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## US-China Rivalry in the Age of Coronavirus – Prospects<sup>2</sup>

### Introduction

The China-US rivalry takes place on many levels, ranging from political<sup>3</sup>, through military<sup>4</sup>, economic for influence in the Far East<sup>5</sup> to cultural<sup>6</sup>. Until recently, the authors of the “Global Trends 2030: Alternative Worlds” forecast of December 2012 pointed out that China has a chance to get closer to the power of the US in 2030 (using indicators such as GDP, population size, military expenditure and technology), but considering additional factors, such as education, healthcare or governance, they claimed that this could happen

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<sup>2</sup> Research status and data as of 8.04.2020.

<sup>3</sup> G. Nycz, *Strategiczna Rywalizacja USA-ChRL i amerykańskie oceny zagrożeń łączyonych z wyłanianiem się antyzachodniego porozumienia sino-rosyjskiego*, [in:] *Stany Zjednoczone – Chiny. W stronę dwubiegowości?*, eds. J. Ciesielska-Klikowska, M. Marczuk-Karbownik, Łódź 2017.

<sup>4</sup> M. Marcinkowski, *Chińsko-amerykańska rywalizacja militarna*, [in:] *Stany Zjednoczone – Chiny. W stronę dwubiegowości?*, eds. J. Ciesielska-Klikowska, M. Marczuk-Karbownik, Łódź 2017, pp. 57–74; Ł. Jureńczyk, *Polityczno-wojskowy wymiar rywalizacji między Chińską Republiką Ludową a Stanami Zjednoczonymi Ameryki w XX i XXI wieku*, “Annales. Universitatis Mariae Curie-Skłodowska Lublin – Polonia. Sectio K” 2017, Vol. 24, No. 2, pp. 14–17.

<sup>5</sup> O. Pietrewicz, *Północnokoreańska kość niezgody. Polityka zagraniczna Chin i USA wobec północnokoreańskiego problemu nuklearnego*, [in:] *Stany Zjednoczone – Chiny. W stronę dwubiegowości?*, eds. J. Ciesielska-Klikowska, M. Marczuk-Karbownik, Łódź 2017, pp. 111–142; M. Salman, M. Pieper, G. Geeraerts, *Hedging in the Middle East and China-U.S. Competition*, “Asian Politics & Policy” 2015, Vol. 7, No. 4, pp. 575–596.

<sup>6</sup> X. Fang, A.L. Lederer, J. “Skip” Benamati, *The Influence of National Culture on Information Technology Development, Implementation, and Support Challenges in China and the United States*, “Journal of Global Information Technology Management” 2016, Vol. 19, No. 1, pp. 26–43.

in 2040–2045<sup>7</sup>. Forecasts are, however, formulated in a given period, based on a current state of knowledge and existing data. Thus, they are designed to estimate the lower or higher likelihood of specific effects in the future. Eight years have passed since “Global Trends 2030: Alternative Worlds” forecast was issued, and voices began to appear in the media that China may become the first power in the world much faster<sup>8</sup>. In this context, it seems reasonable to ask the question: does the coronavirus pandemic (COVID-19), which is currently taking place in the world, have the potential to contribute to China’s predominance in the race of powers over the USA? To be able to answer this question, the concept of rivalry of the powers was used and a qualitative analysis of available sources was carried out.

### Rivalry of the Powers – Technological Area

A useful concept for the mentioned considerations is the rivalry of powers or, in other words, competition between powers, because, as Leszek Sykulski pointed out, “the essence of geopolitics is competition and struggle for gaining an advantage”<sup>9</sup>. Using this concept allows to answer the question whether the current pandemic has the potential to contribute to China’s predominance in rivalry with the USA. Zbigniew Brzeziński in the publication “Wielka Szachownica: Główne cele polityki amerykańskiej” indicated that there are factors that play a significant role for the leading role of the US in the world, thus putting this country as a superpower. It has an advantage over other countries in four areas: military, economic, technological and cultural. According to Brzeziński, these areas are key elements enabling the US political supremacy<sup>10</sup>. Piotr Grochmaliski also pointed to the key role of technology, especially in the field of artificial intelligence as one of the elements of strategic competition between China and

<sup>7</sup> National Intelligence Council, *Global Trends 2030: Alternative Worlds*, Washington D.C. 2012.

