Unprecedented: An in depth look into attitudes to China across 2020 alongside an investigation into how respondents make decisions at surveys

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# The layout of this research project and administrative information:

Section 1: Contains the abstract, literature review, and other background writing necessary to outline the project.

Section 2: Approaches the question "to what extent have British attitudes to China been impacted by the Covid-19 pandemic?"

Section 3: Approaches the question "is the trend in attitudes to the PRC formed by the pandemic a result of subconscious or conscious bias?"

Section 4: Contains a project summary and final conclusions.

Bibliography:

Phrases/shortened words/acronyms used:

PRC: People's Republic of China

The pandemic: The COVID-19 Pandemic which commenced in 2020 in Wuhan, PRC

## Section 1:

#### Abstract:

The Covid-19 Pandemic has been extensively shown to have contributed to declining attitudes to the PRC. Various organisations, including the Pew Research Institute and TUC of Wales, have reported how the coronavirus pandemic has led to increases in such unfavourable attitudes. However, no studies have specifically examined whether the trend is a result of conscious bias regarding the pandemic, whereby citizens actively view the PRC more negatively due to their handling of the pandemic, or subconscious bias, whereby citizens view the PRC more negatively due to a broader sentiment change influenced by undertones and subliminal messaging in society (caused by the PRCs handling of Covid) as opposed to active views regarding the PRC and the pandemic. Thus, in this study I aim to not only examine how British attitudes to China have been impacted by the Coronavirus pandemic, but also determine whether the trend in attitudes seen is a result of subconscious bias following the pandemic, or conscious bias regarding the pandemic. Through unique methods such as precise analysis of daily new COVID-19 cases alongside attitude figures, as well as the designing of unique fieldwork to determine the biases prevalent, I have enabled the research into the pandemic's impact on global attitudes to China to be breadthened, adding new dimensions to debate on the topic. Overall, I conclude that the United Kingdom saw, as with other Western nations, a marked increase in negative sentiment to the PRC in 2020. Further investigation then reveals an undeniable link between daily new COVID-19

cases and negative attitudes, with greater levels of negative attitudes to the PRC occurring in periods of higher infection rates. With regards to biases, I show that subconscious bias was the primary driver of negative attitudes to the PRC as a result of the pandemic, with individuals likely acting upon subliminal messages and undertones they are exposed to, such as speeches by political figures criticising the PRC, rather than them actively recognising the PRC's actions in the pandemic and forming opinions from such recognition.

#### Literature review:

There has been a large variety of literature examining how American attitudes to the PRC have changed as a result of the pandemic, with studies such as Pew's 2020 report<sup>1</sup> breaking down the research into demographics, noting that older generations saw a greater jump in negative attitudes to the PRC – an interesting observation given Moonshot's 2020 report<sup>2</sup> suggesting that the social media space (used primarily by younger generations) had been rife with "conspiracy theories, hate speech and incitements to violence...related to Covid-19". Moonshot's work represented a refreshing take on attitude research, work of a manner similar to that of Cook, Huang, and Xie (2021)<sup>3</sup>, who crucially mapped tweets mentioning China and COVID-19 over attitudes, allowing for direct comparison of trends. The TUC of Wales<sup>4</sup> also noted the prevalence of "racist and violent hashtags" against Chinese people during 2020 utilising Moonshot data – confirming the popularity of social media analysis for attitudes. The TUC of Wales report also offered a fascinating insight to developments closer to home, noting how some right wing politicians in the UK had adopted China-critical stances as a result of the pandemic, perhaps mirroring such sentiment changes of those they hope to represent. Further work regarding the UK comes from YouGov<sup>5</sup>, whose report asked questions focusing specifically on the pandemic, however there has been little in depth analysis which broadens the literature on this topic regarding attitudes in the UK – a gap I aim to fill.

#### How it contributes to literature:

As detailed above, existing studies are for the most part cantered around attitudes of Americans to China – a justified focus, given the China-US relationship in the 21<sup>st</sup> Century is perhaps one of the most studies foreign policy areas. However, the UK-China relationship is increasingly relevant, particularly economically, with governments having to address China at increasing frequency – thus, my research here helps extend studies of international attitudes and relations to the UK, adding greater depth to the ever-expanding field of international relations. Further to this, no studies of attitudes to China throughout 2020 and as a result of the Coronavirus pandemic have gone beyond the standard theories of international relations – this study revolutionises this area by extending this research into

<sup>&</sup>lt;sup>1</sup> https://www.pewresearch.org/global/wp-content/uploads/sites/2/2020/07/PG\_20.07.30\_U.S.-Views-China\_final.pdf

<sup>&</sup>lt;sup>2</sup> https://moonshotteam.com/resource/covid-19-conspiracy-theories-hate-speech-and-incitements-to-violence-on-twitter/

<sup>&</sup>lt;sup>3</sup> https://github.com/junminghuang/covid-impacts-attitude-toward-china

<sup>&</sup>lt;sup>4</sup> https://www.tuc.org.uk/blogs/i-am-not-virus-anti-chinese-racism-and-coronavirus

<sup>&</sup>lt;sup>5</sup> https://yougov.co.uk/topics/international/articles-reports/2020/08/02/western-attitudes-china-arehardening

sociological concepts of bias, thus inextricably linking the individual citizen to research – allowing for greater relevance and "real world" application of such research for the average citizen. By exploring global attitudes in relation to subconscious and conscious biases, I understand better how attitudes are formed and may be changed. Overall, my research here both complements and builds upon existing literature to further and broaden this field – research I hope may lead to more informed decisions being taken by entities in the international space, as well as allow academics to observe the topic through a wider lens.

#### Hypotheses:

H1: British attitudes to the PRC soured significantly in 2020.

H2: The COVID-19 pandemic was the primary influencer of trends in attitudes to the PRC in 2020.

H3: British attitudes to the PRC were directly related to the pandemic's prevalence.

H4: The trend in attitudes to the PRC as a result of the pandemic will be driven mainly by conscious bias.

### Section 2:

To what extent have British attitudes to China been impacted by the Covid-19 pandemic?

#### **Brief overview:**

Here I use data to determine whether any trend in attitudes across the period where the Coronavirus pandemic was most prevalent<sup>6</sup> (2020-2022) was a result of the Coronavirus pandemic, and the extent to which the trend can be directly attributed to the pandemic. Further to this, I examine relationships between infection rates and attitudes to the PRC in more detailed analysis to help establish a greater certainty of whether trends can be attributed to the pandemic.

#### Attitudes to the PRC in 2020:

<u>Data:</u>

<sup>&</sup>lt;sup>6</sup> Prevalent in the sense of infection rates, media coverage, and general public concern

Somewhat surprisingly, with the resources at my disposal I could only source 2 surveys aimed at tracking British attitudes to China<sup>7</sup> which covered the pandemic years. The first was from the Pew Research Institute<sup>8</sup>, and the second from YouGov<sup>9</sup>.

