OVERCOMING MODERNITY?

HOW CHINA'S SPLINTERNET REINFORCES THE IMPACT OF GEOGRAPHY IN GLOBAL INTERNET GOVERNANCE

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1. INTERNET GOVERNANCE AS A TECHNOLOGY RACE AND IDEOLOGICAL CONFLICT

The West has led the world in technological development for centuries, and this innovation edge has contributed to its economic and military prowess. The Chinese Communist Party (CCP)[1] recognizes the benefits of being the global center for innovation, and understands that if it is able to dominate twenty-first-century technology, it would gain important geoeconomic and geopolitical advantages. Another key aspect of this competition is which states or groupings of states will set the standards for twenty-first-century technology. Will the leading democracies be able to set standards for the use of new technology consistent with liberal norms and values, or will China set standards more congruent with its preferred autocratic model? (Kroenig and Cimmino 2020, 18).

China officially gained access to the internet as a latecomer on April 20, 1994 and did not initiate e-commerce until the late 1990s (cf. Fang and Chen 2019, 3). By 2008, however, China had the most internet users in the world. In December 2021, China's internet penetration rate reached 73%, with 1.032 billion internet users and 1.643 billion mobile phone users. Of these, more than 90% used instant messaging and online video, 298 million used e-health services, 544 million used online food delivery services, and 453 million used online car-hailing services (cf. CNNIC 2022). By 2022, China had the world's highest volume of e-commerce transactions, with five Chinese companies (Tencent, Bytedance, Alibaba, Meituan, Pinduoduo) listed in the top 10 most successful global internet companies – in terms of both market capitalization (cf. Statista 2022a) and revenue (JD.com, Alibaba, Tencent, ByteDance, Meituan) (cf. Kiniulis 2022). China also appears to be one of the world's leading adopters of 5G (cf. Richter 2022), and the implementation of 5G in key industries has contributed to the rapid growth of China's national (physical and digital) economy. With around 1.425 million 5G base stations, 150 major industrial internet platforms, 2,000 "5G+industrial internet" projects, and 355 million 5G mobile phone users, China's 5G+industrial internet system already stretches from Beijing-Tianjin-Hebei (North China) to the Yangtze River Delta (East China), the Guangdong-Hong Kong-Macao Greater Bay

1 The two English translations "Communist Party of China (CPC)" and "Chinese Communist Party (CCP)" are both common.

Area (South China), and the Chengdu-Chongqing (Southwest China) Economic Circle (cf. CNNIC 2022). In August 2022, China's Ministry of Science and Technology decided that farms, ports, mines, factories, homes, education, autonomous driving, medical diagnosis and treatment, courts, and supply chains would be the ten focus areas for developing and applying a new generation of smart technology (cf. Huayu 2022).

In 2017, China's artificial intelligence (AI) industry began to flourish, with Chinese companies accounting for nearly 25% of global AI enterprises and the second most AI patent applications in the world (cf. China Electronic News 2017). The Chinese government has promoted the construction not only of a digital society and economy, but also of digital government. This includes the national social credit system and the national government service platform, which provides cross-regional and cross-departmental online government services to more than one billion real-name users (cf. CNNIC 2022). By 2020, according to the *China Artificial Intelligence Development Report 2020*, China already ranked first in the world, with China's AI patent applications (389,571) accounting for 74.7% of the global total (cf. Network public information collation 2021). China constructed the world's fastest supercomputer in 2016 and has surpassed the US in terms of the number of published papers on AI, but it still lacks the AI ecosystem that Silicon Valley has successfully established (e.g., with uniform standards and modes of sharing across platforms) (cf. McKinsey & Company 2017). However, China's huge population (and wealth of user data) is a valuable asset in training and improving artificial intelligence systems (cf. McKinsey & Company 2017; Kroenig et al. 2020).

According to the Chinese philosopher and information scientist Yuk Hui, this rapid acceleration of technological development, along with China's massive experiments during the second half of the twentieth century (e.g., the Great Leap Forward, the Cultural Revolution, the Four Modernizations, and the socialist market economy), catapulted China onto the *same technological time axis* as the West (cf. Hui 2020, 241), as constituted by the *technological unconsciousness of modernity* (cf. ibid., 233). China's "modernization process without modernity" (ibid., 240) destroyed the traditional metaphysics and moral cosmology that had guided societal and political life for centuries. This left a conceptual vacuum and a sense of cultural deracination as Chinese thinking could not keep pace with the country's technological transformation (cf. ibid., 240–241).

The epoch of modernity in seventeenth- and eighteenth-century Europe began with mass media, which enabled technological development, the rise of science, the spread of capitalism, the rule of natural law, and a broad-scale communicative exchange between different countries. This epoch was built on a massive exploitation of natural resources within Europe's colonialism and industrialization. Cartesian dualism peddled the illusion that human beings were superior to nature and could thus subject it to human designs. According to Hui, this notion not only broke the European religious molds (which guided human behavior), but also

broke the mold of other cultures' Ionian cosmologies, which advocated the interconnectedness of all living things (humans, animals, plants) and divine beings (cf. ibid., 243). Hui considers the main characteristics of modernity to be (a) the pressure to globalize, (b) the hegemony of technology, and (c) people's technological unconsciousness, belief in progress, and destructive relation to nature (cf. ibid., 48). He suggests that the disorientation and loss of tradition that arose within all societies after modernization must have been particularly unsettling in non-Western societies like China and Japan, who jettisoned tradition without any form of introspection. In Europe, however, every deviation from tradition arranged itself within tradition, or counteracted tradition (cf. ibid., 240). Hui suggests that Chinese society's feelings of paralysis and disorientation were mainly caused by a limited understanding of technology on the part of Chinese Neo-Confucian philosophers and the Chinese Communist Party (cf. ibid., 239). Furthermore, Hui argues that all other attempts to overcome modernity worldwide (including twentieth-century fascism, communism, and liberalism) failed because they advocated a return to tradition and the local home and demonized modern technologies (cf. ibid., 234–235).

A *technological consciousness* has gradually emerged since the rise of the *Anthropocene* at the end of the eighteenth century. Human beings have begun to grasp the role technology plays in the destruction of the biosphere and the future of mankind (cf. ibid., 241–242). Hui describes the spirit of our contemporary time as a passage from technological unconsciousness to technological consciousness. During this process, we have started to accept that technology is part of our consciousness, realized that our existence is conditioned by technology, and realized that the epoch of modernity is coming to an end, without knowing what comes next (cf. ibid., 187–189). Hence, the Anthropocene – located on the same time axis as modernity – is related to rethinking modernity. We have come to realize that our modern ontological interpretations of the cosmos (dualism of nature/culture, body/mind, being/non-being) have distanced us from our environment and brought us into the awkward position of having to save the earth after desecrating it for centuries (cf. ibid., 242).

The most recent media upheaval (the emergence of the internet and digital technologies) not only consolidates capitalism, but also inscribes the rule of *natural law* into the management of modern "risk societies" (Beck 1992). *Datafication* quantifies all aspects of life and results in an absolute objectification of human behavior. The resulting dangers are that 1) we create a technological world that condemns us to follow the rule of natural laws in every area of life, and 2) the natural laws – amplified and embodied by modern technology – exert power beyond their own territory (nature) (cf. Hui 2020, 202–203). If humankind begins to intervene in natural laws in this way, unintended consequences could arise. Hui suggests technology should be posed as a question of the various *cosmotechnics* inherent in different cultures' metaphysical categories, which must be inscribed into the implementation of new technologies if we want to survive as a human

race (cf. ibid., 254). He postulates that, as human beings, we can only gain control over new technologies and prevent them from ruling us if we reinvent the self and technology (cf. ibid., 233) to ensure that morality and ethics preside over technology (cf. ibid., 238–239).

Instead of working together to find a global solution, the two cyber powers (the US and China) are not only driving the quantification of our lives, but instrumentalizing global internet governance as a technological and ideological competition between two different political systems. While the US desperately defends the democratic and capitalist order, China's socialist market economy and digital capitalism also pursues capital, economic prosperity, and a belief in progress – while drying up our natural resources.

Western think tanks (e.g., the Atlantic Council) employ the Cold War narrative of competing ideologies between liberal democracies and autocratic countries to frame the "technology race" between the US and China, emphasizing that the most successful political system will get to set the standards of use for twenty-first-century technology (cf. Kroenig and Cimmino 2020, 18). The Atlantic Council sees the "China Challenge"[2] as the first challenge to market democracy and international order since the end of the Cold War (cf. ibid., 10). Thus, the Atlantic Council urges its partners to (a) upgrade ICT infrastructure to 5G wireless networks to support smart cities and the Internet of Things (IoT), (b) invest heavily in emerging technologies (e.g., quantum computing) to promote data processing and encryption, and (c) prevent China from engaging in sectors vital to allies' national security (cf. ibid., 13). These suggestions appear to promote technological advancement for the sake of winning an ideological competition.