<sup>8</sup> A. Stando, *Pentagon: “Chiny zostawiły nas w tyle”. Amerykanie już nie są światową potęgą*, <https://tech.wp.pl/pentagon-chiny-zostawily-nas-w-tyle-amerykanie-juz-nie-sa-swiatowa-potega-6443555225737345a?nil=> [accessed: 3.04.2020]; M. Nowicki, *Czy Chiny będą rządzić światem?*, <https://www.newsweek.pl/czy-chiny-beda-rzadzic-swiatem/zsbfwrp> [accessed: 3.04.2020]; D. Rostkowski, *Chiny w poszukiwaniu utraconej potęgi*, <https://www.obserwatorfinansowy.pl/tematyka/makroekonomia/trendy-gospodarcze/chiny-w-poszukiwaniu-utraconej-potegi/> [accessed: 3.04.2020]; J. Bodakowski, *Jacek Bartosiak o potędze Chin i słabnącej pozycji USA! Czy Polska jest bezpieczna?*, <https://prawy.pl/107120-jacek-bartosiak-o-potedze-chin-i-slabnacej-pozycji-usa-czy-polska-jest-bezpieczna/> [accessed: 03.04.2020].

<sup>9</sup> L. Sykulski, *Geopolityka. Skrypt dla początkujących*, Częstochowa 2014, p. 17.

<sup>10</sup> Z. Brzeziński, *Wielka Szachownica: Główne cele polityki amerykańskiej*, Warszawa 1996.

the USA<sup>11</sup>. In this article, due to the subject taken, the emphasis is put on the technological area that plays the largest role during the COVID-19 pandemic. Such a procedure is also justified due to the fact that “scientific and technical progress is of great versatile importance in maintaining an advantage over rivals. The prospect of domination in this field would not only mean economic dominance, but also military advantage, not to mention other areas”<sup>12</sup>. Modern and innovative solutions can contribute, for example, to the production of new types of weapons and equipment, but also influence everyday consumer choices. In addition, technology accelerates development and enters almost every sphere of life. In turn, during an unexpected occurrence of the pandemic, the use of modern technologies may become the most important factor inhibiting and preventing the increase in the number of infected people.

### COVID-19 Pandemic – The Case of Wuhan

For over a dozen years, biological weapons and the phenomenon of bioterrorism have increasingly been exchanged, among the real threats on a large scale<sup>13</sup>. It is pointed out that biological weapons, which pose a serious threat to both the civilian population and the armed forces, are condemned even more than chemical weapons<sup>14</sup>. The authors undertaking this topic also agree that the use of a biological asset is not a novelty. It was a known practice and sporadically used in history<sup>15</sup>. In the scope of bioterrorism, there are also concepts such as “food terrorism” or “agroterrorism” to describe the use of living organisms as a biological weapon, which happened, for example, during World War I and World War II<sup>16</sup>.

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<sup>11</sup> P. Grochmalski, *Amerykańsko-chiński wyścig technologiczny w obszarze sztucznej inteligencji*, [in:] *Państwo w obliczu współczesnych wyzwań. O cyberbezpieczeństwie i innych zagrożeniach na przykładzie wybranych państw azjatyckich*, ed. J. Marszałek-Kawa, Toruń 2019.

<sup>12</sup> D.K. Gemechu, *Chiny: Powstanie nowego globalnego supermocarstwa na dalekim wschodzie – trudne relacje z zachodnimi rywalami*, “Forum Politologiczne” 2010, Vol. 11, p. 246.

<sup>13</sup> B. Michałiuk, *Broń biologiczna i bioterroryzm*, „Zeszyty Naukowe AON” 2016, Vol. 102, No. 1; A. Smakosz, *Broń biologiczna – nowe możliwości i zagrożenia*, [in:] *Człowiek wobec zagrożeń współczesności*, eds. V. Tanaś, W. Welskop, Łódź 2017; K. Wiśniewska, *Zagrożenia bezpieczeństwa biologicznymi materiałami zakaźnymi w atakach terrorystycznych*, “KELM” 2016, Vol. 13, No 1; J. Kięczkowska, *Bioterroryzm jako zagrożenie dla bezpieczeństwa zdrowotnego*, “Teki of Political Science and International Relations – UMCS” 2019, Vol. 14, No. 1.