The initial data tracked from 2019 to 2020 can be observed below in Fig1 and Fig2:

Survey	% v.	% somewhat	DK/refused	% somewhat	% v.
date given:	unfavourable	unfavourable		favourable	favourable
Summer	35	39	3	19	3
2020					
Spring	16	39	7	32	6
2019					

Fig 1 – Pew Research Institute:

% decrease in total favourable attitudes from Spring 2019 to Summer 2020: 16%

% increase in total unfavourable attitudes from Spring 2019 to Summer 2020: 19%

Fig 2 - YouGov:

Survey date	%	DK	% favourable
given:	unfavourable		
10/11/2020	69	16	15
11/08/2020	73	16	11
22/05/2020	70	15	14
05/02/2020	59	17	23
11/11/2019	55	21	23
15/08/2019	61	17	22
13/05/2019	51	20	30
18/02/2019	48	20	31

% decrease in total favourable attitudes from 13/05/2019 to  $11/08/2020^{10}$ : 19%

% increase in total unfavourable attitudes from 13/05/2019 to 11/08/2020: 22%

Average:

<sup>&</sup>lt;sup>7</sup> Utilising similar questions asking of "favourability" to the PRC – the most common language used in surveys asking of attitudes to a nation

<sup>&</sup>lt;sup>8</sup> https://www.pewresearch.org/global/wp-content/uploads/sites/2/2023/07/PG\_2023.07.27\_Vews-of-China\_TOPLINE.pdf

<sup>&</sup>lt;sup>9</sup> https://yougov.co.uk/topics/politics/articles-reports/2022/10/14/quarter-britons-consider-china-be-enemy-uk

<sup>&</sup>lt;sup>10</sup> These dates were chosen as they are those that most closely resemble the rough time periods the Pew study covered, allowing for rough comparison to as accurate a degree as is possible with the provided data, thus allowing us to better build a picture of the attitudes in this period.

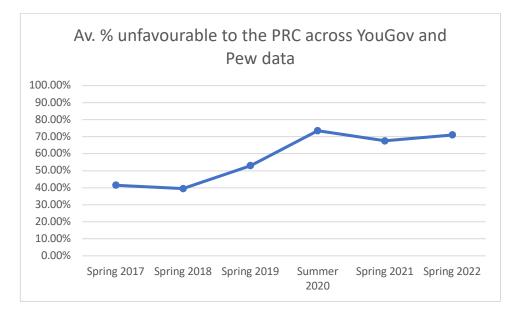
In order to benefit from both of the above surveys, I have calculated the average change in both total favourable attitudes and total unfavourable attitudes across the two surveys, the figures for which are displayed below. I utilised both datapoints displayed above from the Pew data, and selected the datapoints which were closest to the Pew date descriptors of. "Summer 2020" and "Spring 2019" for the YouGov data<sup>11</sup>:

Average % decrease in total favourable attitudes to the PRC from 2019 to 2020 utilising data from the Pew Research Institute and YouGov: 17.5%

Average % increase in total unfavourable attitudes to the PRC from 2019 to 2020 utilising data from the Pew Research Institute and YouGov: 20.5%

#### Visualising the data:

Using the same process<sup>12</sup> used to calculate the averages across the two datasets above, I created a graph (Fig 3) which plots the average % of respondents who answered "unfavourable", "somewhat unfavourable" or "very unfavourable" across both surveys when asked for their attitudes to China. For this graph I extended the dataset I used back to 2017 and forwards to 2022 to allow for better understanding of how the drop in favourable attitudes to China in 2020 relates to longer term trends in the preceding and following years of the pandemic.



#### Fig 3:

#### Analysis of data:

<sup>&</sup>lt;sup>11</sup> For convenience the datapoints used have been highlighted in the tables that constitute Fig1 and Fig2 <sup>12</sup> Here the data was taken from the Pew Research Institute as data by year, as only one datapoint per year was provided, and from YouGov it was taken from the datapoint nearest to the season quoted by Pew as when their survey took place – i.e. if for YouGov I had datapoints from May and August 2020, and the Pew datapoint was for Spring 2020, I would use the figure for May from YouGov

Initially it is clear that the year 2020 saw a jump in unfavourable attitudes to China – to the extent that when the Pew and YouGov surveys are averaged as shown above on the graph, 2020 saw the greatest jump in total unfavourable attitudes to China in the period shown above, as well as the highest point of unfavourable attitudes in the same period.

However, though there is a notable jump in unfavourable attitudes to the PRC in 2020, there also appears to be a longer term<sup>13</sup> trend. This can be seen with the % unfavourable gradually rising between Spring 2018 and Spring 2019 prior to the 2020 spike.

#### With regards to H1:

This proves H1 as being true: there was indeed a souring in British attitudes to the PRC in 2020, with a 22% increase in unfavourable attitudes to the PRC between 13/05/2019 and 11/08/2020<sup>14</sup> significant in attitude research, and certainly more than grounds to satisfy H1's wording of "significant".

#### To what extent can this trend be attributed to the pandemic?

Surveys provide some additional data as to how Britons link the pandemic (an event widely agreed to be negative) to the PRC

Britons actively attribute some blame for the pandemic to the PRC:

- YouGov (04/06/2020 15/06/2020)<sup>15</sup> conducted in Great Britain: 49% said "The Chinese Government" is "most responsible for the severity of the coronavirus pandemic".
- YouGov (04/06/2020 15/06/2020)<sup>16</sup> conducted in Great Britain: a total of 86% said that they "don't trust very much" or "don't trust at all" The Chinese Government to tell the truth about the coronavirus pandemic.
- 3) BFPG (Poll1: Feb 2020, Poll2: Apr 2020)<sup>17</sup> conducted in the UK: In their first 2020 poll on the matter (Poll1) conducted in February 2020 the BFPG found 21% of Britons held trust in China to "Act Responsibly in the World", whereas in their second 2020 poll on the same matter (Poll2) conducted in April 2020 the figure had dropped to 17%. Given that the majority of focus on Chinas actions in a global context was on how it acted with regard to the pandemic, this can be considered as some evidence that Britons viewed how the PRC faced the pandemic negatively. The counterargument that this change seen can be attributed to other issues regarding China that Britons may be considering when answering the poll such as human rights

<sup>&</sup>lt;sup>13</sup> Relative longer-term trend – by which I mean it is not simply a matter of a short term spike in 2020, but instead a seemingly gradual process over 3 years (2018,2019,2020).

<sup>&</sup>lt;sup>14</sup> Taken from the YouGov dataset utilised in this section.

<sup>&</sup>lt;sup>15</sup> https://docs.cdn.yougov.com/o90gsx3oja/TBI\_CovidGlobalImpact\_June2020\_Topline\_CLIENT.pdf

<sup>&</sup>lt;sup>16</sup> https://docs.cdn.yougov.com/o90gsx3oja/TBI\_CovidGlobalImpact\_June2020\_Topline\_CLIENT.pdf

<sup>&</sup>lt;sup>17</sup> https://bfpg.wpenginepowered.com/wp-content/uploads/2021/02/BFPG-Annual-Survey-2021.pdf

issues can be disregarded due to not fulfilling the global actions the survey is focusing on – seen in the phrasing "act responsibly in the world".

- 4) YouGov (04/06/2020 15/06/2020)<sup>18</sup> conducted in Great Britain: 24% said that since the beginning of the coronavirus pandemic their opinion of the Chinese Government had "slightly worsened", and 36% said their opinion had "significantly worsened".
- 5) Sinophone Borderlands (Sept-Oct 2020)<sup>19</sup> conducted in the UK: Utilised a word association question asking "What is the first thing that comes to your mind when China is mentioned?" responses shown in Fig 4 below where "COVID-19" was clearly the issue at the forefront of individual's minds regarding China, suggesting it would be the most prevalent issue when an individual is responding to an opinion poll, thus suggesting the pandemic was a significant contributor to the spike in attitudes to the PRC seen in 2020.

#### Fig 4:



Thus, upon first inspection it is clear that in 2020 Britons were critical of how the PRC reacted to the pandemic and did not hold trust in the PRC – two sentiments indicative of negative sentiment, thus here implying that the pandemic did considerably contribute to declining attitudes to the PRC in 2020. Further to this, survey 3 implies that the pandemic was responsible for the trend in attitudes due to its singling out of the pandemic seemingly resulting in a large proportion of respondents noting their perceptions of the PRC had soured.