China also engages in similar rhetoric and systems of thought. Chinese scholars describing China's 25-year-long internet history emphasize that although China initially tried to "catch up" by imitating developed countries' online products and services, it has since become a hyper-connected and innovative society, which "even surpasses Europe and the US" in real-time communication for business, total value of online shopping goods, and mobile payment penetration rate (cf. Fang and Chen 2019, 3f). Chinese scholars depict recent AI developments as a "technological race" (Hu 2018) or an "AI race" (Official account of the Institute of International Technology 2021), and as a global scientific competition that China must win to lay the foundation for its industrial transformation and technological revolution (cf. Hu 2018). Research centers attached to the Chinese State Council depict a "new Cold War in tech" with both technological and geopolitical consequences. According to their accounts, European and Asian countries (who are "desperately trying to develop their own digital sovereignty") are being forced to decide whether to side with the US or China for intelligence, economic and secu-

2 This includes China's model of authoritarian state capitalism, rapid military modernization, integration into existing multilateral institutions, new partnerships with autocratic states, ambition to dominate key twenty-first-century technologies, and its export of surveillance technologies.

rity partnerships (cf. Official account of the Institute of International Technology 2021).

STRUCTURE

This paper seeks to explore whether China's past and present policy approach to domestic and global internet governance has enabled China to "adopt the global time axis as [its] own" to overcome modernity, without relapsing into a modern dualism between human beings and nature (cf. Hui 2020, 233) or contributing to further consolidation of the homogenous relation between humankind and technology via quantification and control (cf. ibid., 35).

In the second section I discuss China's *national digital policy*, considering how the laws governing China's "splinternet" (a term coined by Crews (2001) to describe the potential fragmentation of the internet along national, commercial, and technological lines) have helped CCP to shift the burden of social governance from state authorities to other stakeholders. Next, I demonstrate that beyond the economically and politically driven "cyber sovereignty" approach taken in China's internet development (cf. Kurbalija 2016, 230), national internet laws also illustrate the Chinese government's attempts to instill socialist values into internet regulation and to introduce market economy principles to digital capitalism. However, I will argue that so far none of these measures have helped to cultivate a technological consciousness that resists the pressures of technological modernization and worldwide military and economic competition (cf. Hui 2020, 252), as the Chinese government regards perpetual technological progress and the spread of economic prosperity as the basis for constructing a socialist society.

The third section reconstructs the Chinese perspective on *global internet governance*. First, I explain why the Chinese government thinks the internet needs to be reformed. I then show how the People's Republic of China (PRC) intends to bring about such reform through its expansion of high-tech products and infrastructure abroad, and active participation in international cyberspace regulation. We will see how the Chinese government insists on state sovereignty within its own national physical territory and splinternet. Finally, I will trace the emergence of a historical awareness within contemporary Chinese online publics, which Hui describes as having been absent in both traditional and modern Chinese philosophy (e.g., Neo-Confucianism) (cf. ibid., 220–221). I will show how Chinese politicians, scholars, and journalists establish a clear relation not only between *technology and time*, but also between *technology and space*, as the ongoing erection of new barriers in cyberspace is considered essential for CCP's mission to liberate the PRC and the Global South from the technology-driven impact of Western hegemonies.

The fourth section depicts what a *splinternet* divided along geographic, political and economic boundaries might look like, if Chinese and US technological development policies continue to promote the rule of capital, the universalization of

naturalism, and "progress" at the expense of an intact planet earth. This approach does not help to harmonize the relationship between human beings and nature, so I support Hui's philosophical concept of an ontological pluralism of different cosmotechnics, as it can assist us in re-appropriating modern technologies and overcoming modernity (cf. ibid., 252; 256–258).

2. NATIONAL DIMENSION OF INTERNET GOVERNANCE: THE NETWORK POLITICS, LAW, AND ETHICS OF CHINA'S SPLINTERNET

> "The Internet has become the fifth largest sovereign space after land, sea, air, and sky" (Deng 2018).

2.1 CHINA'S APPROACH TO CYBER SOVEREIGNTY

As the secretary of the Hebei Zhengding County Party Committee in the early 1980s, Xi Jinping (the current president of China) remarked that "technology is the key, and information is the soul" (Zhuang 2021). Around the same time, Qian Xuesen (1911–2009), the founder of China's missile and space program, said that artificial intelligence would determine the country's future (cf. Wu 2019). The CCP has managed public opinion and centralized the coordination of its domestic internet to strengthen the Party's rule and guide the country's future development (cf. An 2021; Zhuang 2021). Due to the strategic importance of the internet, the Chinese government has encouraged the development of a domestic internet – a splinternet – by enabling Chinese tech companies to develop their own national versions of search engines (Baidu instead of Google), video portals (YouKu instead of YouTube), social media networks (WeChat instead of WhatsApp and Facebook), and microblogging services (Weibo instead of Twitter). This allows for better control of users, business operators, and content. China has also been continuously developing its own data ecosystem, semiconductor industry, and data science (cf. McKinsey & Company 2017).

The Chinese government views the internet as a *territory* that must be subjected to the rule of law, and all network and platform operators, business-operating entities, and individual internet users within the territory of the PRC must abide by it. The rule of law is considered the foundation for building a strong country with the help of the internet (cf. Yang and Liu 2021) and for creating a "clear, clean, and ecologically sound" cyberspace, serving as a "common spiritual home of hundreds of millions of people" (An 2021). The CCP also values online public communication as a way to understand and respond to the problems of the masses (cf. Tao 2019; An 2021).

During China's five stages of internet policy from 1994 to today,[3] news dissemination and cyberspace security have been the most regulated areas. The *Measures for the Administration of Internet Information Services* in 2000 implemented licensing and filing systems for (non-)commercial information services to identify all entities that offer and use internet services. Internet service providers are required to record and provide information (e.g., internet users' identity, time spent online, and 60 days of web history) to government authorities (cf. Zhu 2000). In response to the "negative impact" of user-generated content in the evolving blogosphere during the early 2000s, responsibility for internet governance was shifted from the Ministry of Industry and Information Technology to the ideologically driven State Council Information Office in 2007 (cf. Fang and Chen 2019, 4f).

In 2014, General Secretary Xi Jinping included cybersecurity in his national security concept for the first time. In June 2017, China's first cybersecurity law was implemented to protect the critical information structure of key national industries (Section 2, Article 31, Xinhua News Agency 2016) and address the growing number of cyber security threats[4] and cybercrimes.[5] The law requires the operators of platforms (Article 76) and critical information infrastructure (Article 37) to store all data within China, and to identify and remove "illegal" content[6] via monitoring (Article 47, Xinhua News Agency 2016).

Similarly, the *Measures for the Supervision and Administration of Online Transactions* require all "online transaction operators" to register on the online trading platform with real identity information, so that platform operators (Article 24) can regularly monitor business operators that have not registered as market entities (cf. State Administration for Market Regulation 2021). Registered online transaction operators (including farmers' professional cooperatives) must display their electronic business license and social credit code prominently online (cf. ibid.). China's Cyber Administration permits national entities that comply with Chinese law (e-businesses, platform operators, celebrities, users) to engage in un-

3 1) Initial stage 1994–1999, 2) stable policy implementation 2000–2004, 3) policy transition 2005–2010, 4) policy deepening adjustment stage 2011–2015, and 5) strategic development stage (2016–ongoing) (cf. Huang et al. 2019).

4 According to the 41st Statistical Report on Internet Development in China, more than 20 million terminals were infected with computer viruses and more than 15,000 security vulnerabilities of the information system were detected in 2017, an increase of 47.7% from the previous year (cf. Deng 2018).

5 During the first half of 2017, 1,225 people were prosecuted for illegally obtaining or providing citizens' personal information, and the Ministry of Public Security supervised the handling of 62 major telecom and network fraud cases, arresting 14,540 people and prosecuting 11,590 people (cf. Deng 2018).

6 This includes content meant to overthrow the socialist system (Article 12), the spread of rumors and false information, the sale of prohibited items (Article 46), and network services that endanger the physical and mental health of minors (Article 13, Xinhua News Agency 2016).

restricted economic activity, while restricting the online business activities of those that do not comply (cf. Bogen 2022).

Xi Jinping's concept of internet development is based on linking network *governance* to network *security* and network *sovereignty*, which serve as "powerful ideological weapons to promote the construction of a strong network country" (Zhuang 2021). Network governance is based on a "dialectic relationship between security and development, freedom and order, openness and autonomy, management and service" (ibid.). Hence, these laws require individuals, enterprises, and industry organizations to accept both public and political supervision, and encourage them to report illegal network behavior to the authorities.[7] The government appears to consider cooperation to be one-way – i.e., provided by national users, e-businesses, and platform operators.

