARS-CoV-2 virus.
4. Extensive suppression of individuals and information regarding the pandemic by Chinese authorities.
5. The record of laboratory accidents and the escape of highly dangerous pathogens from laboratories worldwide, which is a quite frequent occurrence.
6. Laboratory accidents and escapes of highly dangerous pathogens in China in general, and biosafety issues at the WIV in particular. “In a meeting 40 days before China announced that there was

an epidemic in Wuhan, it appears that an internal review of safety at the laboratory had revealed possible safety deficiencies, and that improving operational safety was an important priority in the future operation of the laboratory.”²⁸

7. Uncertainty about the biosafety conditions under which bat coronavirus research was carried out at WIV.

8. The nature of the research being done in Dr Shi’s laboratory at WIV.

This last was almost certainly the most significant circumstantial evidence. Details of the most recent National Institute of Allergy and Infectious Diseases (NIAID) grant for WIV bat coronavirus surveillance and WIV bat coronavirus GoF research are publicly available. The key activity for bat coronavirus surveillance is: “*Aim 1 ... We will sequence receptor binding domains (spike proteins) to identify viruses with the highest potential for spillover which we will include in our experimental investigations (Aim 3).*” The key activity for bat coronavirus GoF investigation is: “*Aim 3... We will use S protein sequence data, infectious clone technology, in vitro and in vivo infection experiments, and analysis of receptor binding to test the hypothesis that percentage divergence thresholds in S protein sequences predict spillover potential.*”²⁹

Translated into something approaching lay language, Aim 3 states that de novo synthesis is to be used to construct a series of novel chimeric viruses, comprising recombinant hybrids using different spike proteins from each of a series of unpublished natural coronaviruses in an otherwise-constant genome of a bat coronavirus. The ability of the resulting novel viruses to infect human cells in culture and to infect laboratory animals would be tested. The underlying hypothesis is that a direct correlation would be found between the receptor-binding affinity of the spike protein and the ability to infect human cells in culture and to infect laboratory animals. This hypothesis would be tested by asking whether novel viruses encoding spike proteins with the highest receptor-binding affinity have the highest ability

to infect human cells in culture and laboratory animals.

The WIV began its GoF research programme for bat coronaviruses in 2015. Using a natural virus, institute researchers made “substitutions in its RNA coding to make it more transmissible. They took a piece of the original SARS virus and inserted a snippet from a SARS-like bat coronavirus, resulting in a virus that is capable of infecting human cells.”³⁰ Many virologists noted that the virus was pre-adapted to attach to human lung cells when it first appeared. This had not been the case with the first SARS virus in 2002-3.

On 3 June 2021, it became known that US Department of State officials warned a working group “not to pursue an investigation into the origin of Covid-19” as it would “open a can of worms if it continued...because it would bring unwelcome attention to the US government funding of it.”³¹

In May 2021, *The Bulletin of the Atomic Scientists* published a second detailed examination of the additional circumstantial evidence that had accumulated in the intervening year, with greater focus on the molecular genetics involved. It was written by the respected veteran science writer, Nicholas Wade;³² and on 14 May 2021, 18 prominent international scientists published a letter in *Science*, which stated: “... *the two theories were not given balanced consideration. Only four of the 313 pages of the report and its annexes addressed the possibility of a laboratory accident. Notably WHO Director General Tedros Ghebreyesus commented that the report’s consideration of evidence supporting a laboratory accident was insufficient and offered to provide additional resources to fully evaluate the possibility... We must take hypotheses about both natural and laboratory spillovers seriously until we have sufficient data. A proper investigation should be transparent, objective, data-driven, inclusive of broad expertise, subject to independent oversight, and responsibly managed to minimise the impact of conflicts of interest. Public health agencies and research laboratories alike*

need to open their records to the public. Investigators should document the veracity and provenance of data from which analyses are conducted and conclusions drawn, so that analyses are reproducible by independent experts.”³³

Several additional categories of circumstantial evidence should have been added to the preceding eight. The most prominent is the degree of Chinese government lying regarding the Covid-19 pandemic. Two examples have been selection for consideration.