However, Britons may be concerned by the PRCs other actions, thus suggesting that other issues were to blame for the hardening of attitudes to the PRC:

<sup>&</sup>lt;sup>18</sup> https://docs.cdn.yougov.com/o90gsx3oja/TBI\_CovidGlobalImpact\_June2020\_Topline\_CLIENT.pdf

<sup>&</sup>lt;sup>19</sup> https://sinofon.cz/wp-content/uploads/2021/01/UK-poll-report.pdf

- Pew (March 2021)<sup>20</sup> conducted in Australia: 59% said that "China's policies on human rights" is a "very serious problem" for Australia. Though Australia is evidently not the UK, it is similar in terms of its links to the UK, and as the survey here was not distributed to the UK in 2021, it can be used for rough gauging of what public opinion may have been in the UK. Thus, here it is probable that UK residents held a similar scepticism and concern for the PRC's approach to human rights. This however cannot be used as conclusive evidence, and strictly as a guide.
- 2) BFPG (6-7 Jan 2021)<sup>21</sup> conducted in the UK: 40% supported the UK "Challenging China on its human rights record"
- 3) Sinophone Borderlands (Sept-Oct 2020)<sup>22</sup> conducted in the UK: Utilised a word association question asking "What is the first thing that comes to your mind when China is mentioned?" responses shown in Fig 4 above, where while COVID-19 was the word most associated with China, the appearance of "Uyghurs", "human rights issues", "secretive", "controlling", "animal rights issues", "authoritarianism", "oppression", "dictatorship", "corruption", "Hong Kong", and "lack of freedom" all suggest an underlying concern at a multitude of issues which are perceived to plague the PRC aside from the pandemic.
- 4) Sinophone Borderlands (Sept-Oct 2020)<sup>23</sup> conducted in the UK: Asked respondents for their "Perceptions of certain China-related issues" (seen in Fig 5 below), of which key issues to consider here are: Chinese military power, China's impact on global environment, and China's influence on democracy in other countries with the negative sentiment shown again reinforcing the idea that Britons were concerned by other issues regarding China to a reasonable degree aside from the pandemic in 2020.

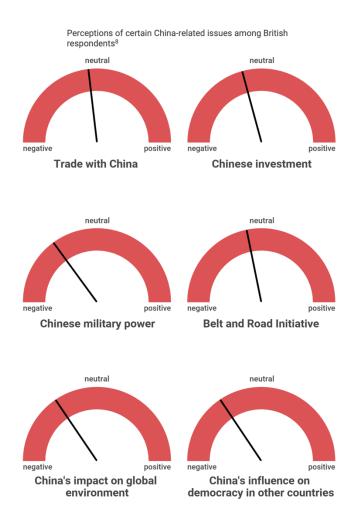
Fig 5:

<sup>&</sup>lt;sup>20</sup> https://www.pewresearch.org/global/wp-content/uploads/sites/2/2022/06/PG\_2022.06.29\_views-of-china\_TOPLINE.pdf

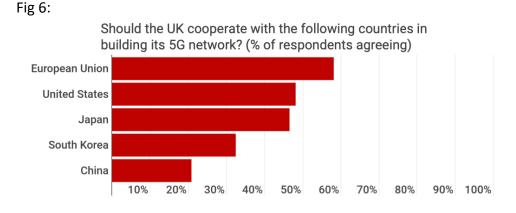
<sup>&</sup>lt;sup>21</sup> https://bfpg.wpenginepowered.com/wp-content/uploads/2021/02/BFPG-Annual-Survey-2021.pdf

<sup>&</sup>lt;sup>22</sup> https://sinofon.cz/wp-content/uploads/2021/01/UK-poll-report.pdf

<sup>&</sup>lt;sup>23</sup> https://sinofon.cz/wp-content/uploads/2021/01/UK-poll-report.pdf



5) Sinophone Borderlands (Sept-Oct 2020)<sup>24</sup> conducted in the UK: Asked respondents if the UK should cooperate with China to advance 5G in the UK, with the results (Fig 6) showing the complexity and depth of suspicion and concern towards China with negative sentiment extending beyond the issues of human rights and military power.



6) Pew Research Institute (Poll1: Spring 2018, Poll2: Spring 2020) conducted in the US: In Spring 2018 (Poll1) 49% of US respondents stated that "China's policies on human rights" were a "very serious" problem, whereas in Spring 2020 (Poll2) the figure had

<sup>&</sup>lt;sup>24</sup> https://sinofon.cz/wp-content/uploads/2021/01/UK-poll-report.pdf

increased to 57% - thus giving greater validity to the argument that a portion of the spike in negative attitudes to the PRC (not just high levels of negative attitudes) was a result of non-pandemic concerns. I have shown this US-fielded survey as no such survey was available for the UK, and due to respondents in each nation holding roughly similar attitudes towards the PRC I felt it could be used for a guide to Western attitudes in general which may help the debate here - though it cannot be used as conclusive evidence.

Thus, here it seems that while the pandemic was likely the major cause of negative attitudes to the PRC in 2020, there were a number of underlying issues which catalysed such sentiment. However, it must be understood that many of these issues are not "new" in 2020 in the way the pandemic was, thus suggesting that much of these other concerns Britons hold regarding China were simply party to the rough<sup>25</sup>baseline from which a spike was observed in 2020.

#### Trend matching:

Though such numbers of surveys as referenced above are useful in providing a rough idea, I devised a method to attempt to determine a more conclusive link between the pandemic and negative attitudes to the PRC by comparing and overlaying infection rate data with attitude data provided by YouGov – possible due to YouGov surveying on 4 occasions per year instead of the expected 1 for the years I examined.

It is clear that public opinion on the pandemic was influenced heavily by social media and news on the situation<sup>26</sup>. Given that the majority of reporting in the period was coverage of infection rates, it can be concluded that infection rate changes contributed to the nature of public opinion during the pandemic. Thus, overlaying specific data on attitudes to the PRC in 2020/21 in the UK over infection rate data presents itself as a compelling method to determine correlation and thus, through the logic outlined above, possible causation.

The data used:

Attitude data: YouGov<sup>27</sup>

Infection data: Ourworldindata<sup>28</sup>

Note: Infection data provided by Ourworldindata is a 7-day rolling average of daily new confirmed COVID-19 cases. Ourworldindata stresses that "Due to limited testing, the number of confirmed cases is lower than the true number of infections."

<sup>&</sup>lt;sup>25</sup> Rough is used here in the sense that no scientific (no deviation) baseline was present, merely a period of no significant jump or fall in negative attitudes

<sup>&</sup>lt;sup>26</sup> https://moonshotteam.com/resource/covid-19-conspiracy-theories-hate-speech-and-incitements-to-violence-on-twitter/

<sup>&</sup>lt;sup>27</sup> https://yougov.co.uk/topics/politics/articles-reports/2022/10/14/quarter-britons-consider-china-be-enemy-uk

<sup>&</sup>lt;sup>28</sup> https://ourworldindata.org/coronavirus/country/united-kingdom

Initially, I will examine data from 2020 to see if immediate observations can be made.