<sup>14</sup> M. Weiner, K. Tarasiuk, *Społeczne i historyczne uwarunkowania wojen biologicznych i epidemii*, “Rozprawy społeczne” 2018, Vol. 12, No. 3, p. 27; J. Kięczkowska, op.cit.

<sup>15</sup> R. Kopeć, *Zastosowanie broni biologicznej w konfliktach zbrojnych i atakach terrorystycznych*, “Annales Universitatis Paedagogicae Cracoviensis. Studia de Securitate”, 2014, Folia 166, p. 53.

<sup>16</sup> L. Ózsvári, G. Kasza, Z. Lakner, *Historical and Economic Aspects of Bioterrorism*, 2017, DOI: 10.18515/dBEM.M2017.n01.ch18.

Currently, there are concerns that “while preventive actions of many international organizations give the opportunity to contain epidemics, appearing from time to time, the rapid development of biotechnology and genetic engineering with the beginning of the 21st century raises concerns due to the possibility of deliberate spreading diseases and losing control over them”<sup>17</sup>. These fears were to be realized at the COVID-19 outbreak. At that time, several conspiracy theories were created, which were supposed to prove that the virus was deliberately spread around the world for e.g. depopulation. However, scientific reliability requires focusing on facts rather than speculations. The development of biotechnology and artificial intelligence in this case contributed positively to the fight against pandemics, as discussed below, beyond the obvious introduction of social distance or quarantine which also mattered.

In 2020, the world had heard for the first time about COVID-19 that appeared in China, specifically in Wuhan, the capital city of the Hubei province. Although the first signals about people infected with the virus began to appear in December 2019, it was only the following weeks that showed how quickly the virus progressed, which led to the announcement of an epidemic in China. As it turned out, the ease of portability quickly led to the official WHO announcement of a pandemic<sup>18</sup>. While rulers around the world are struggling with the spread of the virus and new restrictions are being introduced, in Wuhan according to official media the worst crisis was resolved in March. Initially, on March 25, 2020, all restrictions on entry and exit from Hubei Province were lifted, with the exception of Wuhan, which was the center of the coronavirus pandemic, and in this case the blockade would eventually last a little longer<sup>19</sup>. As announced, the blockade was lifted on April 8, 2020<sup>20</sup>. In this context, it is worth recalling examples of the use of modern technologies of which China has informed. Among them are:

- an AI tool to serve gene sequencing and thus help fighting against the spread of the virus<sup>21</sup>;

<sup>17</sup> M. Weiner, K. Tarasiuk, op.cit., p. 27.

<sup>18</sup> WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020, <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020> [accessed: 6.04.2020].

<sup>19</sup> Chiny znoszą restyrykcje wyjazdu z prowincji Hubei. Poza Wuhanem, <https://www.gazetaprawna.pl/artykuly/1463121,koronawirus-w-chinach-wuhan-hubei.html> [accessed: 7.04.2020].

<sup>20</sup> China lifts 10-week lockdown on Wuhan after no new deaths reported for first time in former epicentre, <https://nationalpost.com/news/world/as-covid-19-rates-fall-in-global-hotspots-hopes-that-the-virus-pandemic-might-be-slowing-down-on-the-rise> [accessed: 8.04.2020].

<sup>21</sup> J. Żywińska, Chińska sztuczna inteligencja walczy z koronawirusem, <https://cyfrowa.rp.pl/technologie/43937-chinska-sztuczna-inteligencja-walczy-z-koronawirusem> [accessed: 7.04.2020].