This approach is reflected in the "diamond model" of China's internet policy system (Fig. 1), which Chinese scholars propose as a possible depiction of China's future internet policy. This model visualizes the institutionalization of China's cyberspace and the rule of law, where "multi-domain systematic norms" and "multi-party participation" systematically regulate four interrelated and interdependent "policy themes" (access rules, content monitoring, market norms and industrial development issues, and network security management). These themes require different degrees of attention, depending on the development of the internet (cf. Huang et. al 2019, 90–91). The authors consider the present form of the internet to be mainly a public opinion tool, so "content monitoring" is currently the most prominent policy theme.

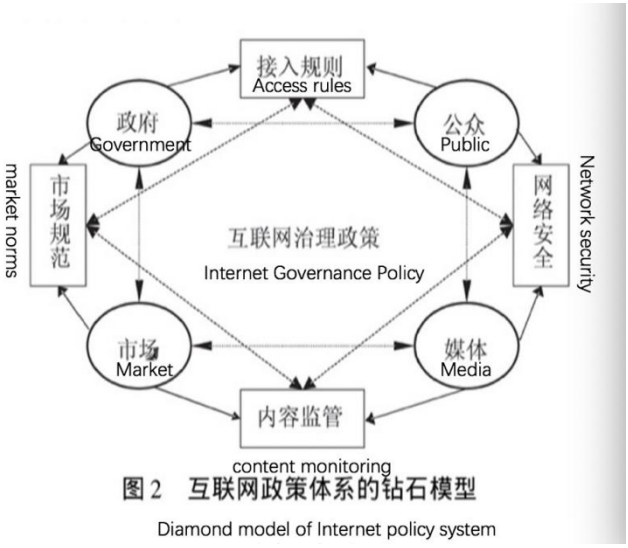

Fig. 1, Diamond model of China's internet policy system, from Huang et. al 2019, 90–91

7 Department of National Network Information; Telecommunications Departments of the State Council; State and Public Security Departments.

Surprisingly, the model depicts internet governance not only as the responsibility of government officials, but also of multiple stakeholders (the government, representing laws and regulation; the public; the media; and the enterprises and organizations representing the "market"). The authors argue that since public power has the potential to erode government authority, internet access has been regulated to balance public rights (e.g., freedom of information) and obligations (cf. Huang et. al 2019, 90). Although the authors describe their model as a "liberal multi-party co-governance policy framework," Chinese government authorities appear to be the actual instigators of internet governance. Similarly, journalists claim that the (mobile) internet has changed social governance "from one-way management to two-way interaction, from offline to online, and from pure government supervision to a greater emphasis on social collaborative governance" (Tian 2018). However, social collaboration in Chinese domestic internet governance requires internet users, media, businesspeople, and platform operators to scrutinize each other's behavior and report alleged offences to authorities. As one journalist states, quite openly: "To create a 'clean' and 'safe' online environment, every Chinese citizen is expected to become an 'internet censor' by 'reporting network violations' […] [to] network supervision departments" (Official account of Xinmin Evening News 2021b).

The authors of the *diamond model* indicate that future internet governance should be "in line with China's national conditions and the current level of internet development." As they see their model as providing "Chinese solutions for global governance" (Huang et. al 2019, 90), it remains unclear whether the model is intended as a framework for governing the Chinese splinternet or the global internet community.

2.2 NETWORK ETHICS: "HEALTHY" ONLINE ENVIRONMENTS AND SOCIALIST CORE VALUES

As discussed, China's "cyber sovereignty" approach (internet follows national laws) has both *economic and political* goals: to foster economic growth and to provide socio-political stability. Online transactions are based on market competition and the rule of law, while laws regulating news dissemination, cybersecurity, and e-commerce aim to create a "healthy" online environment (cf. Zhu 2000; Xinhua News Agency 2016). All entities must respect "social morals," take "social responsibility," and practice "self-discipline" (Articles 9 and 11 of Cybersecurity Law, see, Xinhua News Agency 2016). Online business transactions nationwide must follow the business ethics of "equality," "fairness," and "integrity," to prevent online fraud or unfair business practices and ensure the "healthy development of the digital economy" (State Administration for Market Regulation 2021). Furthermore, enshrining *socialist core values* in law constructs a "multilateral," "democratic," and "transparent" system of network governance, and cultivates a moral value system that directs all parties towards "civilized" behavior in

"healthy" online environments (Article 6 and 7 of the Cybersecurity Law, see Xinhua News Agency 2016). "Healthy news dissemination" includes promoting touching stories of Chinese people's "good deeds" and "righteous actions" in everyday life. These stories aim to "infiltrate the soul" (Tian 2018) and to reflect socialist practices in everyday life. They range from positive examples like "college students and village officials who settle down in the countryside and build wealth for the villagers […] [to deterrent examples like] the 'Xinyi brothers' who promised a thousand dollars and spent the money instead of paying migrant workers' wages" (Wang 2014). In the entertainment industry, socialist core values have been transcribed into popular cultural products (e.g., online games, videos, music, and animation) to reflect the national spirit, advocate "goodness and beauty," incorporate current trends, and promote both Chinese and modern style (Sun 2014). This also serves to "unite hundreds of millions of people under the banner of socialist core values and arouse millions of workers and peasants," and to prevent China from becoming a "prisoner of the dross of Western culture" (Wang 2014). Instant messaging platforms such as Weibo and WeChat also foster socialist core values, for instance with "red jokes"[8] expressed through art (cf. ibid.). The social credit system and the supervision of online transactions by the State Administration for Market Regulation (2021) are meant to create a culture of integrity in market activities, rewarding "honest" entities and punishing the "untrustworthy" (Zhongbanfa 2022). Various Chinese industries have already been integrated into a cross-regional collaborative management system and cloud computing data system that allows the monitoring of the entire digital economy and its actors (cf. Gao 2018, 38).

2.3 PROSPERITY FOR ALL: THE CONCEPT OF "MASS ENTREPRENEURSHIP AND INNOVATION" AND THE "INTERNET+" STRATEGY

The management of China's digital economy, which is officially described as a "socialist market economy with Chinese characteristics" (ibid., 38) but is in fact state capitalism, is based on three macro-control measures that were proposed by Premier Li Keqiang in 2014 and 2015. These recommend that the Chinese government should (1) not intervene while market growth is reasonable ("range control"), (2) promote reform to protect small enterprises and certain social groups (farmers and rural residents)[9] ("targeted regulation"), and (3) make adjustments in advance to prevent and control risks ("camera control") (cf. Yang and Meng 2015). I will now discuss "targeted regulation" by investigating the "In-

8 The Chinese online encyclopedia Baidu defines "red jokes" as uplifting information spread through online devices (e.g., PCs or mobile phones) in the form of inspirational phrases, philosophical proverbs, aphorisms, sincere blessings, and funny sketches (Search item "Red jokes" 2022).

9 One example is to give preferential income tax treatment to small e-businesses run by these groups.

ternet+" (2015) national development strategy and the related "mass entrepreneurship and innovation" policy agenda (2015). These illustrate how China's digital transformation of the national economy is based on both consumption and innovation (cf. Lin and de Kloet 2019, 3), and market economy principles. I will investigate whether these agendas help to make China's digital capitalism less profit-oriented and more commons-based – a necessary prerequisite to escape worldwide competition and generate the kind of technological consciousness that Hui considers crucial for overcoming modernity.

While the previous laws only allowed large IT companies to flourish, the agenda of "mass entrepreneurship and innovation" seeks to foster prosperity for all by enabling small enterprises, single individuals, and start-ups to launch their own online businesses. Journalists announced that "the era when only rich people can start a business has passed" (Economic Observer Information 2021). According to assessments by the National Development and Reform Commission and the China Association for Science and Technology, more than 7 million start-ups and 30,000 "entrepreneurial service institutions" newly registered as market entities in 2020. By 2021 (eight years after the implementation of the concept), 212 "mass entrepreneurship and innovation demonstration bases" had been built across the country, including 3,800 professional cooperatives for farmers in Shandong province alone (cf. Niu 2021). At present, then, we are witnessing the Chinese government's efforts to combine market economy principles with socialist ideas (e.g., collective ownership) in China's physical and digital economy. Nevertheless, it seems hard to rein in the turbo-capitalism of China's internet economy. Chinese scholars predict that China's Internet+ strategy will cause the manufacturing industry to shift from being labor-intensive to capital-intensive and technology-driven (cf. Liu 2017, 4–5), by "using information flow to drive technology, capital, talent, and material flows" (Tian 2018).