Fig 7: Ourworldindata "Daily new confirmed COVID-19 cases" (UK) between the dates 6/2/2020 and  $10/11/2020^{29}$ :

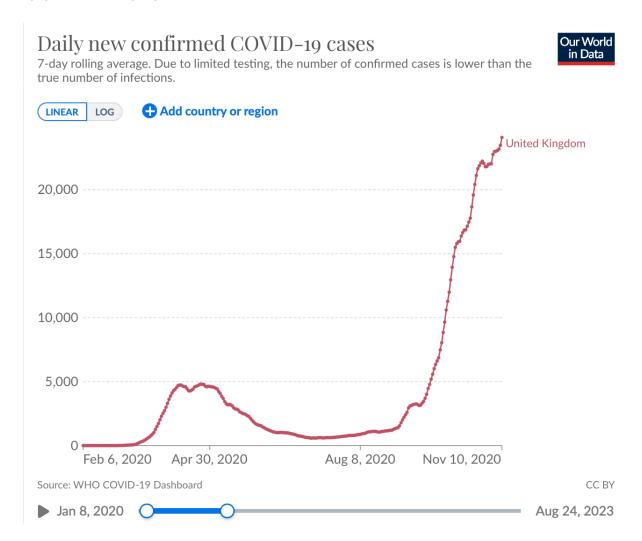
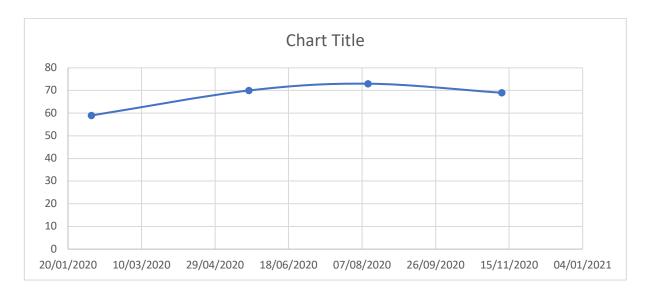


Fig 8: YouGov % of respondents who expressed they had an "unfavourable" view of China (GB) (4 data points recorded, the first being on 5/2/2020 and the last on 10/11/2020):

<sup>&</sup>lt;sup>29</sup> Note: we selected the nearest possible dates as possible to the earliest and latest polls of the 4 YouGov polls we are comparing this data to – with the one discrepancy being the earliest YouGov poll was conducted on the 5<sup>th</sup> of February 2020, and the nearest date to this we could observe data for on the infection rate data was the 6<sup>th</sup> of February 2020. This made no difference to our conclusions due to the incredibly low levels of infection in the early periods of the data.



#### Fig 9: Side-by-side comparison of data:

Date:	YouGov % unfavourable to PRC	Daily new confirmed COVID- 19 cases (7-day rolling average)
05/02/2020	59	2.86 (data for 06/02/2020) <sup>30</sup>
22/05/2020	70	2,491.71
11/08/2020	73	947.43
10/11/2020	69	24,089.57

Initially there would seem to be a reverse correlation to what one might expect between infections per day in the UK and attitudes to the PRC in the UK within this time period, with unfavourable attitudes seen in the 10/11/2020 YouGov poll dropping from the previous datapoint, despite this point marking the highest ever infections per day of the time period we have isolated. Further observations show that excluding the datapoint 05/02/2020 (when public awareness and commotion over the Coronavirus was significantly reduced<sup>31</sup>) the higher the daily new confirmed COVID-19 cases, the lower the negative sentiment shown towards the PRC. As previously stated, this is the reverse of what would be expected.

However, I felt that perhaps there was an incidence of delay – where the trend in negative attitudes did indeed correspond to infection rates, however the poll data seemed to be almost acting as if respondents were looking at infection data a couple of months earlier.

Therefore, I re-evaluated the data by comparing infection rates in 2021-2022 to attitudes to the PRC in this period, as this would not only give me a greater dataset to compare, with a higher number of fluctuations to line up across the two graphs, but would also resolve fears that attitude data from 2020 – very early in the pandemic – would be skewed slightly by any panic and potential media manipulation of the event which may have resulted due to the unprecedented nature of COVID-19. Though of course panic and such reactions to an

<sup>&</sup>lt;sup>30</sup> See footnote 6

<sup>&</sup>lt;sup>31</sup> <u>https://crisisnlp.qcri.org/covid19</u> - shows comparative low numbers of tweets regarding the coronavirus in February 2020 compared to later in 2020

unprecedented event must be considered as valid when reflected in attitude data, the aim of our trend comparison here is simply to form an undeniable link between the pandemic and changing attitudes to the PRC – an experiment for which we seek individuals able to rationally consider the pandemic without any interfering "shock factor".

Fig 10: Ourworldindata "Daily new confirmed COVID-19 cases" (UK) between the dates 17/02/2021 and 05/08/2022:

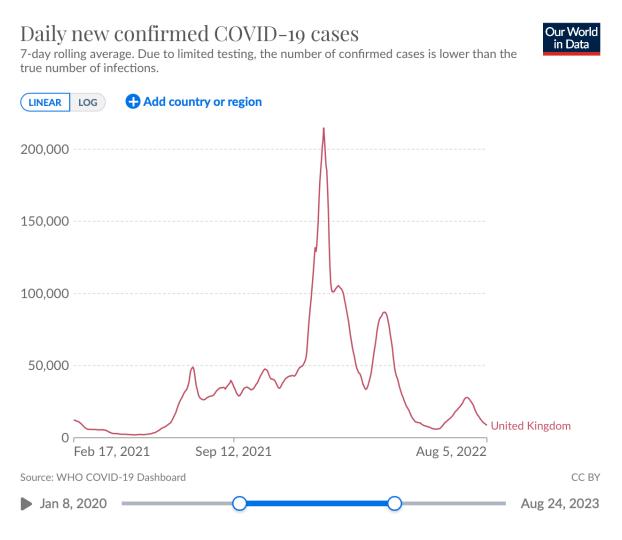
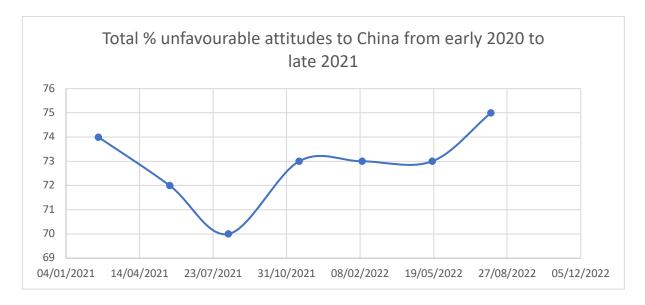


Fig 11: YouGov % of respondents who expressed they had an "unfavourable" view of China (GB) (8 data points recorded, the first being on 17/02/2021 and the last on 05/08/2022):



#### Fig 12: Side by side comparison of data:

Date:	YouGov % unfavourable to PRC	Daily new confirmed COVID- 19 cases (7-day rolling average)
17/02/2021	74	12,371.57
25/05/2021	72	2,527.57
13/08/2021	70	28,878.86
17/11/2021	73	40,473.57
11/02/2022	73	66,178.29
17/05/2022	73	8,264.57
05/08/2022	75	8,706.57

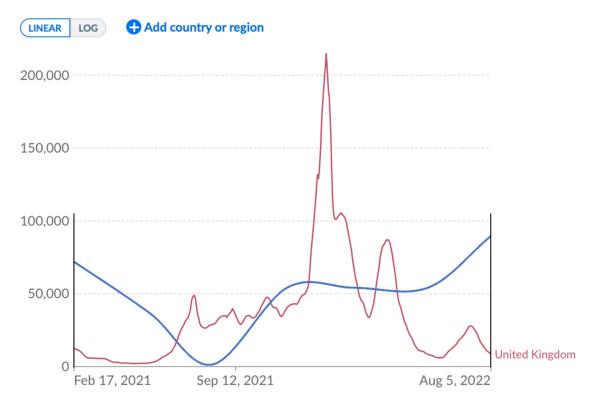
My immediate thought here was to overlay the two graphs, aligning dates, given the greater visibility of changes in public opinion and greater dataset. The result can be seen below, with the line for the total % unfavourable attitudes to the PRC from early 2020 to late 2021 shown in blue, and the line for the daily new confirmed COVID-19 cases shown in red.