- providing genetic research agencies with an algorithm that enables RNA – ribonucleic acid forecasting<sup>22</sup>;
- remote pistols for measuring body temperature “Thermometer Guns”<sup>23</sup>, but they are assessed differently and their weaknesses are often pointed out;
- robots replacing physicians in some activities<sup>24</sup>;
- artificial intelligence systems supporting the diagnosis and analysis of epidemiological data<sup>25</sup>;
- fever detection helmets<sup>26</sup>;
- drones used in various ways to fight a pandemic<sup>27</sup>;
- surveillance cameras detecting faces, even in masks (in this case used to obtain information about the movement of people who should be in quarantine)<sup>28</sup>;
- introduction of the so-called health code in the Alipay mobile payment application, depending on the color assigned by the system (green, yellow, red), the user receives feedback on the period of isolation or the possibility of using the metro, hotels, restaurants or going to stores etc.<sup>29</sup>;
- or a constantly updated interactive map of the world showing the spread of the virus in the world, which was developed by a scientist of Chinese origin at the University of Washington<sup>30</sup>.

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<sup>22</sup> Ibidem.

<sup>23</sup> D. Yaffe-Bellany, ‘Thermometer Guns’ on Coronavirus Front Lines are ‘Notoriously not Accurate’, <https://www.nytimes.com/2020/02/14/business/coronavirus-temperature-sensor-guns.html> [accessed: 7.04.2020].

<sup>24</sup> Ibidem; M. McFall-Johnsen, *Thermometer guns used to screen for coronavirus are ‘notoriously’ unreliable experts say, warning about improper use and false temperatures*, <https://www.businessinsider.com/thermometer-guns-screening-for-coronavirus-notoriously-not-accurate-2020-2?IR=T> [accessed: 7.04.2020].

<sup>25</sup> *Report of the WHO-China Mission on Coronavirus Disease 2019 (COVID-19)*, <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf> [accessed: 07.04.2020]; J. Bullock, J.K.P. Hoffmann., M. Luengo-Oroz, A. Luccioni, C. Sin Nga Lam, *Mapping the Landscape of Artificial Intelligence Applications against COVID-19*, <https://arxiv.org/pdf/2003.11336.pdf> [accessed: 7.04.2020].

<sup>26</sup> J. Hamill, *Chinese cops given Robocop-style helmets which can detect coronavirus sufferers*, <https://metro.co.uk/2020/03/10/chinese-police-12376337/> [accessed: 7.04.2020].

<sup>27</sup> J. Yang, T. Reuter, *3 ways is using drones to fight coronavirus*, <https://www.weforum.org/agenda/2020/03/three-ways-china-is-using-drones-to-fight-coronavirus/> [accessed: 7.04.2020].

<sup>28</sup> *China firm develops system to recognize faces behind coronavirus masks*, <https://www.cNBC.com/2020/03/09/china-firm-develops-system-to-recognize-faces-behind-coronavirus-masks.html> [accessed: 7.04.2020].

<sup>29</sup> H. Davidson, *China’s coronavirus health code apps raise concerns over privacy*, <https://www.cNBC.com/2020/03/09/china-firm-develops-system-to-recognize-faces-behind-coronavirus-masks.html> [accessed: 7.04.2020].

<sup>30</sup> K. Eckart, *Interactive map shows worldwide spread of coronavirus*, <https://www.washington>.

We should be aware that some of these measures and new technologies have been used before, before the pandemic, e.g. face recognition cameras. However, it is in the face of the crisis that their enormous potential can be realized and observed, which can be used both during crises and for controlling citizens or surveillance. Depending on the purpose of use, they create other possibilities.

## China as the Winners of the Powers Race?

By using modern technological solutions, the spread of the virus has been officially suppressed in China as large as in other countries. Almost all new cases (90%) infected with coronavirus are Chinese returning to the country according to Chinese Ministry of Foreign Affairs<sup>31</sup>. In the case of Wuhan, the violent epidemic was stopped within practically four months, subsequent restrictions were slowly lifted, and the Chinese returned to their normal lives. However, the reporting of diseases in China is not without significance, because as announced in April, Chinese statistics should also include people who are a group of asymptomatic carriers<sup>32</sup>. For this reason, previous reports and data may have been underestimated. However, this does not change the fact that the number of such carriers around the world is difficult to determine, and currently restrictions are lifted in China.