At first sight, the concept of mass entrepreneurship and innovation encourages the growth of small and micro enterprises in structurally underdeveloped regions of China. For example, the Wanshun car-hailing start-up was founded by Chinese workers in 2017 to meet the demand for car-hailing services in third- and fourth-tier cities. In their first five years of business, they issued 20,000 direct and 300,000 flexible employment contracts to provide more jobs for Communist Party members and veterans (cf. Economic Observer Information 2021). However, the Cyberspace Administration in Beijing also ordered the leading car-hailing app Didi Chuxing to be temporarily removed from Chinese app stores due to an alleged illegal use of user data. Thus we can conclude that the concept of mass entrepreneurship serves to restrict the monopoly of national internet companies, reduce the "disorderly expansion of capital" (Zhuang 2021), and limit foreign investors' sphere of influence (the US car-hailing service Uber Technologies is Didi Chuxing's second largest shareholder) (cf. *Der Spiegel* 2021). Developing its own core technology and internet infrastructure enables China to become independ-

ent of both global supply chains and the interests of foreign stakeholders who hold stock options in Nasdaq-listed Chinese tech giants:

> No matter how large an Internet company is and how high its market value is, if its core components depend on foreign countries and the "life" of the supply chain is in the hands of others, it will be "in peril." To build a powerful country in the Internet era, we must have our own "core competitiveness," our own technology, and a good information infrastructure. Only by strengthening independent innovation can we "start anew" and truly "get tough." […] [A]nd completely reverse the embarrassing situation of being controlled by others. (Tao 2019)

Chinese legal scholars such as Qiao Xinsheng have urged the government to reform China's legal system in order to stop Chinese online platforms from being governed by foreign stock markets. Their aim is to prevent foreign investors from trying to overthrow China's socialist system by influencing the ideology and opinion of the Chinese general public (cf. Qin An Strategy 2021).

"Mass entrepreneurship and innovation" is also a way to deal with high youth unemployment in China (cf. Springfeld 2022), as popular video-sharing platforms such as Kuaishou, TikTok (Chinese: Douyin), and Bilibili[10] provide new job opportunities and help the post-1990s generation to maximize their income opportunities. They enable people in mid- and low-tier cities to establish their own online businesses by acting as private companies and content creators, while receiving financial support (investment) from Chinese IT giants like Baidu, Tencent, and other venture capital companies (cf. Lin and de Kloet 2019, 3–4). In the first quarter of 2022, Kuaishou used live broadcasts to teach more than 100 million users how to create a business on its platform (cf. Louchun 2022). The platform has generated 34.64 million employment opportunities for content creators, and among the content creators active in 2016, 94% of those with >1,000,000 fans and 70–80% of those with 10,000–100,000 fans were still active in 2022 (cf. ibid.). Of the 400 million daily active TikTok users in 2020, more than 20 million either made direct income from live broadcasts and e-commerce or worked in new occupations (e.g., internet marketers or "live broadcast salesmen") (cf. China Youth Daily 2020). Of the 4 million enterprises that were registered on China's national version of TikTok by July 2020, 80% were small enterprises with less than 20 employees (cf. ibid.). Internet legislation supports small businesses[11] by not requiring

10 The majority of content creators (70%) on Bilibili are between 24 and 30 years old (cf. Daily Economic News 2021).

11 Small businesses are defined as those that do not require administrative licenses and whose annual transaction volume does not exceed 100,000 RMB (cf. State Administration for Market Regulation 2021).

them to register their business as a market entity (cf. State Administration for Market Regulation 2021).

Media reports (Daily Economic News 2021; Louchun 2022) suggest that most online businesses on video-sharing platforms (Bilibili, Kuaishou, TikTok/Douyin) are started by people living in inland-southern (Hunan, Jiangxi), central (Shanxi, Henan), and southwestern China (Yunnan, Sichuan, Chongqing). These are all landlocked central provinces (not the richer coastal regions), so the concept of mass entrepreneurship and innovation seems to have worked for now.

In recent years, the Chinese government's "Internet+" strategy has promoted the integration of the physical economy into the digital economy and transformed traditional production relations and circulation systems by encouraging three core industries (agriculture, manufacturing, services) to use digital channels and digitize supply chains (cf. Shen 2017). The "Internet+" strategy also seeks to improve living conditions for rural peasant groups (cf. State Council 2015), by stimulating innovative forms of organization among farmers and employing market mechanisms for agricultural brand building (cf. Ma and Hu 2020, 7–10). It aims to create a market- and government-led digital rural economy, centered around the social participation of farmers, resource sharing, and collaborative construction (cf. ibid., 5–6). The internet penetration rate expanded to 57.6% in rural areas by December 2021 (284 million internet users) (cf. CNNIC 2022), and farmers use content on platforms like Kuaishou to learn how to operate agricultural machinery (cf. Louchun 2022). In 2022, Xi Jinping concluded that rural e-commerce had promoted agricultural innovation and rural development and raised farmers' incomes (cf. Wu et al. 2022). Furthermore, five years after McKinsey suggested that the Chinese government should educate its workforce to use AI technology across industries (cf. McKinsey & Company 2017), China's first open-source, industrial-level deep learning platform was launched, providing teaching resources, tools, platforms, and services to vocational education institutions, colleges, and universities. This AI-based multi-level education system will help tackle China's AI talent gap, create high quality jobs, and allow the further growth of China's digital economy by integrating education into digital industries (cf. Yue 2022).

However, despite these public internet platforms and public service alternatives to private companies, both the Internet+ strategy and the agenda of mass entrepreneurship and innovation mainly center around a profit-oriented model of e-commerce that fosters further quantification and control. For example, even farmers' professional cooperatives and collective ownership associations are required by China's State Administration for Market Regulation (2021) to publish their social credit code online (Article 12). China's current digital economy is still not establishing the type of commons-based society I consider to be crucial for escaping the homogenous relationship between human beings and technology. According to Hui (cf. 2020, 35), this relationship is caused by humans' self-imposed pressure to constantly invent even larger technical systems (e.g., smart

cities, the Internet of Things, social networks) to track and quantify human behavior (the "technological unconsciousness").

2.4 INTERIM SUMMARY

Chinese national internet laws are meant to ensure network security and network sovereignty. The burden of social governance appears to have shifted from state authorities to other stakeholders (platform operators, e-businesses, internet users). Socialist core values are incorporated into internet legislation to create healthy online environments. China's current digital economy is governed by state market supervision and market economy principles to integrate marginalized social groups. Recent policy documents advocate the promotion of new forms of consumption and retail/consumer networks (cf. National Development and Reform Commission 2021), and socialist elements such as farmers' professional cooperatives are integrated into China's digital economy. However, the current Chinese internet economy does not resemble the kind of "open sharing" platform (e.g., public service platform for collaborative manufacturing) that the State Council envisioned in 2015 for new models of economic production and public service (fair services and open public data resources) (cf. State Council 2015). Chinese legal scholars classify China's digital economy as "capitalist" and far from the State Council's vision, since online platforms do not serve the people and are not owned by the public (cf. Qin An Strategy 2021). In digital capitalism, "competition between great powers in the digital economy era is invisible," so legal scholars urge the Chinese government to scrutinize foreign investors' attempts to influence Chinese online public opinion (cf. ibid.). Although technological governance aims to create a socialist society, its underlying economic principles rely on market competition, consumption, the spread of economic prosperity, quantification, and control. Hence, China's domestic internet legislation submits to the pressure of technological modernization and worldwide competition and does not reveal the kind of technological consciousness that Hui describes as necessary to overcome modernity.

3. THE INTERNATIONAL DIMENSION OF CHINA'S INTERNET GOVERNANCE

> "We should [...] turn the deep sea, polar regions, outer space and the Internet into new frontiers of cooperation rather than making them arenas for a common game."
> (CCTV reporter 2022).

3.1 A FIREWALL OF VALUES

Google's withdrawal from the Chinese market in 2010 and the dispute between China and the US over cyberspace order and network infrastructure not only provided an impetus for Chinese local companies to dominate the national online market, but highlighted the fact that the US and China were pursuing two opposing internet development models. The US government's rejection of Chinese tech giant Huawei's attempts to promote its 5G solutions in the US market in 2018 initiated an ongoing international discussion of China's growing influence. Chinese scholars frame the US government's ban of Huawei as an act of "disconnection, decoupling and division" that counters the global (interconnected) nature of the internet (cf. Fang and Chen 2019, 7–8). The EU and US have become concerned about the expansion of Chinese 5G technology to countries of the Belt and Road Initiative (cf. Official account of the Institute of International Technology 2021). Chinese-brand smartphones and Chinese tech giant Huawei's operating system have a growing presence on the African continent, which Western policy analysts depict as a battle between Chinese and US tech firms for control over developing countries' software, content, and communication tools (cf. Tugendhat 2021). Western think tanks believe China intends to "build […] a global information network with China at its center" (Arcesati 2020), which will challenge Western hegemony. Recent attempts by the US to prevent Chinese students from studying at American universities are regarded by the Chinese State Council as an attempt to disadvantage China when it comes to training future talent (cf. Official account of the Institute of International Technology 2021), as China already has a talent gap of five million people (engineers, data scientists) in the fields of AI research and production (cf. Yue 2022).