Fig 13:

## Daily new confirmed COVID-19 cases



7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



This at first glance presents a similar paradox as with the 2020 data comparison – with it seeming that at the lowest point of unfavourable sentiment towards the PRC there was a spike in daily infections.

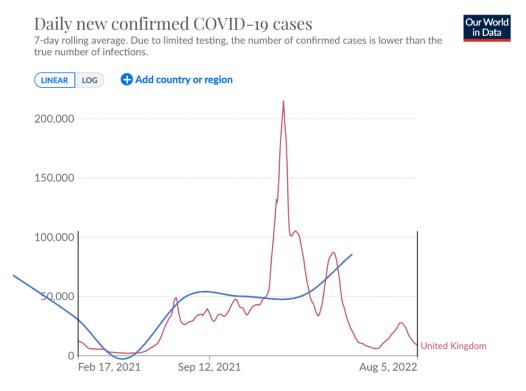
However, this paradox is quickly solved here thanks in part to the greater dataset considered and greater variability of the public opinion compared to the data for 2020, which allows for greater visibility and understanding of trends. The solution is simple; when a respondent is considering how they will answer an opinion poll, they consider information at their disposal, and will often prefer basing a response from complete data rather than incomplete data as patterns are more visible – with pattern recognition linked to intuition<sup>32</sup> (the likely way by which respondents select an answer). Therefore, it can be assumed that one would consider<sup>33</sup> complete past trends when answering such as opinion poll as utilised here – a reasonable assumption given the availability of infection data as graphs clearly showing peaks and troughs during the pandemic. As in the comparison of infection data to attitudes to the PRC from 2021 to 2022 the attitudes line seems slightly offset to what would be expected (i.e. the trend is what one would expect should the line be shifted back a little – see Fig 14) it can be concluded that in fact the pandemic's changes in daily new confirmed

<sup>&</sup>lt;sup>32</sup> <u>https://www.harvardbusiness.org/data-and-intuition-good-decisions-need-both/</u> "at its best, intuition is a powerful form of pattern recognition"

<sup>&</sup>lt;sup>33</sup> Either subconsciously or consciously

cases in the UK had a delayed impact on attitudes towards the PRC due to the consideration of past data, thus meaning there was a direct relationship between daily new confirmed COVID-19 cases and negative attitudes to the PRC. The repeated occurrences of such a trend<sup>34</sup> again evidence strengthening the claim. If further evidence is needed, one might observe the YouGov polled figure of 74% respondents viewing the PRC as unfavourable on 17/02/2021, and though the data for daily new confirmed COVID-19 cases prior to this date was not included in the comparison in Fig 13, we can see that there was indeed a spike in daily infections in Fig 15 which preceded the spike in negative attitudes, thus again reinforcing our conclusions here with a further example of the matching trends.

Fig 14 (for illustration purposes only):

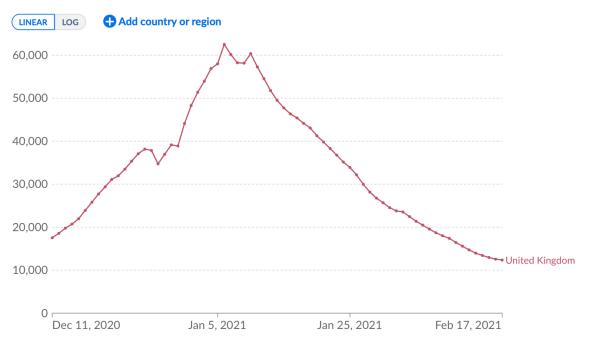




<sup>&</sup>lt;sup>34</sup> By trend we are referring to the attitudes hardening following a jump in daily new confirmed COVID-19 cases

#### Daily new confirmed COVID-19 cases

7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



Addressing the potential skewing of data due to the invasion of Ukraine:

One significant counterargument to the claim of daily new confirmed COVID-19 cases being linked significantly to attitudes to the PRC is the claim that a final spike in negative sentiment towards the PRC in mid-late 2022 seen in Fig 13 and until here attributed to the double spike in daily new confirmed COVID-19 cases occurring around early 2022 was in fact a result of Russia's invasion of Ukraine (which also occurred early 2022). This is primarily due to the association often made between Russia and China due to their most glaring similarities for the average Western citizen of the two countries both being autocracies – an association only strengthened with regards to the invasion of Ukraine by Russia by the PRC's abstention during the vote on UN General Assembly Resolution ES-11/1, being one of only 35 nations to do so, and the most significant nation of the 35<sup>35</sup>. With early 2022 marking a swivel from pandemic-related news to full focus on Russia's invasion of Ukraine, as can be seen by the covers of the popular British satirical publication (selected for observation here due to its readily available archives of covers on the limited resources at our disposal, and it's tendency to focus on the overall most popular/discussed news on its front pages) displayed in Fig 16,17, and 18 below, it is only natural that given both the pandemic and the invasion reflect in some form negatively on the PRC for citizens of the UK that it be concluded at least some of the jump in negative attitudes to the PRC in later 2020 be attributed to the invasion of Ukraine, yet also some still be attributed to the pandemic. Given the pattern of a spike in negative attitudes to the PRC in the months following a spike in daily COVID-19 rates, and the fact that the spike in negative attitudes that begins c. May 2022 follows a similar pattern it is imperative that the impact of COVID-19 incidence rates here on attitudes is not discarded entirely.

<sup>&</sup>lt;sup>35</sup> Most significant nation in the UN of the 35 abstentions, based upon its status as a permanent member of the UN Security Council and thus one of the 5 generally accepted most prominent nations in the UN

Fig 16:

Private Eye Issue 1566, 04/02/2022 (20 days prior to invasion):



Note how Issue 1566 is focused on the pandemic – and although it is focused on government scandals during the pandemic, it represents a continued focus on the pandemic in general and thus its position as being forefront in the public's minds prior to the invasion of Ukraine.

Fig 17: Private Eye Issue 1567, 18/02/2022 (6 days prior to invasion):



Note how suddenly the focus of Private Eye pivots from be enthralled by pandemic related news to fears of an invasion in Ukraine.

Fig 18: Private Eye Issue 1568, 04/03/2022 (14 days after the invasion)



However, due to the overwhelming media coverage of the invasion of Ukraine and it's pivoting away from the pandemic (see above), as well as the invasion's dominating of social media seen in displays of support for Ukraine being displayed by Western social media pages (such as via the widespread addition of a Ukrainian flag with a motto expressing support for Ukraine being employed by such social media users<sup>36</sup> – see fig q), it can be reasonably assumed that a large proportion of the spike in negative sentiment towards the PRC beginning c.May 2022 can be attributed to the invasion of Ukraine.

Fig 19:

<sup>&</sup>lt;sup>36</sup> <u>https://www.leicestermercury.co.uk/news/leicester-news/how-show-your-support-ukraine-6730581</u>



Despite this, it is important to consider that whether the final spike in negative sentiment towards the PRC is eventually attributed at all to the pandemic it does not discredit our main conclusion, as there are 3 other examples of a relationship between public opinion towards the PRC and covid-19 daily cases being delayed by similar time periods – with the average delay between the 3 peaks in daily new confirmed COVID-19 cases and the 3 peaks in unfavourable sentiment identified below being 86.33 days.