It has been repeatedly pointed out that the countries that are the leaders in the artificial intelligence market are the USA and China<sup>33</sup>. In the face of the coronavirus pandemic, the primacy of China in this area appeared very clearly. One should therefore consider whether this situation will not contribute to the acceleration of works on hybrid intelligence, which is already being used by Chinese, as successfully demonstrated by the pandemic. There are more and more new publications about artificial intelligence, such as "China 5.0. How digital

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[edu/news/2020/02/07/interactive-map-shows-worldwide-spread-of-coronavirus/](https://edu/news/2020/02/07/interactive-map-shows-worldwide-spread-of-coronavirus/) [accessed: 7.04.2020].

<sup>31</sup> U. Gwiązda, *Nowe przypadki koronawirusa w Chinach. Chodzi o osoby wracające do kraju*, <https://www.rmfi24.pl/raporty/raport-koronawirus-z-chin/najnowsze-fakty/news-nowe-przypadki-koronawirusa-w-chinach-chodzi-o-osoby-wracaja,nld,4406050> [accessed: 7.04.2020].

<sup>32</sup> P. Rzymiski, *Chiny zapowiadają wysyp przypadków COVID-19 w kwietniu. Dlaczego?*, <https://www.polityka.pl/tygodnikpolityka/nauka/1951752,1,chiny-zapowiadaja-wysyp-przypadkow-covid-19-w-kwietniu-dlaczego.read?fbclid=IwAR1KL9MvIMGQl--YOb4YvXOmShLJlWEl1Yzsu26BRza-aH2jjUs4b1gF7JOQ> [accessed: 8.04.2020].

<sup>33</sup> P. Rosik, *Na rynku sztucznej inteligencji liczą się tylko Chiny i USA*, <https://forsal.pl/artykuly/1390747,-na-rynku-sztucznej-inteligencji-licza-sie-tylko-chiny-i-usa.html> [accessed: 7.04.2020]; J. Greig, *China aims to overtake US as global leader in AI innovation*, <https://www.techrepublic.com/article/china-aims-to-overtake-us-as-global-leader-in-ai-innovation/> [accessed: 7.04.2020].

dictatorship arises"<sup>34</sup>, which are leaning on the phenomenon of Chinese using technology. A possible revolution in biotechnology is also highlighted as a result of the COVID-19 pandemic due to the challenges faced by the pharmaceutical industry, and where the key will be to use artificial intelligence key<sup>35</sup>.

Moving still within the concept of the rivalry of powers, one should briefly consider the discourse that arose around the pandemic. China and the US blamed each other for the outbreak of a pandemic. China is indicated as the country in which COVID-19 infection was first detected, while Americans as the country which citizens could transport the virus to China<sup>36</sup>. Donald Trump even described this virus as a "Chinese virus", which was met with an immediate response from China<sup>37</sup>. The US president also announced the suspension of WHO funding, accusing the organization of focusing on China<sup>38</sup>. Tomasz Grodzki, Speaker of the Senate in Poland, however, stated during a speech in one of the current affairs programs that the Chinese diaspora living in the suburbs of Milan, which he described as "little Wuhan", was responsible for the epidemic in Italy. The virus was to be brought by Chinese who came from Wuhan and went to China to celebrate the New Year and then returned to Italy and then their families fleeing the epidemic<sup>39</sup>. Currently, on the one hand, the case of responsibility for the outbreak of the pandemic is ongoing, and on the other hand (departing from political speculation and presumptions) the statement of the Speaker of the Senate in Poland raised a very important aspect of the rivalry between the powers, i.e. the Chinese diaspora. It is pointed out that the Chinese diaspora lives in areas that are important both from a strategic point of view and in terms of the economy. The majority of Chinese live in Southeast Asian countries, Australia, Pakistan, South Africa and Brazil<sup>40</sup>. So,

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<sup>34</sup> K. Strittmatter, *Chiny 5.0. Jak powstaje cyfrowa dyktatura*, Warszawa 2020.

<sup>35</sup> *Rewolucja w biotechnologii. Wpływ koronawirusa na rozwój nowych rynków*, <https://mycompanypolska.pl/arttykul/4215/rewolucja-w-biotechnologii-wplyw-koronawirusa-na-rozwoj-nowych-rynkow> [accessed: 7.04.2020].

<sup>36</sup> Ł. Kobierski, *Wojna o pochodzenie koronawirusa*, <https://warsawinstitute.org/pl/wojna-o-pochodzenie-koronawirusa/> [accessed: 7.04.2020].