The first concerns mortality caused by SARS-CoV-2 in China. This was documented in detail in an earlier edition of *CBRNe World*,³⁴ and the conclusions reached in that paper have been corroborated by other publications.³⁵ The number of cases and deaths are suspected of being undercounted by at least an order of magnitude, and more likely two, meaning that the officially reported Chinese government figures could be as little as 1% of the actual total. In the last week of April 2020, Caixin, one of the most reliable publications in China, reported that a serological study had been carried out in Wuhan on 11,000 inhabitants. Extrapolating from its results, which showed that 5% to 6% of the sample of 11,000 persons carried antibodies for SARS-CoV-2, Caixin estimated that 500,000 people in the city had been infected. This was 10 times as many as officially reported by the Chinese government. The Caixin publication was quickly deleted by Chinese government censors.³⁶

The second example is quite unprecedented in Chinese diplomatic history, at least since the false allegations made by China between 1951 and 1953 that the US had used biological weapons during the Korean War.³⁷ On 12 March 2020, Chinese foreign ministry spokesperson Zhao Lijian posted a link on social media to an article published by Global Research, an organisation that has been identified as a proxy of the Russian intelligence agency, the SVR. This article blamed the US for the origins of the coronavirus: “The only possibility for the origination [of the COVID-2019 virus] would be the US.... And it may therefore be true that

the original source of the Covid-19 virus was the US military bio-warfare lab at Fort Detrick.”³⁸

Chinese embassies in South Africa, Maldives, Botswana, Suriname, Iran, France, Philippines, Jordan, Chad, Uganda, Pakistan, Cameroon and Germany reposted the item, followed by a further 12,000 reposts. Zero Hedge, another Russian BW disinformation proxy site, then wrote about Zhao’s post.³⁹ The head of the Chinese foreign ministry’s department of information, Hua Chunying, followed suit, as did a third Chinese foreign ministry spokesperson, Geng Shuang.⁴⁰ In a renewed round, Geng’s remarks were also distributed by various Chinese ambassadors. This set of interactions marked the initial collaboration between entities of the Chinese government and Russian proxy disinformation outlets. Zhao followed with several tweets of his own to some half million Twitter followers republished by *China Daily Online*, *People’s Daily Online*, and *Global Times*. The latter is the English language tabloid daily produced by *People’s Daily*, the major Chinese government newspaper.

This Chinese disinformation and propaganda campaign displayed several remarkable aspects. First, it was adapted from a Russian government-directed Covid-19 disinformation campaign that began in the week of 21-26 January 2020, blaming the US for the origin of the SARS-CoV-2 virus.⁴¹ The Russian campaign tapered off in mid-2020, however, while the Chinese one continued unabated with increasing mendacity up to the time of writing (the first week of June 2021) with a very sharp spurt towards the end of May, while the World Health Assembly was in session. After 13 months’ duration, there is little indication it will stop. With only the rarest of exceptions, the Russian government campaign was carried out via proxy media outlets. In contrast, the Chinese campaign has been delivered by senior Chinese government spokespeople at press conferences and published in major Chinese government newspapers. The same charges are repeated over and over:

- That the SARS virus was produced at and leaked from “Fort Detrick”, pointing out that “Fort Detrick” was closed for several months beginning in August 2019. The Chinese actually mean the US Army Medical Research Institute of Infectious Diseases (USAMRIID), and there is nothing secret about its closure, which was due to inadequate and faulty waste water treatment and was extensively reported in the press.⁴² Fort Detrick, which also houses research facilities of the US National Cancer Institute, Environmental Protection Agency and the Department of Homeland Security, was never closed. Nonetheless, it led to a full year of Chinese hectoring that the US should “open-up Fort Detrick”, not “cover-up” and be “as transparent” as China by inviting international inspection of USAMRIID. In fact, USAMRIID has been “open” since a Russian deputy minister visited in 1971. Scientific researchers from Nato nations regularly work at USAMRIID and visitors from eastern European countries were frequent in the early 1990s. Researchers from China have even worked at USAMRIID. Chinese intelligence agencies know all this, of course, which adds a particularly nasty quality to an aggressive Chinese disinformation campaign.
- Another charge was presented by the China Global Television Network, which claimed that US military athletes brought the SARS-CoV-2 virus to Wuhan during the international military games held there in October 2019.⁴³
- Chinese foreign ministry spokespeople have also featured a fiction adopted from Russian intelligence agency disinformation releases, that the US maintains 200 bio-weapon laboratories around the world.⁴⁴ They also alleged that these facilities were investigating “ethnic weapons”. Two years of research has failed to identify “200 US bio labs worldwide,” unless this refers to every medical clinic at US overseas bases.
- The Chinese charges even reintroduced fraudulent Korean war bio-weapon allegations and claimed that the second world war Japanese Unit 731 was connected to “Fort Detrick”.

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The peaks in Chinese disinformation occurred just before and during the WHO mission to China in January-March 2021, and during the last week of May 2021 during the World Health Assembly. The Chinese disinformation campaign itself is circumstantial evidence because a government that is not involved in a massive cover-up of some kind would not indulging in such behaviour.