- 1) 17/02/2021 74% unfavourable preceded by spike in daily covid cases peaking at 62,520.14 on 06/01/2021 (Fig y)
- 2) 13/08/2021 70% unfavourable preceded by drop in daily covid cases troughing at 1,967.00 on 05/05/2021 (main comparison graph)
- 17/11/2021 73% unfavourable preceded by spike in daily covid cases peaking at 48,923.29 on 21/07/2021 (main comparison graph)

#### With regards to H2:

H2 is proven correct here, as shown through both the analysis of external surveys asking of the pandemic itself, and the relationship between daily new confirmed COVID-19 cases and unfavourable attitudes to the PRC.

#### With regards to H3:

H3 is proven correct here, as shown through the overlaying of the graph showing daily new confirmed COVID-19 cases and that showing total unfavourable attitudes to the PRC.

#### Conclusion:

Overall, the coronavirus pandemic has undoubtedly resulted in a hardening of British attitudes towards the PRC, represented within the period of the pandemic as a period of peaks and troughs acting almost as "steps" at times, building up anti-PRC sentiment throughout the pandemic.

These "steps" or peaks and troughs in negative sentiment can be asserted to have been following the general trend in daily new COVID-19 cases in the UK. Some may argue correlation rather than causation, however due to such peaks and troughs being "in tune" with the daily new confirmed covid-19 cases on multiple occasions it can be said to be beyond correlation, and thus "beyond reasonable doubt" that this is a matter of causation.

There are however undoubtedly other factors beyond the pandemic alone impacting trends in public opinion we identified – hence why, for example, the "delay" between a peak in daily COVID-19 cases and the ensuing peak in negative attitudes to the PRC was in one case just 42 days, 44.33 days short of the average of 86.33 days. Despite this the general trends seem to show that the pandemic was indeed linked directly to attitudes to the PRC in the UK – with such precise analysis showing direct correspondence which is difficult to challenge. Therefore to conclude Section 1, hypotheses 1, 2, and 3 were proved correct, with there being a marked increase in negative attitudes to the PRC among Britons in 2020, a trend which can be largely attributed to the pandemic due to the close correlation between the daily COVID-19 cases and negative attitudes, which show how the general prevalence of the pandemic was directly related on a month-by-month scale to attitudes to the PRC.

## Section 3:

Were the trends in attitudes to the PRC as a result of the pandemic a result of subconscious bias or conscious bias?

#### Brief overview:

As outlined above, it is clear that the pandemic resulted in an increase in negative attitudes to the PRC among Britons.

Here I aim to explore that conclusion to a greater extent, by looking at how respondents behave when polled. By this I mean I am aiming to determine whether in the scenario of the pandemic, those reporting their sentiment towards China did so with active consideration of the pandemic and the PRC's role in it (which I term conscious bias), or conversely if they did so while subconsciously considering the pandemic (which I term conscious bias)

#### An outlining of subconscious and conscious bias in this context:

Subconscious bias:

- Where one subconsciously (not actively) links the coronavirus pandemic's occurrence to their perception of the PRC
- By this we mean where one would simply think "I disliked the PRC between 2020-2021 compared to 2019" and despite covid having an impact as we have proved earlier in this paper the impact is subconscious.

Conscious bias:

- Where one actively and consciously links the coronavirus pandemic's occurrence to their perception of the PRC
- By this we mean where one would think "I disliked the PRC during the Coronavirus pandemic (because of how they delt with it etc.) compared to before it" the impact of covid shaping their opinion is conscious and actively introduced and entertained within their decision making of which response to give in the opinion poll.

#### How I will attempt to answer this question:

Though this research is completely unique, some answers may be found in existing surveys through looking for respondent's views on countries responsible for the pandemic among other variations, and those which specifically mention attitudes with relation to the pandemic. A few such survey questions were found in my research, however due to a) the unusual question I am attempting to answer, and b) the focus country being the UK, a country I found to be less surveyed than the US the questions do not suffice to come to a reasoned judgement. Therefore, I designed my own fieldwork to specifically approach the research question of this section, which utilises a unique quality to allow for conclusions to ultimately be made. However, I have also included an additional useful survey found in order to provide some additional information or perhaps evidence of the difficulty in utilising existing surveys to approach this question.

#### **Existing survey of use:**

#### Question:

"Tell me how much confidence you have in each leader to do the right thing regarding world affairs – a lot of confidence, some confidence, not too much confidence, or no confidence at all. B. Chinese President Xi Jinping"

#### Why this survey:

Looking at how UK citizens perceive the way the PRC's leader approaches world affairs before, during, and after the pandemic allows us to understand how forefront the primary world affairs issue in 2020 (the pandemic) was in respondent's minds. For example, a large drop from before 2020 to after 2020 in positive perceptions of the way Xi Jinping approaches world affairs would suggest that the increase in negative attitudes was a result of conscious/active bias as respondent's focus is clearly on the pandemic.

#### Data:

Date:	% who answered "no confidence at all"
Spring 2018	18
Spring 2019	29
Summer 2020	47
Spring 2021	45
Spring 2022	37

#### Conclusions:

This data here would initially suggest conscious bias as the main driver behind the trend in attitudes to the PRC as a result of the pandemic, though as previously stated this is a highly tenuous conclusion, and it is necessary to design unique fieldwork to answer this question.

#### My fieldwork/survey:

#### Why I designed my own survey:

Unfortunately, given the ground-breaking nature of this research project, there were no preexisting surveys conducted with the sole intention of determining if the impact of the Coronavirus pandemic on attitudes to China was a result of subconscious or conscious bias. Therefore, I designed fieldwork of my own to answer this question, and distributed it to UK residents, accepting responses between the dates of 4/8/2023 and 12/8/2023 – thus allowing me to come to an accurate and well-informed conclusion rather than assumption based upon other surveys.

#### The design of my survey:

My survey was designed with the aim of allowing for a clear and simple conclusion – with it's principle purpose to answer the specific question at hand.

The system I devised is as follows: Two separate surveys were distributed, where I would control response numbers to ensure the two had similar numbers of respondents by locking one of the forms if necessary to allow the other to gather more responses.

The two forms were identical aside from one detail. The forms both asked of the respondents attitudes to China prior to the pandemic, and then their attitudes to China today.

The forms varied in that one form explicitly used the words "Coronavirus pandemic", whereas the other used time language (i.e. "5 years ago") – which can be seen below under the "Survey questions" section.

This was done in order to distinguish between conscious bias and unconscious bias – by which I mean the survey where the pandemic was explicitly mentioned (Survey 1) was designed to trigger conscious bias by making the respondent actively recognise the pandemic as a potential influencer on their attitude to China, and thus make the respondent consider the pandemic actively before making their decision in the poll. On the contrary, the survey where the pandemic was not explicitly mentioned (Survey 2) was designed to not trigger any conscious bias by deliberately drawing the respondent away from actively considering the pandemic by planting the notion of binary dates – i.e. the respondent would be focused on dates, not events. Thus in survey 2 the primary function I attempted to elicit was unconscious bias.

Thus, to come to a conclusion as to whether changes in attitudes to the PRC as a result of the pandemic were a consequence of subconscious or conscious bias I would simply need to observe the % changes in total unfavourable attitudes from prior to the pandemic to after the pandemic in each survey. If the survey designed to provoke conscious bias (survey1) saw an increase in unfavourable attitudes greater than the survey designed to provoke unconscious bias (survey2), conscious bias can be concluded to be the primary manner by which respondents considered the pandemic when responding to polls regarding attitudes to China – and vice versa.