<sup>37</sup> Ibidem; K. Sikorski, *Koronawirus: Chiny i USA spierają się o to, kto wywołał pandemię. Donald Trump: Wirusa można było zatrzymać tam, skąd pochodzi*, <https://polskatimes.pl/koronawirus-chiny-i-usa-spiera-ja-sie-o-to-kto-wywolal-pandemie-donald-trump-wirusa-mozna-bylo-zatrzymac-tam-skad-pochodzi/ar/c1-14869393> [accessed: 7.04.2020].

<sup>38</sup> Q Forgey, C. Oprysko, *Trump announces, then reverses, freeze on funding for World Health Organization*, <https://www.politico.com/news/2020/04/07/trump-threatens-world-health-organization-funding-171859> [accessed: 8.04.2020].

<sup>39</sup> M. Olejnik, *Kropka nad I* [television program], TVN 24 [emitted: 11.03.2020].

<sup>40</sup> *Chińska diaspora ma pomóc Pekinowi w budowie wielkich Chin za granicą*, <https://www.pch24.pl/chinska-diaspora-ma-pomoc-pekiniowi-w-budowie-wielkich-chin-za-granica,55625,i.html> [accessed: 7.04.2020].

migrations are important for the economic development of states. Diaspora may be a key source of more advanced technologies transferred to China<sup>41</sup>. As Maciej Meyer states, “diasporas accelerate the flow of information across national borders. Family connections and knowledge of local cultures facilitate investment, especially in the face of dynamically developing information and communication technologies”<sup>42</sup>. This means that Chinese diasporas also may contribute to China’s primacy in the rivalry of powers on a larger scale of research on artificial intelligence during the ongoing pandemic. However, this is the material for further extensive work.

An important aspect in the rivalry of superpowers may also be help provided by China for other countries in the fight against the pandemic. Both in the form of supplying gloves, masks, medical equipment, e.g. to Italy<sup>43</sup>, Poland<sup>44</sup>, but also doctors<sup>45</sup>, or by publishing publications about COVID-19 based on the Chinese experience<sup>46</sup>, including books for children<sup>47</sup>, and information brochures<sup>48</sup>.

Based on the mentioned factors, it can be presumed that China will gain primacy in the power rivalry faster than predicted, due to the unexpected COVID-19 pandemic and actions taken against it. The following months with a high degree of probability will also indicate which factors outside of technology may be equally important. Thinking of, for example, unknown economic and military effects, soft power, and public governance and stability. Unfortunately, for all these factors to be measurable indicators, it will take a long time, especially since it is difficult to predict the pandemic’s end.

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<sup>41</sup> M. Meyer, *Wpływ chińskiej diaspory na gospodarkę ChRL po 1978 roku*, “Kwartalnik Kolegium Ekonomiczno-Społecznego Studia i Prace / Szkoła Główna Handlowa” 2012, No. 4.

<sup>42</sup> *Ibidem*.

<sup>43</sup> J. Wood, *China is sending medical experts and supplies to help Italy fight coronavirus*, <https://www.weforum.org/agenda/2020/03/coronavirus-covid-19-italy-china-supplies/> [accessed: 8.04.2020].

<sup>44</sup> J. Dąbrowski, *China to send medical supplies to help staff fighting killer virus*, <https://www.thefirstnews.com/article/china-to-send-poland-medical-supplies-to-help-staff-fighting-killer-virus-11491> [accessed: 8.04.2020].

<sup>45</sup> J. Wood, *op.cit.*

<sup>46</sup> *Stories of Courage and Determination. Wuhan in Coronavirus Lockdown*, Toruń 2020; *China’s Battle Against the Coronavirus. A Daily Log*, Toruń 2020.

<sup>47</sup> *Nie chcemy Cię koronawirusie!*, Toruń 2020.

<sup>48</sup> *Nowy koronawirus i zapalenie płuc. Informacje o ochronie*, Toruń 2020.