During January 2020, the WHO representative in China, Dr Gauden Galea, complained publicly that his organisation was not getting the information from China that it needed. On 19 January, a team from China's National Health Commission, including Dr Zhong Nanshan, went to Wuhan. It was obvious that the local medical personnel had been tutored to provide only very limited information, however, the team finally learned that one patient had infected 14 members of the medical staff. On 20 January when China's Xinhua press agency reported person to person transmission for the first time it mentioned two cases in far off Guangdong province in southeast China,⁴⁵ and not those in Wuhan.

The Chinese team's visit preceded that of a small, WHO team on 21-22 January. Although the WHO team visited two laboratories, the Wuhan Institute of Virology (WIV)⁴⁶ was not included. On 28 January the WHO's director general, Tedros Ghebreyesus, visited Xi Jinping, and was advised by Xi that: "The Chinese government has released information about the epidemic in a timely, open, transparent and responsible manner, responded to concerns of all sides actively, and enhanced cooperation with the international community."⁴⁷ The WHO announced that: "The two sides agreed that WHO will send international experts to visit China as soon as possible to work with Chinese counterparts on increasing understanding of the outbreak to guide global response efforts."⁴⁸ But on 1 May 2020, Dr Galen stated: "We know that some national investigation is happening but at this stage we have not been invited to join." He added: "The WHO had not been able to investigate logs from the two

laboratories working with viruses in Wuhan, the Wuhan Institute of Virology and the Wuhan CDC." Despite WHO staff assuming that it was a naturally occurring virus, not a manufactured one, "the laboratory logs would need to be part of any full report, any full look at the story of the origins."⁴⁹

In anticipation of the World Health Assembly (WHA) meeting in mid May 2020, the Australian government had been gathering support for a proposal to initiate an "impartial, independent, and comprehensive evaluation" of the origins and early responses to the coronavirus pandemic "at the earliest appropriate moment" and in consultation with WHO member states. Despite support for the draft resolution from 122 countries, China's opposition was sharp. China attacked the proposal as a "political manoeuvre" and threatened to impose tariffs on Australian barley imports. China succeeded in defeating the draft Australian resolution and the WHA passed WHA-73.1 instead, requesting the WHO director general "to identify the zoonotic source of the virus and the route of introduction to the human population, including the possible role of intermediate hosts."⁵⁰ Nonetheless, China subsequently made clear its displeasure at Australia's temerity by imposing additional tariffs on Australian meat imports, as well as those from New Zealand.

Between 10 July and 3 August 2020 the terms of reference (ToR) of the global study of the origins of SARS-CoV-2 were negotiated in Beijing without any international oversight by a team of two individuals that the WHO had dispatched to China. The WHO's governing board, with members from 34 countries, was not consulted. The primary negotiator was Dr Peter Ben Embarek, a Danish food scientist on the WHO's staff who had previously worked for the organisation in China.⁵¹ The ToR are dated 31 July 2020, and were finalised on 2 August. China obtained the word "global" in the title, as well as the following provisions:

- The mandate was highly selective and restrictive. The opening paragraph of the ToR states that Covid-19 is an

"emerging zoonotic disease," ie of natural origin.

- The report would be a joint report arrived at by consensus between Chinese scientists and officials and an "independent" team of scientists representing the WHO. The only WHO staff member on the "independent" team would subsequently turn out to be Dr Embarek.
- All field research and data gathering was to be done by Chinese scientists. The group representing the WHO would simply review the data so gathered and attempt to make an assessment. It would see what China choose to show, nothing more.
- China would have veto power over the selection of the members of the "independent" / WHO team.
- The ToR did not acknowledge the possibility of any contribution to the outbreak of the pandemic by any virology institute in Wuhan, did not name any institutes, and provided for only the most minimal and cursory access to any of them.
- The ToR also did not provide for complete access to relevant Chinese databases.
- The ToR already included explicit reference to searching for possible sources of the Covid-19 virus outside China, suggesting that "global original tracing work" could also take place "elsewhere" after what would later be formally referred to as the "China Part." "Phase 2" would involve studies in areas other than China.