Please note the following survey nomenclature:

Survey1: The survey where the pandemic is explicitly mentioned, and the survey is aimed at provoking conscious bias

Survey2: The survey where the pandemic is not explicitly mentioned, and the survey is aimed at eliciting unconscious bias

Respondent numbers:

Survey 1 had 14.3% more respondents than Survey 2

Survey questions: (please note the sections of the questions which varied between the two forms are highlighted in yellow)

Survey 1: [explicitly mentioned the coronavirus pandemic]

 Please select the option which best describes you attitude to China before the Coronavirus pandemic

Options:

- Very favourable towards
- Somewhat favourable towards
- Neutral
- Somewhat unfavourable towards
- Very unfavourable towards
- Please select the option which best describes your attitude to China after the Coronavirus pandemic

Options:

- Very favourable towards
- Somewhat favourable towards
- Neutral
- Somewhat unfavourable towards
- Very unfavourable towards

Survey 2: [did not explicitly mention the coronavirus pandemic]

1. Please select the option which best describes your attitude to China 5 years ago

Options:

- Very favourable towards
- Somewhat favourable towards
- Neutral
- Somewhat unfavourable towards
- Very unfavourable towards
- 2. Please select the option which best describes your attitude to China today

#### **Options:**

- Very favourable towards
- Somewhat favourable towards
- Neutral
- Somewhat unfavourable towards
- Very unfavourable towards

#### <u>The data:</u>

Survey number:	Question:		% Very unfavourable towards	% Somewhat unfavourable towards	Neutral	% Somewhat favourable towards	% Very favourable towards
Survey 1		the option which best ur attitude to China before the pandemic	14	24	43	14	5
Survey 1		the option which best ur attitude to China after the pandemic	30	33	29	5	5
Survey 2		the option which best ur attitude to China 5 years ago	0	17	39	39	6
Survey 2		the option which best ur attitude to China today	11	50	22	17	0

#### Key data to observe:

Key figures:

Survey1 increase in total unfavourable attitudes from pre to post pandemic = 25%

Survey2 increase in total unfavourable attitudes from 5 years ago to today = 44%

Additional figures:

Survey1 increase in very unfavourable attitudes from pre to post pandemic = 16%

Survey2 increase in very unfavourable attitudes from 5 years ago to today = 11%

Survey1 increase in somewhat unfavourable attitudes from pre to post pandemic = 9%

Survey 2 increase in somewhat unfavourable attitudes from 5 years ago to today = 33%

#### Conclusions:

Main conclusion:

From the data above it can be concluded that the trend in attitudes to the PRC as a result of the pandemic were driven primarily by subconscious bias, where individuals did not actively recognise the pandemic as their reasoning for their declining attitudes. This does not discredit the argument that the pandemic was the main reason for such trends, and however simply shows that respondents likely did not directly identify any factors at all for the drop in attitudes, and acted instead off of the subconscious decision making.

This conclusion can be reached due to the survey where the pandemic was not explicitly mentioned and the focus shifted to the binary timeline of years (survey2) seeing a 44% increase in total unfavourable attitudes from 5 years ago to today, and survey1 only seeing a 25% increase in a similar time period. This shows that even when the issue of the pandemic is not at the forefront of individuals' minds, they still reported a large increase in unfavourable sentiment towards the PRC across the pandemic years.

#### Sub-conclusions:

Upon closer inspection, further conclusions can be developed. Through looking at the increase in "very unfavourable" attitudes across the pandemic years in the surveys as separate to the increase in "somewhat unfavourable" we can identify that the survey where the pandemic was explicitly mentioned (survey1) saw a greater jump in "very unfavourable" attitudes than the survey which only referred to years (Survey2). The reverse was true for the jump in "somewhat unfavourable attitudes".

Therefore, it can be concluded here that where the pandemic is actively considered regarding attitudes it catalyses more extreme sentiment, and when the pandemic is considered subconsciously it catalyses more mild sentiment.

Thus, the respondents who answered "very unfavourable" to the second question of both surveys were likely driven more by conscious bias than subconscious bias, and the respondents who answered "somewhat unfavourable" to the second question of both surveys were likely driven more by subconscious bias than conscious bias. However, overall subconscious bias was the more prevalent in caused changes in attitudes as a result of the pandemic.

#### Weaknesses in my fieldwork and how to improve it:

#### Weaknesses:

- Small sample size
- Most likely concentrated demographic as shared via social platforms
- Anonymous additional useful data not collected e.g. political affiliation
- Questions vary by "real" timeframe Survey 1 measured 2019 and 2023 attitudes, whereas Survey 2 measured 2018 and 2023 attitudes by virtue of wording

The most obvious issue with my own survey is the small sample size, an inevitability resulting from a lack of resources and platform (e.g. The Pew Global Attitudes Panel is a large scale platform example) by which to distribute the survey more widely. Further to this, due to the survey being primarily distributed via social medias (in order to obtain a greater sample size), a narrower demographic can be inferred to have responded, as though the survey was anonymous social media users are likely to be younger, and with regards to this survey the respondents are likely those with whom I have some degree of connection, whether via friends or family – thus they are likely to be of a similar demographic as myself.

Aside from those two principle issues with the survey, a number of smaller concerns may be raised. One such concern is that the two surveys measured the change in attitudes across marginally different time periods. By this we mean Survey 1 asked for attitudes "before the Coronavirus pandemic" and "after the Coronavirus pandemic" – suggesting attitudes were measured between 2019 and an unspecified year the respondent deemed the pandemic to have "finished" in (likely 2022 or 2023). On the contrary, Survey 2 asked for attitudes "5 years ago" and "today", thus measuring attitudes between 2018 and 2023. Therefore, here it is clear that the two surveys may not be directly comparable.

#### To improve:

One might be immediately tempted to offer the response of increased resources/funding – and though this would likely solve the majority of the issues above, as by allowing for the development of structures such as the Pew Global Attitudes Panel a greater number of respondents could be reached, and the demographic of respondents be widened. However, it is a largely unfeasible solution to such a project. Thus, I would propose the following:

Firstly, that the survey be sent via school communications of the RGS Guildford, allowing for a greater variety and number of respondents – or, indeed, the survey could be publicised in local area noticeboards, whether on social media platforms or established local news outlets, which would allow for an even wider range of respondents, eliminating the potentially narrow demographic my study may have inadvertently surveyed.

Regarding collecting additional useful data: It is perhaps an inevitability of small-scale fieldwork conducted by a student that for a poll to be effective it should be anonymous, due to likely lower levels of trust regarding storage of personal data in comparison to the trust placed in established organisations such as the Pew Research Institute. Therefore, though additional data such as political affiliation or age may be useful, it is largely impractical to collect as part of such a project, and nevertheless in this project would have added marginal benefit compared to the core conclusions drawn.

Finally, with regards to the slightly different time periods respondents may have considered between Survey 1 and Survey 2 I would perhaps reword the question for Survey 2 to be "4 years ago" rather than "5 years ago". This would result in survey 2 having a time period over which respondents consider if their attitudes have changed of 4 years between 2019 and 2023, a likely similar time period as survey 1. It must be considered however that in my fieldwork I utilised "5 years ago" for the first question of survey 2 due to "5" years being often being perceived as more "well rounded" number than "4". Nonetheless, changing the question wording is an incredibly simple change which I would implement should I conduct the fieldwork again.

#### With regards to H4:

H4 is proven false here, as it is clear that overall when an individual's subconscious bias is elicited they report a greater increase in unfavourable attitudes as a result of the pandemic, demonstrating how the main driving force behind the trend in attitudes to the PRC as a result of the pandemic was subconscious bias.

## Section 4:

#### Summary:

To summarise, my research here has utilised ground-breaking approaches to allow for a greater understanding of British public opinion as a result of the pandemic, with particular notable methodology being the overlaying of infection rate data over attitude data, and the creation of bespoke fieldwork utilising a novel approach in making use of 2 separate surveys to better understand the way opinion poll respondents make decisions when being polled/

#### **Overall conclusion:**

I shall start by outlining conclusions drawn beyond the testing of my initial hypotheses.