Chinese scholars and journalists often compare China and the US as cyber powers, considering their performance and their underlying ideologies. Despite running similar profit models[12] through their internet economies, the US is still the leading center for innovation (cf. Li 2016, 155ff). The Chinese National People's Congress suggests that the US dominates the global trend of integrating the

12 These seven profit models include 1) the cross-subsidization pricing model for information products, 2) Pareto's law, 3) the transaction sharing model, 4) the advertising model, 5) the labor exchange model, 6) the virtual currency model, and 7) the gift economy model (cf. Li 2016, 152ff).

physical economy into the internet and uses the high-tech revolution to further promote globalization, neoliberalism, and the rule of monopoly capital in international finance and industry, leading to increased inequality between the rich and the poor (cf. Shen 2017). Although "the internet knows no borders, internet companies often have a 'nationality'," so "it is not the technology itself that determines the outcome, it is economic and political systems" (ibid.). Leading authorities in China's National People's Congress believe the political and legal governance of China's internet economy are crucial in creating socialist production relations, with only a fraction of people "still believing that 'neoliberalism' can save China and the world" (ibid.). Chinese journalists take a critical stance towards capitalism, highlighting the fact that AI developers in India "develop apps for Western companies with only their wealthy customers in mind, creating a polarized economic society" (Official account of the Institute 2021). Overcoming a polarized society, eliminating workforce exploitation, and guaranteeing prosperity for everyone is considered to be the essence of a socialist society (Search item "Socialist society" 2022), and AI technology is considered crucial to governing such a society.

Chinese journalists claim that due to their technological superiority, Western developed countries are trying to impose "cyber cultural colonization" (Sun 2014) on developing countries. Chinese journalists portray online platforms as a "front for ideological confrontation, cultural contest, and value struggle" between "allegedly undemocratic" countries and some Western countries. They accuse the latter of using strategies ranging from online infiltration to direct attacks, which not only confuse Chinese people about "right" and "wrong" values, but might even lead to the "failure of socialism" (Wang 2014). Hence, it does not come as a surprise that China's Cyber Security and Informatization Committee describes the internet as "the main front, the main battlefield, and the forefront of ideological struggles" (Zhuang 2021).

Chinese journalists also describe the situation in this way: "At present, the cybersecurity game between great powers is not only a game of technology, but also a game of ideas and the right to speak. The more critical the moment, the more it is necessary to enhance the people's sense of responsibility and mission for cyber security" (Deng 2018). Journalists argue in favor of going beyond "defense" strategies such as blocking content by adopting more active forms of "fighting," to build a "firewall of values" that responds to "value 'hackers' from different directions" (Wang 2014). They suggest building a professional team to conduct "social 'Internet Criticism'," by "actively criticizing and fighting against multifold wrong values in the network." This includes values that promote reactionary attitudes, vulgarity, and the "universal values" that certain Western countries and even some Chinese citizens advocate or praise online (ibid.). Hence, the internet is seen as a "test of governance" for Party rule, as it helps to "consolidate its ruling status, and improves its governing ability, which reflects the strong sense of urgency and historical responsibility of Marxist politicians" (Zhuang 2021).

3.2 THE OVERSEAS EXPANSION OF CHINA'S HIGH-TECH INDUSTRY

Another way to break free from the grip of the Western powers on "cyber cultural colonization" is to help national tech giants expand overseas. Chinese companies use the internet's information infrastructure to pursue their businesses globally. Chinese smartphone brands already dominate the market in low-income countries in Southeast Asia (cf. Abacus 2019) and Africa (cf. Tugendhat 2021), and the Chinese brand Xiaomi is among the top three in Latin America (cf. Ding 2021). Leading Chinese national social media apps, film distribution, and e-commerce platforms are also used in other countries. The Twitter-like microblogging service Sina Weibo is the first Chinese social media company to be listed in Nasdaq, and Tencent's mobile chat and instant messaging software WeChat was listed in the top-10 most popular social media apps worldwide in 2019 (cf. Lai and Tian 2019, 54). China's overseas market expansion has not only targeted Southeast Asia (Taiwan, South Korea, Thailand, Vietnam, Singapore, Indonesia, Malaysia, the Philippines), Japan, the Pacific (Australia, New Zealand), Africa (Ghana, Congo, South Africa), and Latin America (Argentina, Brazil, Mexico), but also densely populated underdeveloped countries with a low penetration rate for smartphones, such as India (cf. ibid.; Luo 2014, 52). Expansion strategies include finding local partners, conducting (offline) advertising and event marketing, cooperating with local celebrities, studying international internet service providers' product design, using Chinese students overseas to promote WeChat services, and opening offices abroad to investigate local habits (cf. Zhu 2014, 48; Luo 2014, 52).

The portal website Sina obtains overseas interview rights through overseas branches, and e-commerce platform Alibaba (Tmall.com, Taobao.com, Alipay) has invested in the acquisition of digital media content and distribution companies in both local (e.g., Youku) and international markets (e.g., the US company Lionsgate) since 2014 (cf. Dang 2016, 110–111). Alibaba also focusses on film distribution on multiple screens (PC, mobile phone, TV etc.). Its aim is to introduce the concept of e-commerce into the film and television industries, by creating a consumption model that combines ticketing, payment, and consumption of movies, and links online payment with offline movie theaters. Furthermore, with Yuyubao, Alibaba has established its own film and television operating model based on crowdfunding, where users can invest in their favorite movies, interact with stars, and participate in content production (script creation).

To promote Chinese culture on a global scale and establish a number of large and competitive cross-regional and cross-industry media groups, China Central Television's online channels' and Xinhua News Agency have constructed international websites. Along with local TV stations (e.g., Hunan Satellite TV), they have also established partnerships with international television news (UK, USA) to cooperate on program development, copyright, and program broadcasting (cf. ibid., 111). Some Chinese journalists advocate spreading socialist core values outside China, "as the natural boundaries and barriers between countries can be easily

broken with the help of values" (Wang 2014). Success stories about the joint efforts of the Chinese Communist Party and Chinese people to overcome hardship are disseminated online to help global internet users relate to socialist core values (cf. ibid.).

The online search engine Baidu and e-commerce platforms like Taobao and Tmall have not yet achieved top-10 traffic in other countries (cf. Lai and Tian 2019, 54–58), so Chinese scholars conclude that the US still governs the internet globalization process (cf. Xu 2017, 19). They suggest pursuing an "innovative technology-driven" model of internet development similar to the US, to ensure a leading position on a global scale (cf. ibid., 20). The Chinese short video platform TikTok (Douyin) has achieved worldwide success, so they believe more Chinese hardware and software solutions will soon conquer foreign markets (cf. Lai and Tian 2019, 54–58).

Chinese production- and distribution-centered digital platforms are already restructuring regional markets abroad. For instance, Chinese platform conglomerates coordinate food production networks in Southeast Asia and regulate food imports from Thailand and Vietnam (cf. Yang 2022, 716–734). China's social credit system targets the supervision of import and export businesses and the establishment of a credit system for foreign cooperation and foreign investment (cf. Zhongbanfa 2022). China aims to shape international credit governance by providing "Chinese wisdom and Chinese solutions to promote the construction of a more just and reasonable international governance system" (ibid.).

The strategies deployed by national tech giants to promote the use of their digital products and platforms in countries around the globe may be the first step in creating a community of allied countries who will gradually join China's online media ecosystem.

3.3 CHINA'S POLICY APPROACH TO GLOBAL INTERNET GOVERNANCE

The CCP is also counteracting the perceived US domination of global internet governance by adopting a *multilateral approach* and joining international cyberspace governance programs. China has not only hosted the annual World Internet Conference since 2014 and the World Artificial Intelligence Conference since 2018 (activities that Chinese journalists interpret as evidence of the world's "high recognition of China's position in this field," see Huayu 2022), but has actively participated in meetings of the Internet Corporation for Assigned Names and Numbers (ICANN) and the Internet Engineering Task Force (IETF) (cf. Kurbalija 2016, 230). Moreover, the Chinese government fosters digital connections between Asia and Europe through the Digital Silk Road project and aims to *close the digital divide* in the Global South (e.g., by financing Africa's digital infrastructure, implementing Chinese IT solutions for e-governance and online education in developing countries, promoting smart health in Arab countries, and promoting AI-enabled COVID-19 diagnostic systems in certain South American countries) (cf.