On 17 August the WHO requested names for members of the prospective team that would visit Wuhan. The US government proposed three scientists but all three were rejected, however, Dr Peter Daszak, director of the New York based EcoHealth Alliance, who had volunteered himself, was accepted despite his 15 year association with the WIV. The director of Germany's centre for disease control (CDC), the Robert Koch Institute, was also rejected. After a further delay, the ToR were published on the WHO website on 5 November 2020. During Dr Embarek's July-August mission to Beijing, he reported: "It appears that little had been done in

terms of epidemiological investigations around Wuhan since January 2020. The data presented orally gave a few more details beyond what was presented at the emergency committee meetings in January 2020. No PowerPoint presentations were made and no documents were shared.”⁵²

Once the study existed, the WHO team began conference call discussions with their Chinese counterparts in October 2020. The WHO team spent 14 January to 10 February in China. For the first two weeks, the Chinese authorities required them to quarantine in their hotel rooms, while the conference call deliberations with their Chinese counterparts continued. They then spent two weeks visiting various facilities in Wuhan, which included a perfunctory three hour visit to WIV. During that visit they examined no records and were only provided with *ex-cathedra* statements without any supporting evidence. When the question of databases that the WIV had taken offline in September 2019 arose, Dr Daszak informed his team colleagues that there was no need to see them. He knew what was in them and it was only “a spread sheet” of no significance.

The Chinese authorities held a press conference to pre-empted the release of the trip report, the most significant aspect of which was the presentation of the joint group’s consensus evaluation. It listed four possible origins for the virus:

- Introduction through an intermediate host - very likely.
- Direct zoonotic spillover - possible to likely.
- Introduction through cold/food chain products - possible.
- Introduction through a laboratory incident - extremely unlikely.⁵³

It was, of course, striking that although the material the Chinese had prepared for evaluation contained absolutely no evidence to support any of the four alternatives, the first was pronounced very likely while the laboratory incident was considered very unlikely. This is aside from the fact that there was no serious examination of the latter. When the full report was

eventually released in March 2021, all information concerning the WIV was contained in a four page annex (D7). Several of the WHO team subsequently commented that they were not prepared to examine that question. No evidence exists to support the cold/food chain alternative as a mechanism for the origin of the virus, or its initial appearance in China. It is discounted by experts globally but pushed by China as an obvious diversion.

Chinese commentaries about the exercise repeatedly emphasised terms such as “transparency,” “open,” “scientific,” “together”, and “deep discussions” - in most cases, the opposite of what transpired.⁵⁴ China castigated any comment or reservations by US or EU officials as “politicisation” and pressure on the WHO. In an interview, Dr Embarek explained: “The politics was always in the room with us on the other side of the table. We had anywhere between 30 and 60 Chinese colleagues, and a large number of them were neither scientists, nor from the public health sector. We know there was huge scrutiny on the scientific group from the other sectors. So the politics were there, constantly. We were not naïve, I was not naïve about the political environment in which we tried to operate and, let’s face it, that our Chinese counterparts were operating under.”⁵⁵

When the WHO report was released, WHO’s director general Tedros Ghebreyesus said: “Although the team has concluded that a laboratory leak is the least likely hypothesis, this requires further investigation. I do not believe that this assessment was extensive enough. Further data and studies will be needed to reach more robust conclusions. ...Let me say clearly that as far as WHO is concerned all hypotheses remain on the table. This report is a very important beginning, but it is not the end. We have not yet found the source of the virus, and we must continue to follow the science and leave no stone unturned as we do.”⁵⁶

Mr Ghebreyesus also said: “In my discussions with the team, they expressed the difficulties they encountered in accessing raw data. I expect future collaborative studies to

include more timely and comprehensive data sharing.”⁵⁷

The joint China-WHO report was widely criticised in the west, both by governments and the media, as having been controlled and constrained by China, for its severe limitations and absence of critical data, and for having been compromised.⁵⁸ Dr. Della-Porta, who headed the WHO team that investigated the LAI incidents in Singapore and Taiwan in 2004, commented that Singapore had provided all the primary data to his team and that: “It was absolutely open, which is quite different I’d say from the group that recently was in Wuhan.”⁵⁹

A particular failing was the inability of the Chinese researchers to locate the postulated intermediate host for SARS-CoV-2.⁶⁰ The report also contained factual errors but space limitations make it impossible to itemise them here.⁶¹ In March and April 2021, three Republican members of Congress presented 10 page lists of extremely precise and detailed questions to Dr Collins, the director of the National Institutes of Health (NIH), and to Dr Daszek, regarding the bat coronavirus research taking place at the WIV.⁶²

On 14 January the US Department of State released a short fact sheet concerning the WIV, which listed three points, the first of which was that “several researchers inside the WIV became sick in autumn 2019, before the first identified case of the outbreak, with symptoms consistent with both Covid-19 and common seasonal illnesses.” It was subsequently reported that the three individuals required hospitalisation. The second was that “the US has determined that WIV has collaborated on publications and secret projects with China’s military. The WIV has engaged in classified research, including laboratory animal experiments, on behalf of the Chinese military since at least 2017.”⁶³

Following the release of the joint China-WHO report, the US and 13 other nations made a statement recognising the severe shortcomings of the study process and calling for “a transparent and independent analysis and evaluation, free from interference

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and undue influence, of the origins of the Covid-19 pandemic... It is critical for independent experts to have full access to all pertinent human, animal and environmental data, research, and personnel involved in the early stages of the outbreak relevant to determining how this pandemic emerged.”⁶⁴ EU member states released a very similar comment.