My research into the trend in attitudes to the PRC as a result of the pandemic in section 2 has shown not only a fascinating relationship between infection rates and attitudes, thus demonstrating how closely citizens follow unusual events and how strongly this influences sentiments, but also the volatility of public opinion in times of crises. While the trend in attitudes to the PRC was overall shown as a souring throughout the period of the pandemic, the presence of such distinct fluctuations in opinion linked to external stimuli emphasise this variability in sentiment individuals are susceptible to.

My later research into biases revealed the conclusion that when conscious bias is the main decision-making process for respondents considering their attitudes to the PRC, more extreme negative sentiments are shown, and when the reverse is true more mild negative sentiments are shown.

With regards to my hypotheses.

#### H1: "British attitudes to the PRC soured significantly in 2020"

H1 was proven true, though to no great surprise: it is clear that in other Western nations more studied than the UK, such as the US, similar trends occurred. I proved this hypothesis through simple analysis of two datasets, one from the Pew Research Institute, and another from YouGov. With YouGov reporting a 22% jump in unfavourable attitudes to the PRC between 13/05/2019 and 11/08/2020 the provision of H1 of "significantly" is satisfied. Further to this, the evident trend may be visualised through my use of graphs utilising average figures from the Pew and YouGov surveys for simple observation of H1 being correct.

## H2: "The COVID-19 pandemic was the primary influencer of trends in attitudes to the PRC in 2020"

H2 was proven true through my analysis of surveys asking specifically regarding the period 2020, the pandemic, the PRC's global stance, and attitudes with regard to the three. To further clarify my hypothesis, I developed my own methodology of overlaying the data for daily infections in the UK over attitude datapoints taken up to 4 times a year by YouGov. This revealed a correlation which undeniably proved the link between the pandemic and the increase in negative attitudes to the PRC. Though I also found that other factors resulting in attitude changes, such as human rights issues, should not be disregarded it is clear that the pandemic was the single most significant factor which was not as prevalent in 2019, and thus it can be held accountable for the attitude change.

#### H3: "British attitudes to the PRC were directly related to the pandemics prevalence."

H3 was proven true through my overlaying of daily new COVID-19 cases over attitude data provided by YouGov, which as outlined earlier initially showed the reverse to what would be expected: though an instance of delay was soon recognised and accounted for – resulting in a more expected result, and one coherent with H3. I found direct relationship between daily new COVID-19 cases and unfavourable attitudes to the PRC, showing clearly the validity of H3 and how individuals were evidently receiving and considering infection data to a great extent – or, alternatively, the attitudes of media publications may have been impacted by infection rates, attitudes then passed on to viewers/readers of such media.

## H4: "The trend in attitudes to the PRC as a result of the pandemic will be driven mainly by conscious bias."

H4 was proven false by my fieldwork. I wrote H4 on the basis that the widespread awareness of the pandemic would result in individuals actively considering it when answering polls, however this was not the case. Instead, it became clear that while the pandemic was widely recognised, a direct link to a strong dislike of the PRC was not actively made, a sensical conclusion given the lack of a prominent coordinated worldwide movement stoking anger against the PRC<sup>37</sup>.

<sup>&</sup>lt;sup>37</sup> Here the word "coordinated" is key – there were of course groups however there was a distinct lack of publicly voiced worldwide dislike towards the PRC with direct reasoning being given as the pandemic.

## **Bibliography:**

Works either referenced or considered for this report are included here. With thanks to the authors for such freely available academic resources.

#### **Reports or other literature:**

Silver, S, Devlin, K & Huang, C 2020, *Americans Fault China for Its Role in the Spread of COVID-19,* Pew Research Institute, <u>https://www.pewresearch.org/global/wp-content/uploads/sites/2/2020/07/PG\_20.07.30\_U.S.-Views-China\_final.pdf</u>

Detzler, M 2020, *I am not a virus – anti-Chinese racism and coronavirus,* Wales Trades Union Congress, <u>https://www.tuc.org.uk/blogs/i-am-not-virus-anti-chinese-racism-and-coronavirus</u>

Moonshot 2020, From #CoronaVirusCoverUp to #NukeChina: An analysis of conspiracy theories, hate speech and incitements to violence across Twitter related to Covid-19., Moonshot, <u>https://149736141.v2.pressablecdn.com/wp-content/uploads/COVID-19-on-Twitter\_Moonshot.pdf</u>

Stanford Center on China's Economy and Institutions 2022, *The Impact of COVID-19 on American Attitudes towards China*, Stanford Center on China's Economy and Institutions, <a href="https://sccei.fsi.stanford.edu/china-briefs/impact-covid-19-american-attitudes-toward-china-0">https://sccei.fsi.stanford.edu/china-briefs/impact-covid-19-american-attitudes-toward-china-0</a>

Cook, G.G., Huang, J & Xie, Y 2021, *How COVID-19 has Impacted American Attitudes Toward China: A Study on Twitter, <u>https://github.com/junminghuang/covid-impacts-attitude-toward-china</u>* 

De Wall, J.R. 2020, *Western attitudes to China are hardening*, Pew Research Institute, <u>https://yougov.co.uk/topics/international/articles-reports/2020/08/02/western-attitudes-china-are-hardening</u>

Tony Blair Institute for Global Change 2020, *Resetting the West's Relationship With China*, Tony Blair Institute for Global Change, <u>https://www.institute.global/insights/geopolitics-and-security/resetting-wests-relationship-china</u>

School of the Art Institute of Chicago 2020, *Lesson 6: Conscious and Unconscious Bias*, School of the Art Institute of Chicago,

https://libraryguides.saic.edu/learn\_unlearn/foundations6#:~:text=Conscious%20Bias%3A% 20Biased%20attitudes%20about,action%20more%20than%20conscious%20biases

Summers, T, Man Chan, H, Gries, P & Turcsanyi, R 2021, *Worsening British views of China in 2020: evidence from public opinion, parliament, and the media,* Asia Europe Journal, <u>https://link.springer.com/article/10.1007/s10308-021-00639-x</u>

Farrell, M 2023, *Data and Intuition: Good Decisions Need Both*, Harvard Business Publishing, <u>https://www.harvardbusiness.org/data-and-intuition-good-decisions-need-both/</u>

Summers, T, Turcsányi, R.Q., Šimalčík, M, Kironská, K & Sedláková, R 2020, *British public opinion in the age of COVID-19: Worsening perceptions amidst the pandemic,* Central European Institute of Asian Studies, <u>https://sinofon.cz/wp-content/uploads/2021/01/UK-poll-report.pdf</u>

Gaston, S & Aspinall, E 2021, *UK Public Opinion on Foreign Policy and Global Affairs,* british Foreign Policy Group, <u>https://bfpg.wpenginepowered.com/wp-</u> content/uploads/2021/02/BFPG-Annual-Survey-2021.pdf

#### Datasets:

YouGov 2020,

https://docs.cdn.yougov.com/o90gsx3oja/TBI CovidGlobalImpact June2020 Topline CLIEN T.pdf

Pew Research Institute 2022, <u>https://www.pewresearch.org/global/wp-</u> content/uploads/sites/2/2022/06/PG\_2022.06.29\_views-of-china\_TOPLINE.pdf

Pew Research Institute 2023, <u>https://www.pewresearch.org/global/wp-</u> content/uploads/sites/2/2023/07/PG\_2023.07.27\_Vews-of-China\_TOPLINE.pdf

CRISISNLP 2020, https://crisisnlp.qcri.org/covid19

Our World in Data 2023, https://ourworldindata.org/coronavirus/country/united-kingdom