Arcesati 2020). In the eyes of President Xi Jinping, "the common aspirations of the vast number of developing countries have brought Chinese wisdom and solutions into global internet development and governance" (Zhuang 2021).

While China is promoting an interconnected global cyberspace by building the necessary infrastructure in different countries, Xi's concept of a "community of shared future in cyberspace" is meant to provide a vision of Chinese wisdom for the international community (cf. CCTV reporter of China Central Radio and Television 2022). It builds on Marxist theory and aims to move away from nationalism (cf. Wang 2021, 39f). The internet is understood as a "borderless" global cyberspace, cooperatively governed by interconnected international players (cf. CCTV reporter of China Central Radio and Television 2022). It envisions a global online community that is defined neither by ethnicity and regional belonging nor by "Western centralism," but is "infinitely inclusive," commonly constructed, "clean" (undefined here),[13] and based on the idea of sharing "public goods" (Wang 2021, 39f). To transform the existing cyberspace from a "zero-sum game" into a "win-win situation" for all, the interconnection and interoperability of network facilities along with an open exchange and mutual integration of cyber cultures needs to be promoted (cf. ibid., 43). The focus of internet governance has to transform from "seeking common ground to seeking peace," and from "technical security assurance to global collaborative security" (ibid., 43). As the internet's main dynamic (i.e., content produced by many different players) is an "urgent problem" in the management of global cyberspace, Xi's concept is the "Chinese" answer to solving it (cf. ibid., 39). The solution is to make the global community respect cyber sovereignty, to maintain peace and security, and to promote open cooperation and build "good order" (cf. ibid., 41f.). Hence, we can also identify a *cyber sovereignty approach* in China's attitude towards global internet governance.

We can apply the (national) *diamond model* of internet policy from section 2 to deduce how China envisions its systematic regulation of the global internet. The Chinese government currently concentrates on "market norms" and "network security management" policies (e.g., providing its IT infrastructure to Digital Silk Road partners to regulate cross-border e-commerce). Eventually, after completing this process, the Chinese government may switch its attention to "access rules" and "content monitoring" policies, to ensure that its partners engage in "global collaborative security" in a way that aligns with Xi's development objective of a "community of shared future in cyberspace." Bearing in mind what "social collaborative governance" means in China's national internet governance context (as reconstructed in section 2), "global collaborative governance" could imply that foreign business operators and internet users in the Digital Silk Road coun-

13 Another journalist clarifies the meaning of the word "clean": The Cybersecurity Law, which regulates and restricts online behavior by making Chinese internet users comply with the rule of law, is presented as "conducive to creating a clean and upright online environment" (Yang and Liu 2021).

tries would be required to scrutinize each other's behavior and report violations to Chinese authorities to meet the demands of China's cybersecurity approach. This is not unlikely, as General Secretary Xi Jinping's concept of international cyberspace governance is based on the notion that people worldwide should benefit from the freedom and economic prosperity the internet provides, but only if users submit to a certain code of conduct that ensures harmonious interaction and cooperation. "Only by forming a good internet order can we balance freedom and order, promote development and prosperity, and ensure that the internet benefits mankind" (Zhang 2022).

China's Cybersecurity Law (Article 7) advocates "international exchanges and cooperation in cyberspace governance, network technology research and development and standard setting" (Xinhua News Agency 2016). However, research institutes affiliated with the Chinese State Council have indicated that the Chinese government would be unlikely to authorize international stakeholders to shape China's global internet governance, as artificial intelligence touches on crucial aspects of national security and political hegemony:

> Businesses, charities, or other non-government actors may very much want to step in and lead technology collaborations, however, any form of collaboration will be more difficult once policymakers view technological issues through the lens of national security and political hegemony. (Official account of the Institute of International Technology 2021)

The next section will show how the emergence of a historical awareness is strengthening China's ambition to embed the ideas behind its national cybersecurity law in global cybersecurity legislation.

3.4 TECHNOLOGICAL UNCONSCIOUSNESS DESPITE THE EMERGENCE OF A HISTORICAL AWARENESS

The Chinese government believes that digital technologies are fuelling a worldwide technological revolution and industrial transformation "unseen in a century" (Zhuang 2021). The Cyber Security and Informatization Committee of the Central Committee of the CCP is convinced that China is capable of becoming (one of) the world's strongest cyber power(s):

> In today's world, it can be said that there are only a few ruling parties in a few countries that can actively adapt to the trend of information revolution like the Communist Party of China does, and attach importance to the Internet, develop the Internet, and govern the Internet. (ibid.)

Some Chinese scholars believe China will pursue a *historical mission* in the next 25 years of internet development, by leading digital interconnectivity among the remaining four billion people worldwide who are not yet online, engaging in the global 5G and 6G competition, and using the internet to make the "global leadership of China's hyper-connected society the biggest driving force for the future development of human civilization" (Fang and Chen 2019, 3; 8). Journalists proclaim that "[…] the era when Western countries controlled China's economic lifeline through mergers and reorganizations of traditional enterprises is gone forever" (Qin An Strategy 2021). They welcome the arrival of artificial intelligence "at the right time" (Hu 2018), which will be a key factor in "realizing the Chinese dream of the great rejuvenation of the Chinese nation" (China Electronics News 2017).

Turning China into a strong domestic and global cyber power will advance the two centenary goals (cf. Zhuang 2021; Tian 2018; Deng 2018) and realize the "Chinese Dream," an idea Xi Jinping put forward in 2014 (cf. Official account of Xinmin Evening News 2021a). The goals are to become 1) a prosperous country and 2) a civilized, harmonious, and modern socialist country by 2049, when the CCP celebrates its 100th anniversary. The Party's firm internet governance will be decisive in "win[ning] the great victory of socialism with Chinese characteristics in the new era" (Wu et al. 2022). The old glory of being one of the oldest civilizations in human history – a glory that went astray due to the technological superiority of Western powers during the nineteenth-century opium wars, and China's self-attributed lack of technological competence (cf. Hui 2020, 36) – has to be restored. Zhang Shenglei from the Chinese Academy of Sciences concludes that Xi Jinping's "strategic thinking of building a strong country on the basis of the internet has opened a new journey for an ancient civilization to become an information-based power" (2022). One step to achieve that goal is to become the world's market leader and major artificial intelligence innovation center by 2030 (cf. jimmonzang 2017), as outlined in the *New Generation Artificial Intelligence Development Plan* implemented by the Party Central Committee and the State Council in 2017.[14] By then, leading AI enterprises and global brands are expected to have a market value of over 150 billion USD (cf. Network public information collation 2021), the scale of the AI core industry will exceed 1 trillion RMB, and the scale of related industries will exceed 10 trillion RMB (cf. jimmonzang 2017;

14 The first step within the three-phase strategic goals has already been reached with the construction of National Independent Innovation Demonstration Zones, National High-Tech Industrial Development Zones (cf. Robot Frontier 2018) and National Artificial Intelligence Industrial Parks across the country since 2018 to advance research and development of AI technology for industrial chains (cf. Xi'an Software Park 2022; Official account of Beijing Fuhua 2022). By 2020, 300 AI-related enterprises already existed in China (cf. Network public information collation 2021). The second step is to reach major breakthroughs by 2025 in those areas where China already holds an advantageous position (i.e., drones, speech and image recognition, natural language processing, intelligent robots, and machine learning) (cf. jimmonzang 2017).

Robot Frontier 2018). For now, however, China's core industries are not ecologically friendly intelligent industries, as national agricultural information systems have neglected to collect certain data (e.g., on the impact of climate on output) to train their AI systems (cf. McKinsey & Company 2017).

Instead of working towards an eco-friendly intelligent industry to address the environmental problems of our time, we see Chinese politicians, scholars, and journalists emphasizing Marxist theory as a solution to the problems caused by today's information societies, which have opened up "a new era calling for new ideas" (Official account of Xinmin Evening News 2021a). Xi Jinping argues for deep reforms, as the global internet is characterized by an "inconsistent" and "unreasonable" network order, "unsound rules," and an unequal development of the internet in different countries (cf. Zhang 2022). In Xi's view, it is not enough simply to establish an internet with Chinese characteristics; he also considers it as necessary to put forward a Marxist standpoint to "clarify the international proposition of internet development and governance" (Official account of Xinmin Evening News 2021a). Shen Yi, director of the Cyberspace Governance Research Center of Fudan University, believes that the practical paths and development models China has developed since it accessed the internet "have set an example for developing countries to master and use information technology to serve their own development" (Wu et al. 2022). The "Chinese plan for global internet development and governance" is meant to ensure the peaceful development and progress of humankind by "making the internet benefit the world and people of all countries" (Official account of Xinmin Evening News 2021a). Closing the digital divide in the Global South is intended to help developing countries prosper economically and "leap into a new era and share the advantages of the Internet of Things" (Official account of the Institute of International Technology 2021). As President Xi Jinping puts it:

> China's digital economy will enter the fast lane. Through its own efforts, China hopes to encourage all countries to board the express train of Internet and digital economy development. China will not close its door to the outside world and will only open even wider. (CCTV reporter 2022)

Hence, China's Cyber Security and Informatization Committee recommends accelerating the construction of a global network infrastructure in developing countries, as "China has a once-in-a-lifetime opportunity" (Zhuang 2021).