## Conclusions and Perspectives

Despite appearing voices and statements, such as the one of the President's of the United States, the Speaker's of the Senate in Poland, or concerns about the understatement of statistics due to disregarding asymptomatic COVID-19 carriers, China is probably ahead in the fight against the pandemic. It also provides real help to other countries, share experience, give guidance, and Hubei Province and Wuhan itself, all of which have become real examples of China's success. Although there are fears that China's aid will entail the obligations of the recipient countries, which will cause increase of benefits for the Chinese. First of all, they will warm their image up. Secondly, they will make further contacts and create new business and investment networks. Third, at a time when human health is paramount, efforts are focused on fighting against the pandemic are crucial. There are many more benefits of this type. Another important issue that appears while analyzing China's success is the category of open and closed societies<sup>49</sup>. Not without significance for actions taken in connection with the pandemic are *ad hoc* solutions that are introduced in China, and in open societies they can meet with resistance, accusations of limiting civil rights and freedoms. The technological aspect, in particular the use of artificial intelligence, is not without significance in this case. In the long run, as the US continues to struggle with COVID-19, China will gain time to act, take on new challenges, and help its partners. Help, as previously indicated, will enable the acquisition of new partners, warming up the image of the Great Dragon, but avoiding a serious crisis that is likely to affect Europe, which first symptoms are already appearing. The conducted analysis allows, therefore, to positively answer the research question: does the coronavirus pandemic (COVID-19), which is currently taking place in the world, have the potential to contribute to China's victory in the race of powers with the USA? Social reality is much more complicated, and this analysis is only a fragment, a part and a forecast based on the dynamically developing situation. The article does not analyze all areas of competition between the powers, but only in technological terms, assuming that it is a crucial area. It is not possible to generalize on a case-by-case basis, Wuhan is not the whole of China, though this one case is a good example of Chinese potential, since the epidemic has slowed down in that region. It is quite possible, therefore, that China has accelerated work on

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<sup>49</sup> J. Marszałek-Kawa, K. Rezmer-Płotka, B. Płotka, *Editorial. Biopolitical Dimension of Contemporary Political Issues*, "Polish Political Science Yearbook" 2020, Vol. 49, No. 1.

hybrid intelligence in connection with the pandemic, thus, when the US continues to deal with it, China will use this time and overtake the US in the race of powers faster than assumed. However, it is only the next few years that will show whether the forecasts referred to in this work will find any confirmation in hard data and statistics.

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## US-China Rivalry in the Age of Coronavirus – Prospects

### Summary

The China-US rivalry takes place on many areas. In this article, attention is focused primarily on the technological area that plays the largest role during the coronavirus pandemic (COVID-19). In addition, scientific and technical progress is crucial for maintaining an advantage over other countries. A useful concept for the analysis is the rivalry of the powers allows to answer the research question: what is the coronavirus pandemic (COVID-19), which is currently taking place in the world, potential to contribute to China's predominance in the race of powers with the US? The study uses a qualitative analysis of available sources and focuses, among others, on the case of Wu-

han, which became the focus of a pandemic. Modern technologies used in China, allowed to slow down the spread of the virus in a relatively short time. Result: Based on the analysis, it can be assumed that China has accelerated work on artificial intelligence, which may be one of the key factors for gaining a predominance over the US in the power rivalry.

**Keywords:** China, US, race of powers, coronavirus, Wuhan, AI

## Соперничество между США и Китаем в эпоху коронавируса – перспективы

### Резюме

Китайско-американское соперничество происходит во многих областях. В этой статье основное внимание уделяется технологической области, которая играет наибольшую роль во время пандемии коронавируса (COVID-19). Кроме того, научно-технический прогресс имеет решающее значение для сохранения преимущества перед другими странами. Полезной концепцией для анализа является соперничество держав, позволяющее ответить на вопрос исследования: что такое пандемия коронавируса (COVID-19), которая в настоящее время происходит в мире? Может ли она способствовать доминированию Китая в гонке сил с США? В исследовании используется качественный анализ доступных источников и, в частности, основное внимание уделяется случаю Ухани, который стал центром пандемии. Современные технологии, используемые в Китае, позволили замедлить распространение вируса в относительно короткие сроки. Результат: основываясь на анализе, можно предположить, что Китай ускорил работу над искусственным интеллектом, который может стать одним из ключевых факторов для получения доминирования над США в соперничестве за власть.

**Ключевые слова:** Китай, США, гонка сил, коронавирус, Ухань, AI