In anticipation of the 2021 WHA meeting in the late May 2021, it was reported that: “The EU has drafted a proposal to give the WHO powers to rapidly and independently investigate disease outbreaks, bypassing the kind of delays the organisation faced from China in trying to investigate the coronavirus outbreak. But the proposal has run into strong resistance from a number of states, including China and Russia.”⁶⁵ Once the assembly was in session, nothing further was heard about this initiative.

The US government sent three senior officials to the WHA to urge a renewed and independent investigation. US secretary of health and human services, Javier Becerra, said: “Phase two of the Covid origins study must be launched with terms of reference that are transparent, science-based and give international experts the independence to fully assess the source of the virus and the early days of the outbreak.”⁶⁶

A Chinese delegate responded that China’s part of the WHO work was done: “Currently [in] the WHO-convened origins tracing study, China’s part has been completed. China supports the scientists to conduct a global origin tracing cooperation. We call on all parties to adopt an open and transparent attitude to cooperate with the WHO in origins tracing.”⁶⁷ There would seem to be little likelihood that the WHA will produce any new resolution proposing a

“Phase 2” investigation. China won the battle at the 2020 WHA and is set to do so again in 2021. The response of the Biden administration was quick⁶⁸; it ordered an interagency report on the origin of the SARS-CoV-2 virus to be delivered and made public within 90 days.⁶⁹ The US Senate concurred with a sense of the Senate resolution stating: “Should such a full investigation not be authorised by the 2021 WHA, then the US government should immediately begin planning a comprehensive and data driven investigation into the Covid-19 pandemic origins, in concert with willing partner governments and experts around the world.”⁷⁰

A final word

As this was being written in June 2021, the *nominal* global figure for deaths caused by SARS-CoV-2 is over 3.5m and those infected perhaps 200m. This suggests a mortality of around 2%, however, these figures are almost certainly inaccurate. On 21 May 2021, the assistant director of the WHO’s data division, Dr Samira Asma, stated: “As many as six to eight million people have died from the coronavirus and its effects - or two to three times the 3.4m deaths that have been officially tallied by countries worldwide.”⁷¹ Asymptomatic infection is estimated to be 40% to 60% and with global infection possibly 30% and a fatality rate of around 0.75%, the actual figures could be substantially higher than Dr Asma’s estimate⁷².

In 2002-3, the Sars pathogen had a substantial mortality rate but it did not spread easily from person to person. It was possible to contain it and then eradicate it by strict containment policies. In 2019-21, the new Sars pathogen had a much lower mortality rate but spread very easily from person to person, and it therefore infected far

greater numbers of people. As of 12 October 2020, the global pandemic has been estimated to have cost €25tr, or \$29.4tr. At present it seems that the pandemic will last several more years, and the longer it goes on, the greater the likelihood that new variants will appear. Several have already emerged, increasing the risk that one or more of them will be able to evade the currently available vaccines.

The world was forewarned after the 2002-2003 SARS-CoV pandemic in China. Massive global virus collection efforts were initiated, and thousands of new viruses were gathered. Much of that field sampling took place in China. Virologists in many countries also began gain of function research with bat coronaviruses within four to five years of the end of that pandemic.

When the SARs-CoV-2 outbreak began in China in 2019, the Chinese government behaved essentially as it had in 2002-3, but far worse. Initial information to the WHO was inaccurate and delayed, and the government initiated a massive campaign of denial, cover-up, diversions, delay and disinformation⁷³. A joint Chinese and “independent” team of scientists whose selection followed Chinese government winnowing and who served nominally on behalf of the WHO was not allowed into Wuhan until 13 months had passed. The report that was produced was not a true investigation and was grievously flawed. It was written on the basis of a two-week rigorously supervised tour in the city of Wuhan, during which the team reviewed information gathered by Chinese scientists supervised by Chinese government officials. There is every reason to assume that this catastrophe will be repeated should a third SARS pandemic ever break out in China in the future.

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