China also seeks to reform the global internet governance system and wants to introduce "Chinese solutions" (ibid.). One major goal is to inscribe the vision formulated in China's Cybersecurity Law within global cybersecurity legislation:

> […] [A]t a critical moment when the new order of global internet governance needs to break the old model and establish a new one, the effective implementation of the Cybersecurity Law will not only

> open a new era of internet governance and internet legislation in China, but will also play a positive, leading role in global cybersecurity legislation. (Cui 2017)

The Chinese government suggests that global internet governance should consider cybersecurity and e-commerce together (rather than as separate policy fields), because network security ensures social order and economic prosperity (cf. Deng 2018). For Xi Jinping, the internet as a "global village" is a "new territory" that is not a "land outside the law" (CCTV reporter 2022):

> A secure, stable and prosperous cyberspace is of great significance to all countries and the world at large. In the real world, there are still lingering wars, shadows of terrorism and occurrences of crimes. Cyberspace should not become a battlefield for countries to wrestle with one another, still less a hotbed for lawlessness and crime. (ibid.)

For Xi, it is of utmost importance that global legislation for internet governance should respect each country's cyber sovereignty. Although he sees the internet as "a realm without national borders", whose governance requires international cooperation (cf. CCTV reporter 2022), he advocates "building *new barriers* to [enhance] national cyber security" (Zhuang 2021; Tao 2019) and "strengthening the technical control of China's internet territory" (Wang 2018). China's *Global Initiative on Data Security* (2020) insists on each country's right to govern its own data and digital economy according to its national jurisdiction, which the Mercator Institute for China Studies interprets as "strong localization requirements" (Merics 2020). According to the deputy secretary of the Party Committee of Peking University, the goal of China's initiative is to establish a "multilateral, democratic, and transparent international internet governance system," based on the principle of network security (national cyber sovereignty, peace, openness, cooperation, and effective order) and economic prosperity (innovation, fairness and justice, mutual trust, orderly development) (cf. An 2021).

China lags behind European (cf. European Commission 2022a) and US (Algorithmic Accountability Act) attempts to control the risk of algorithmic discrimination, having only just taken its first steps to regulate algorithms with e-commerce law (cf. Zhang 2019; Yan 2019; Hong et al. 2021). However, Chinese scholars also highlight China's growing self-assertion, since European and US regulations (the former focusing on protecting individual users' data, the latter on imposing self-discipline on industries) have not been enough to prevent algorithmic discrimination. They propose that administrative supervision led by an algorithm committee consisting of various (legal) professionals should design China's path to legal regulation of algorithmic discrimination (cf. Zhang 2019). Global consulting firms suggest China is capable of founding an international regulatory agency to set standards and establish ethical guidelines for the development of AI technology and for global AI governance (cf. McKinsey & Company 2017).

So far, China has a long way to go when it comes to decisively shaping global internet governance, as illustrated by the US *Declaration for the Future of the Internet* issued on April 28, 2022 (U.S. Department of State 2022). One week earlier, Xi Jinping had urged his audience at the National Network Security and Informatization Work Conference to "seize the historic opportunity" for China to shape the "process of international governance of cyberspace," and to "win the great victory of socialism with Chinese characteristics in the new era" by advocating a "socialist way of governing the internet" (Zhang 2022). Obviously, the US and the 60 countries who signed the Declaration for the Future of the Internet consider the Chinese way to be undesirable, as their declaration is seen as a means to counteract a *closed vision of the internet* and the suppression of online freedom by authoritarian governments (cf. U.S. Department of State 2022; European Commission 2022b).

The US declaration recommits its partners to "a single global internet," a decentralized network of networks, which aims at fostering 1) network security and a stable technical infrastructure of the internet, 2) democratic principles such as the free flow of information, individual privacy, and fundamental freedoms (Universal Declaration of Human Rights), 3) market growth and economic prosperity for all through fair competition and an inclusive digital economy, and 4) a multistakeholder approach to internet governance (e.g., UN, WTO, Internet Governance Forum, Freedom Online Coalition). Its goal is to "resist […] efforts to splinter the global internet" and to reduce the global "digital divide" (U.S. Department of State 2022). The US sees the principles outlined for the internet's future as "universal in nature" and aims to make this vision global, "while respecting each other's regulatory autonomy within our own jurisdictions and in accordance with our respective domestic laws and international legal obligations" (ibid.).

It is not surprising that the day after the White House issued the Declaration, Zhao Lijian (spokesperson for the Chinese Foreign Ministry), described it as yet another attempt of the US to impose its own ideology and standards on other countries and undermine international rules, thus provoking "a *splinternet* and a *confrontation in cyberspace*" (Shen and Kong 2022). He was outraged that the Declaration called for human rights protection, despite the US itself having engaged in data theft and unlawful surveillance of internet users around the world for years. Zhao also saw the Declaration's statement on trust in the digital ecosystem as implausible, since the US itself used digital tools to erode political processes and even to overthrow other countries' regimes. When it came to the Declaration's stance on fair online markets, Zhao accused the US of using national security as an excuse for harming international companies and implementing its own "immature systems" (ibid.). Although the Declaration advocated a multistakeholder approach to internet governance, its content was, Zhao argued, inconsistent with the rules set by the United Nations, as the Declaration itself was an attempt "to introduce ideology into cybersecurity issues" and to use democracy as an excuse to establish an "exclusive circle" (ibid.). Zhao Lijian juxtaposed the

vision outlined in the *Declaration for the Future of the Internet* with Xi Jinping's vision of a "Community with a shared future in cyberspace," which advocates returning to existing forms of multilateral negotiations and co-constructing international rules for a "truly multilateral, democratic and transparent internet governance system to build a peaceful, secure, open, cooperative and orderly network" (ibid.). China's concept of global internet governance is based on 1) a multistakeholder approach that includes the participation of governments, international organizations, internet companies, technical communities, non-governmental organizations, and individual citizens from every country, 2) mutual trust and respect, 3) a form of network governance embedded in the framework of the United Nations, and 4) "network sovereignty of various countries." Without these things, it is argued, "the problems brought by the internet to the world" cannot be solved efficiently (cf. Zhang 2022).

The Chinese Foreign Ministry spokesperson makes it clear that the US declaration is seen as an instrument to reignite the fight between communist systems and liberal democracies. In contrast to Russia, disconnecting from the global internet is not an option for China. In an "era of mobile internet" and networked societies, it is "impossible for any social subject to stay outside the network" (Official account of Xinmin Evening News 2021b). As President Xi Jinping concludes:

> The Internet has turned the world into a global village and gradually transformed the international community into an interconnected community with a shared future. Now, there is a view that the Internet is so complex and difficult to govern that it is better to just shut it down. This is not true and it is not the solution. China cannot and will not close its door to the outside world. (CCTV reporter 2022)

Chinese journalists conclude that "the future of the world lies in Asia, and the future of Asia lies in China" (Gu 2022).

3.5 INTERIM SUMMARY

We can reconstruct China's position towards competing internet governance policies over the last decades as follows. First, China has adopted a "new-cyber" approach that sees cyberspace as a realm requiring a new form of governance. In the former unidirectional social governance model of the analogue world, the Chinese government supervised the actions of businesses with autocratic capitalism and controlled public opinion-making with laws regulating journalist practice. China's national internet legislation, on the other hand, helped to foster "social collaborative governance" (Tian 2018). This shifted the burden of "content monitoring" from government to national users, e-businesses, and platform operators, who are required to scrutinize each other's network behavior. A new-cyber approach also characterizes the Chinese government's stance towards global internet governance, as it recognizes that the internet's inherently global nature re-

quires a different form of governance. In the eyes of the CCP, the current status quo of the global internet is characterized by an unreasonable and inconsistent network order, a predominance of liberal ideology, and unequal development in developed and developing countries. Hence, the CCP favors the formulation of new laws for network order and security that allow all countries to enjoy economic prosperity.

Second, China is ambivalent as to whether governments should have sole responsibility for internet governance or whether non-state actors (the business sector, international organizations, media, the public) should also be involved (cf. Kurbalija 2016, 6). On the one hand, China pursues a *multilateral* (consensus-driven, multi-stakeholder) approach to internet policy-making (cf. ibid., 230), as it agrees that any international internet governance system should be established collaboratively and respect existing forms of international cooperation (United Nations). On the other hand, it takes a *cyber sovereignty approach*, as it insists on the principle of national sovereignty in the global management of cybersecurity (cf. Zhang 2022).

Third, Chinese national and global internet governance takes a *holistic approach* towards cybersecurity and e-commerce policy (cf. Kurbalija 2016, 17), which goes beyond the mere regulation of infrastructural issues. Both its domestic internet laws and its vision for global internet governance address developmental, legal, economic, sociocultural, and security issues, while ignoring the "Western" focus on human rights and "universal values" (ibid., 22; 29). The rejection of human rights as a form of "cultural imperialism" is not new; it was evoked by the Asian intellectuals who advocated New Confucianism during the twentieth century (cf. Dirlik 1996, 109–110; 114). Similarly, we have seen how Chinese critics view Western countries' domination of internet development as a form of "cyber cultural colonization" (Sun 2014). Scholars recognize such currents of thought as East Asian societies reasserting themselves "against Euro-American cultural hegemony" (Dirlik 1996, 113).

Moreover, the CCP has a growing awareness that digital technology will be the key to securing future Party rule and China's long-term position as a hegemonic power. However, I argue this is a form of *technological unconsciousness*, as it is not the kind of technological consciousness that Hui describes for overcoming modernity (cf. Hui 2020, 42). The CCP's vision for future development of the internet centers around the preservation of power, but not around the preservation of the planet. The Chinese government considers itself to be on a historical mission to become the world's leading cyber power – to end Western countries' control over China's economy, become a prosperous socialist country, a role model for the Global South, and shape the process of international internet legislation by advocating a "socialist way of governing the internet" (Zhang 2022).

4. OUTLOOK: A CONFRONTATION OF TWO SPLINTERING INTERNETS OR AN (ONTOLOGICAL) PLURALISM OF DIFFERENT COSMOTECHNICS?

> Die Anerkennung des Anthropozäns entspricht dem Gipfelpunkt eines technologischen Bewusstseins, an dem der Mensch anfängt, sich der maßgeblichen Rolle der Technologie bei der Zerstörung der Biosphäre und der Zukunft der Menschheit […] bewusst zu werden. […]. Es [gibt] zwei Antworten auf die potentielle Gefahr des Anthropozäns: zum einen Geoengineering, […], und zum anderen der Aufruf zur kulturellen Vielfalt und zum ontologischen Pluralismus. (Hui 2020).

Both leading world cyber powers (China and the US) consider the internet to be a borderless space that symbolizes globalization, while also conceptualizing it as a territory for ideological confrontation between communist/autocratic systems and liberal democracies. For the Chinese government, the internet serves as a tool to realize the Chinese Dream of becoming an economically prosperous, modern, socialist society by the mid-twenty-first century. Beyond this ambitious goal, the Chinese government sees its country's modernization through digitization as a role model for other developing countries who seek further internet development. China is attempting to close the digital divide in the Global South and enter new markets with its worldwide internet development and infrastructure projects. However, "tak[ing] the promotion of people's well-being as the starting point and end point of the development of informatization" (Zhuang 2021) is too short-sighted. By exporting digital technologies, China hopes to promote the spread of economic prosperity to other developing countries. In reality, however, it is just following the pattern established by developed countries: the exploitation of natural resources and environmental destruction for the sake of "progress."

In economic terms, both Chinese state capitalism and US neoliberal internet economies foster further consolidation of digital capitalism. China's "Internet+" strategy and "mass entrepreneurship and innovation" national policy agendas have not yet created an internet economy that relies on socialist production relations. Instead, China's internet legislation aims to integrate marginalized social groups into its e-commerce by making them subject to profit-orientation, quantification, and surveillance. In political terms, both powers consider the internet to be a battlefield for competing political ideologies. The Chinese government sees today's global internet as serving the US by imposing its liberal norms and standards on other countries, while Western countries see China's extension of technological governance to the Global South as the basis for spreading socialist ideology or autocratic norms. In legal terms, while trying to actively shape the formulation of a global internet legislation, the Chinese government insists on the principle of national sovereignty, as it sees cybersecurity for its domestic internet as being crucial to the future of Party rule in China. Thus, it fosters the erection of new national barriers in global internet space.

Both cyber powers appear to believe that the ideological and economic competition will determine who sets standards of use for new technology in the twenty-first century. Hence, within this geoeconomic and geopolitical power struggle, we are witnessing a *return of geography* in global cyberspace. This power struggle both transcends national barriers and erects new barriers on the basis of two economically and politically competing systems. Each country seeks to establish cross-national alliances with partners who are prepared to be part of either the Chinese or the US media ecological system and the respective corpus of legislation (including the underlying normative ethics). Moreover, this power struggle consolidates the barrier between nature and human beings created by modernity, as the two cyber powers are both focussed on winning the ideological conflict and controlling the standards of technological development.

If the two countries continue along these lines, the global internet will develop into two splinternets, one under the leadership of the US (along with partners in Europe, the United Kingdom, Canada, Australia, the Republic of Korea, Taiwan (if it still exists by then), Japan, and some South American countries), and another under the leadership of China (including Russia, most countries in Southeast Asia and Africa, and some South American countries). The Declaration for the Future of the Internet by the US and its partners, along with China's disapproving reaction, already suggests that this scenario is likely. Neither state capitalism nor neoliberalism (with their joint focus on economic growth at the expense of the environment), provides an answer to the problems of climate change, species extinction, and overexploitation of natural resources. It follows that neither China nor the US has found a way for their internet development to address these most urgent questions of the twenty-first century.

According to Hui (2020, 252), to overcome modernity (and the military and economic competition it is based on), we must cultivate a technological consciousness and re-appropriate modern technologies. We must become more aware not only of the power, limitations, and risks of available technological instruments, but also of the technological conditions of human beings (cf. ibid., 45). In my opinion, to create a genuine community and shared future in both physical and cyber space, further development of digital technologies must overcome the ideological contest and follow a vision that will help to prevent the extinction of humankind *and* nature. Hui reconstructs the variety of cosmotechnics that different (ancient and pre-modern) cultures had produced (Daoism, Buddhism, Stoicism) before they were made obsolete by modernity and its technological developments (cf. ibid., 253; 255). Hui argues that technology is an ontological category that must be related to a larger configuration – a cosmology that is appropriate for the culture from which it emerged (cf. ibid., 19).

In contrast to European naturalism, other cultures' cosmologies (e.g., Amerindian perspectivism, Chinese moral metaphysics) do not build on a dualism between nature and culture, mind and body, being and non-being, but rather display *relational thinking* – a continuity of nature and culture created through relation-

ships (e.g., in Chinese moral metaphysics: a relation between heaven and human beings) (cf. ibid., 51; 55; 56). In his attempt to construct a Chinese philosophy of technology (cf. ibid., 57), Hui shows how the Qi-Dao relation could help to systematically juxtapose the relationship between technology and the unity of a cosmic and moral order (cf. ibid., 254). The Chinese concept of Dao as a cosmological and moral principle is based on a resonance (or union) between human beings and heaven (cf. ibid., 51–52). According to (ancient) Chinese cosmology, the interaction between human beings and the world is defined in relation to cultural practices (family hierarchy, social order, state order, public policy, and human/non-human relationships) *and* natural resources (cf. ibid., 52). In contrast to ancient Hellenistic philosophy, where technology was meant to imitate and perfect nature, ancient Chinese philosophy subordinated technology to the cosmological order (cf. ibid., 66). Against this backdrop, Hui considers whether China's traditional relational concept of the cosmos and human beings could serve as a moral cosmotechnics to help solve the problematic relation between humans, technology, and the environment.

To conclude, the development of information technologies can no longer be viewed in isolation; its effect on our environment must also be considered. If we reconceptualize world history with the help of cosmotechnics from different cultures' relational or holistic thinking (cf. ibid., 45; 57), we can rethink the production and implementation of technology, explore a new way for human beings to live with technical objects and systems, and renew our relationship with non-human creatures after centuries of modernization (cf. ibid., 255).

However, while Hui considers modernity and de-modernization from the perspective of a global axis of *time* (cf. ibid., 200), I argue that it is also a question of *space*: the two cyber powers seek to return geography to the global cyberspace, which may risk splintering the internet. Thus, we must begin to see human beings and nature as one community, whose intertwined destinies depend on morally and ethically sound technology governance.

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